

**The London School of Economics and Political Science**

**FOUR ESSAYS ON EDUCATION, CASTE AND COLLECTIVE  
ACTION IN RURAL PAKISTAN**

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**A thesis submitted to the Department of International Development of  
the London School of Economics for the degree of Doctor of Philosophy,  
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## **Declaration**

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## Abstract

In this thesis, I use mixed methods to present four interdisciplinary essays on education, caste and collective action in rural Pakistan. In the **first essay**, I undertake a conceptual analysis of the nature of the Pakistani kinship group, locally referred to sometimes as *biraderi* (brotherhood), *quom* (tribe, sect, nation) or *zaat* (ancestry, caste). By systematically comparing the features of the kinship group with modern interpretations of caste, I argue that the Pakistani kinship group is much closer to a caste than is commonly acknowledged in a lot of the research.

In the **second essay**, I document the extent of educational inequalities based on this kinship group, henceforth also referred to as caste. Using a unique dataset that I collected for approximately 2500 individuals from rural Pakistan, I show that low caste individuals on average are 7% less likely to be literate and 5% less likely to attend school than their high caste counterparts. Strikingly, these differences rise to over 20% for certain low caste groups. Even though caste-based inequalities are not statistically significant for the youngest cohort in my sample, my qualitative analysis of over 65 in-depth interviews with key informants confirms that caste remains not only a critical marker of identity, but also an important source of fragmentation in the country.

In the **third essay**, I focus on the fragmentary nature of the kinship group and develop a theoretical framework in which caste fractionalization, land inequality and the imbalance in power between various castes – or what I refer to as caste power heterogeneity – jointly influence the level of collective activity for rural education provision. I test this framework using a blend of quantitative analysis of original data for over 2500 individuals, and qualitative comparative case studies of a total of eight rural communities in Pakistan. The analysis I present both confirms the interdependence of my three proposed dimensions of social heterogeneity, as well as highlights the salience of caste power heterogeneity in predicting the level of collective activity for education provision.

In the **final essay**, I turn to studying the role of social capital in enhancing educational outcomes. I perform statistical analysis of data from over 350 households and combine it with a micro-level comparative case study of social capital and collective action surrounding education in two rural communities from Pakistan. My results in this final paper indicate that there are weak associations between my two parameters of interest. They also highlight the importance of understanding the downside of social capital, and of recognizing that rather than being driven by social capital alone, collective action is often embedded in a wider system of village politics and patronage.

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# *Preface*

## **i. Introduction**

There is widespread agreement that education is of paramount importance. Social reformers agitate for more education due to its status as a fundamental human right; economists highlight education's private returns and the role of human capital accumulation in contributing to economic growth; while political commentators see education as a critical precursor for greater civil participation and empowerment.

As a consequence, unsurprisingly, education has not only been at the centre of global international development initiatives such as the Millennium Development Goals (MDG) and the Education for All (EFA) framework, but it also continues to be a significant topic of concern in the ongoing discussions on the Sustainable Development Goals (SDG) and the post 2015 development agenda. In recent decades, this focus has led to substantial global progress in improving access, quality and equity. In spite of this, however, the fact is that education provision remains poor in many developing countries. According to 2012 estimates, for instance, over 770 million adults around the world are illiterate, while some 58 million children of primary school age are still out of school (UNESCO 2014).

Of these totals, approximately 50 million illiterate adults and some 5.4 million of the out of school children are from Pakistan alone - these statistics place Pakistan in the top three highest ranking nations in the world for both number of illiterate adults and out of school children (UNESCO and UNICEF 2015). What factors drive such worrying education statistics globally, and in Pakistan in particular? Experts tend to attribute this performance to several underlying causes, ranging from issues related to poverty, conflict, governance, and financing on one hand to problems associated with culture, social divisions, and political economy on the other.

In this PhD thesis, I focus on the latter two factors of social divisions and political economy to present four essays on education, caste, and collective action in rural Pakistan. The essays draw insights from diverse fields such as economics, sociology, political science and anthropology to address a variety of research questions, which are summarized in detail later on in this introductory note. These four essays do have one common underlying theme though - the consideration of the kinship group in Pakistan, and the multiple roles this kinship group plays in influencing educational outcomes, a term I use in this thesis to refer broadly to variables such as literacy and enrolment.



Through the blended use of quantitative and qualitative analysis of original data, I highlight two roles of the Pakistani kinship group with respect to education in this thesis in particular. In the first two essays, I assert the salience of this social institution as a dimension of stratification in education; while in the following two essays, I emphasize the importance of the kinship network as a unit of economic and political power that serves as a vehicle for collective activity – collective activity through which the kinship group becomes a critical determinant of educational outcomes. My analysis in this essay collection both tests and generates theory, thus advancing critical debates on my core topics of study and informing education policy for Pakistan and other similar developing countries.

Structurally, this thesis comprises of this introductory note, four essays, followed by detailed Appendices on research methods and fieldwork. The purpose of this introductory chapter specifically is to assist the reader in navigating through the thesis. To that end, the rest of this note proceeds as follows: Section Two of this chapter sets the stage for this work by situating my contribution in the broader education and international development scholarship; Section Three provides background information on education in Pakistan; Section Four discusses the four constituent essays, highlighting their research aims and findings, as well as distinguishing the contributions they make from those made by other authors working in the same strain of research; Section Five presents an integrative discussion of three overarching themes that bind this collection together; and Section Six concludes by briefly outlining policy implications and possible directions for future work in the arena.

## **ii. Education and International Development: A Research Agenda**

My thesis is located in the area of education and international development, an evolving, interdisciplinary subfield of development studies<sup>1</sup>. Like many other research domains in this arena, this subdiscipline does not have a single theoretical foundation; rather, it draws upon a variety of disciplines to consider the multiple relationships between education and international development (see McCowan and Unterhalter 2015). In this short literature review, instead of examining this entire subfield, I engage with select strands of the education and international development research that are particularly useful in setting the context for my thesis. I thus begin by introducing the basic interplay between development theory and education to emphasize the need to study education in the first place. Next, I turn my attention to the specific strains of this body of work that focus on (a) educational stratification and (b) the political economy of education provision in particular – these

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<sup>1</sup> See McGrath 2010 or Unterhalter (2015) for good histories of the field.

literatures help set the stage for my first two, and the following two essays, respectively<sup>2</sup>. I finally conclude this section by underlining some of the wider gaps this essay collection addresses.

The intersections between prominent development paradigms and education are manifold. On one hand, proponents of the human development approach invoke the ideas of writers such as Sen (1985) and Nussbaum (2000) to assert that education is not only a fundamental human right, but that its egalitarian distribution is critical to ensuring freedom of choice. On the other, scholars cite the influential human capital theory from the field of economics to argue that schooling both enhances private returns to labour, and facilitates a country's wider economic prosperity (see Schultz 1961; Becker 1964; Mincer 1974; Angrist and Krueger 1991; Glewwe et al. 2014). Other scholars still use Marxist perspectives and post-development theories to both criticise the nature of socialization promoted in traditional schooling systems and agitate for extensive reform (e.g. Illich 1971; Carnoy 1974; Bowles and Gintis 1976). Most notable in this vein is perhaps the work of Freire (1970), whose advocacy of critical reflection and empowerment in the education space has in turn had substantial influence on wider aspects of development theory and practice (see Chambers 1994).

The place of education in the intellectual history of development theory is not just reflected through such cross-applications. Rather, in recent years, several scholars have also proffered education as a deeper cause of development, pitting it against other commonly accepted factors such as institutions (see North 1990; Acemoglu et al. 2012) and geography (see Gallup et al. 1999). Writing in this vein, Glaeser et al. (2004: 271) for instance contend that "human capital is a more basic source of growth than are the institutions", while Engerman and Sokoloff (2002) suggest that differing initial endowments in people (and land) resulted in differing levels of inequality, which then affected country's paths of development. Rajan and Zingales (2006), take the latter arguments further, posing a model in which the initial endowment of factors such as education in particular determined political constituencies and their incentives, thereby affecting subsequent economic development. Hanushek and Woessmann (2010) concur in a broader sense, arguing that cognitive skills are a more fundamental source of economic growth in OECD countries than are institutions.

Given this interplay between education and development theory, a large literature has been dedicated to understanding the problems of schooling. While this body of work is extensive in terms of subject matter and approaches (see for e.g. Reid 1986; Glewwe et al. 2011), one topic that has garnered considerable attention, particularly from sociologists and economists alike, has been inequalities in educational outcomes. Leading from core insights provided by Marx and Weber on social structure, this body of work initially focused on socioeconomic class as the core dimension of stratification in

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<sup>2</sup> Note that because my four essays tackle different research questions, I also review the specific scholarship that pertains to their unique area of investigation in some detail within the individual essays themselves.

education (see Reid 1986). The landmark study of Coleman et al. (1966), however, not only brought disparities in educational achievement between different ethnic groups to light in the US, but also served as the impetus for a substantial research that now considers educational inequalities on the basis on race, ethnicity, and caste in several countries (e.g. Jencks and Phillips 1998; Strand 2001; Cook and Evans 2000; Heath and Brinbaum 2007; Asadullah and Yalonetzky 2012).

The explanations for educational stratification provided by authors writing in this vein are varied, but have commonly been summarized as falling into two broad schools of thought (Kao and Thompson 2003). The first school credits group differences in culture, especially in attitudes towards schooling, as the key factor driving disparities on this front. The second school of thought, in contrast, attributes disparities in outcomes to differences in socioeconomic status between groups. Put differently, proponents of this camp argue that educational inequalities arise due to group-based differences in parental wealth, income and education. In recent years, both camps have been criticized for failing to explain stratification in education satisfactorily; and supplementary arguments related to discrimination, social distance and diminished self-image, as well as the adverse effects of social heterogeneity and the positive effects of social capital, among others, have all been advanced to address this inadequacy (e.g. Putnam 2000; Alesina and La Ferrara 2005; Hoff and Pandey 2006; Kingdon and Rawal 2010; Bros 2014). The underlying causes as yet remain subject to some debate, but there is growing agreement among researchers on at least one front - that the extent and causes of educational stratification across countries and between subgroups in these countries differ dramatically, and most likely depend on a multitude of factors.

Explanations for problems in schooling have understandably been influenced by overriding trends in the theoretical, empirical and policy literature on international development. One such trend that is relevant for my thesis is the notable shift since the 2000s towards adopting a political economy approach to studying development phenomena. Haider and Rao (2010: 4) define this approach as one that “is concerned with the interaction of political and economic processes in a society: the distribution of power and wealth between different groups and individuals, and the processes that create, sustain and transform these relationships over time”. What sets this approach apart from others is the marked focus on understanding the interests of, and power possessed by, key actors and how such interests and power dynamics enable or hinder cooperation between the parties involved.

In the field of education in particular, that access, quality and equity in schooling would be influenced by the incentives of a variety of stakeholders is no surprise. Education policies are designed and implemented in a broader system where the incentives of parents, teachers, politicians and other interest groups, together with the nature of formal and informal institutions, shape the decisions that affect educational outcomes. Because of this, there is a growing literature that studies

the power relations that drive educational outcomes (see Busemeyer and Trampusch 2011; Kingdon et al. 2014 for good reviews). Contributions in this arena hail from a variety of disciplines and have been instrumental in providing insights into, for instance, the role played by global actors in shaping country level education policies (e.g. Mundy 2006), the role of vested interests of teachers and teachers' unions in driving the success of policy reform and implementation (e.g. Hoxby 1996; Grindle 2004; Moe 2011), and the role of politicians, bureaucrats and political entrepreneurs in determining ultimate outcomes (e.g. Kosack 2009; Little 2010; Altschuler 2013). Efforts have similarly been useful in shedding light on the impetus for and impediments to wider education reforms such as decentralization and school-based management (e.g. Barrera-Orsorio et al. 2009). According to Kingdon et al. (2014: 47), however, this extant scholarship does have a key shortcoming - it tends "to employ a very general understanding of 'political economy'" rather than a more theoretically rigorous one, which could for instance leverage a variety of frameworks such as agency theory, or theories of collective action and cooperation, or even rent-seeking and rational choice theories in order to explain the factors shaping key education decisions.

Another challenge associated with the political economy of education provision literature is its disproportionate reliance on analysis at the level of states or regions at the expense of analysis at a micro level<sup>3</sup>. There are nevertheless reasons to suspect that micro level study of political economy may be important. When states fail to provide public goods adequately, it is often left to local communities to act collectively in order to address this failure instead. As a consequence, in recent years, one of the fastest growing mechanisms for channelling development funds have been community driven development initiatives (Mansuri and Rao 2004). By definition, community driven development initiatives involve local communities in key project decisions, usually with the central aim of altering existing local power dynamics in order to create voice and agency for the poor. Logically it follows then that such interventions are most likely to be successful if a thorough understanding of power dynamics and collective action within smaller social groups and social networks exists. Writing in this vein, a handful of scholars working on education have studied unequal power relations between different members of society – particularly between those who sit on school councils - to help shed light on the subject (e.g. Anitha 2000; Khan 2007; Kingdon and Rawal 2010; Chen 2011). Nonetheless, our understanding of the micro-level relations that ultimately determine which individuals and interest groups are able to negotiate change in the education arena as yet remains relatively underdeveloped.

In sum, the reader should take away three central ideas from the short discussion presented above, each of which motivates this PhD thesis. First is the broader acknowledgement of the central role

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<sup>3</sup> Note that this disproportionate focus in the political economy of education provision mirrors a similarly uneven focus in broader political science – see Willner 2010.

education plays in international development theory and practice. This acknowledgement makes a contribution to the subdiscipline of education and international development inherently significant. Second is the growing consensus among educational stratification researchers that the extent and causes of inequalities in education tend to be context-specific. The need to understand educational inequalities in different contexts thus serves as the primary motivation for the first two essays I present in this collection, which focus on educational stratification by kinship group in Pakistan. Finally, the political economy of education provision scholarship continues to have two shortcomings – a lack of sufficient theoretical engagement and scarcity of micro level studies. Both shortcomings serve as the impetus for my final two essays in this collection, which consider how power dynamics at the level of the community influence educational outcomes. A detailed summary of these essays follows later on in this introductory note.

### **iii. Research Context: The Case of Pakistan**

In the populous South Asian country of Pakistan, the right to education is guaranteed under the country's 1973 constitution. The 1973 Constitution in fact makes it the duty of the state to “remove illiteracy and provide free and compulsory primary and secondary education within a minimum possible period”. Under the 18<sup>th</sup> Amendment to the Constitution enacted in 2010, Article 25A was introduced to further reinforce this responsibility. The Amendment with respect to the right to education mandates that: “The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law”.

Despite this right, as noted earlier, poor education statistics prevail in Pakistan. In fact, many scholars present the country as a classic case of economic growth without social development, highlighting how Pakistan's performance in areas such as education severely lags behind that of other countries at similar levels of income (see Easterly 2003). In 2013, the lower middle income country had a primary Net Enrolment Ratio (NER) of 68%<sup>4</sup>- this metric implies that Pakistan is highly unlikely to achieve the MDG and EFA goal of universal primary education by end of 2015 (PBS 2013). Significantly, underlying the nation's low enrolment indicator are persistent gaps in gender, urban-rural, rich-poor and provincial progress (Rahman 2004; PBS 2013). Based on 2013 figures, for instance, the pan-Pakistan gender gap stood at 8 percentage points in favour of men, while the urban rural divide was even higher at 15 percentage points – urban primary NER is 79% compared to 64% for rural areas. And besides poor and inequitable access, quality of education is also an issue. According to the ASER 2014 report, 54% of children enrolled in grade five had not

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<sup>4</sup> Pakistan's official age for primary schooling is 5 to 9, although most students enter grade 1 at the age of 6 or later. As a consequence, the official statistics are reported for both the 5-9 and the 6-10 groups. I use the latter group for all the enrolment analysis in this paper.

mastered reading at the grade two level. Unsurprisingly, as a result, Pakistan currently ranks 146<sup>th</sup> out of 186 countries on the Human Development Index, whereas neighbours India, Bangladesh and Sri Lanka stand at 135, 142, and 73 in the world, respectively (UNHDR website). A selection of recent socioeconomic and education indicators for Pakistan is given in the Fact Sheet below.

Pakistan's education system itself consists of multiple stages: pre-primary (kindergarten), primary (grades 1 to 5), middle (grades 6 to 8), upper secondary (grades 9 and 10) and intermediate (grades 11 and 12). At each stage, although multiple actors are involved in provision, some 70% of educational institutions are in the public sector, while private and non-profit providers make up the rest (AEPAM 2012)<sup>5</sup>. By and large, the literature has shown that students in private and non-profit schools outperform their counterparts in public schools (Khan et al. 2005; Andrabi et al. 2008). Consensus is that this in large part is due to poor infrastructure, rampant teacher absenteeism, and poor quality of teaching in the public schooling system. Meanwhile, at a broader level, scholars agree that bottlenecks related to demand, particularly for schooling of girls, distance to schools, and direct and indirect costs of schooling have further contributed to poor educational statistics.

#### Pakistan Fact Sheet

Metric	Statistic	Year	Source
<b>Overall Indicators</b>			
Population	196 million	2014 estimate	<i>CIA Factbook</i>
Gross National Income per capita (Atlas method, current USD)	1,360	2013	<i>World Development Indicators</i>
Poverty Incidence	22%	2006	<i>CIA Factbook</i>
Urban Population	36%	2011	<i>CIA Factbook</i>
<b>Education Indicators</b>			
Gross Enrolment Ratio (GER Ages 6 to 10), excluding non-formal basic education	92%	2013	<i>PSLM 2013</i>
Net Enrolment Ratio (NER Ages 6 to 10), excluding non-formal basic education	68%	2013	<i>PSLM 2013</i>
Literacy (Ages 15 and above)	55%	2011	<i>PSLM 2013</i>
Population that has completed primary school	51%	2013	<i>PSLM 2013</i>
Population that has ever attended school	61%	2013	<i>PSLM 2013</i>
Education expenditure as % of GDP	2.1%	2012	<i>CIA Factbook</i>

To address persistent lags in educational performance, Pakistan has implemented numerous Social Action Programmes and Education Sector Reforms; indeed, education has also formed an integral component of both the country's Five Year Plans and its Poverty Reduction Strategy Papers (MoE 2009; MoE 2013). In the 2000s in particular, education-related initiatives deriving from such reforms have incorporated initiatives such as free schooling, free textbooks, school infrastructure improvement, merit-based teacher recruitment programmes and stipends for female students, to

<sup>5</sup> The country also has a number of non-formal schooling and religious schools (i.e. deeni madarasahs) - given their 10% contribution to total number of local educational institutions and their unique nature, however, both types of institutions generally fall out of the scope of this thesis.

name just a few. Much of the funding for these interventions has come from international organizations and bilateral donors, whose interests in reforming Pakistan's educational system have been instigated by events such as the War on Terror and the widely publicized shooting of Malala Yousafzai (see Hathaway 2005). In spite of this interest and funding support, outcomes have nevertheless remained poor.

#### **iv. Preview of Findings**

The essays contained in this thesis are entitled, (1) "Does Pakistan have a Caste System? A Critical Examination of the Nature of Pakistani Kinship Groups," (2) "A Neglected Dimension of Stratification: The Influence of Caste on Education in Rural Pakistan," (3) "Caste Fractionalization, Land Inequality and Caste Dominance: Understanding the Drivers of Poor Educational Outcomes in Rural Pakistan," and (4) "Can Social Capital Enhance Educational Outcomes? Empirical Evidence from Rural Pakistan". In the discussion that follows, I summarize the research aims, main findings and key contributions of each of these papers.

I establish the context for this thesis in the **first essay** by examining the features of the patrilineal, primarily endogamous kinship group in Pakistan, locally referred to sometimes as *biraderi* (brotherhood), *quom* (tribe, sect, nation) or *zaat* (ancestry, caste). Although early ethnographic work on post-partition Pakistan referred to this kinship group using the same terminology of caste that had previously been applied to pre-partition India (see for e.g. Eglar 1960; Marriott 1960), the treatment of these kinship groups has changed dramatically in the literature since then. In fact in recent decades, several researchers working on the country have dismissed the presence of a local caste system based on comparisons drawn against an 'older' interpretation of the notion in the literature, which views caste as a religious institution grounded in the ideology of purity and pollution (e.g. Ahmad 1972; Alavi 1972). This broad-based dismissal - often by academics, policymakers and politicians alike - has led not only to the primacy of class as the key form of stratification in areas such as education and health studied in the nation, but sometimes even to the conflation of kinship with class (see Lyon 2004; Gazdar 2007).

In a related, growing literature, however, a number of scholars in recent years have highlighted the political importance of the *biraderi* (see for e.g. Gilmartin 1994; Chaudhary and Vryborny 2013; Mohmand 2014). In this first essay, I attempt to build on this latter literature and strive to facilitate the debate on Pakistani kinship groups in two distinct ways. First, I systematically compare their features against those of class and caste systems to consider the more appropriate categorization. Through this analysis, on one hand, I show that class is an inadequate characterization of kinship

groups – unlike in a class system, there is restricted mobility across groups and additionally, the commonly accepted feature of similar economic status of members in a specific class does not necessarily obtain. On the other hand, by systematically comparing the kinship group's characteristics with the complex features of caste, particularly surrounding the parameters of hierarchy, association with traditional occupation, and ritual purity and endogamy, I demonstrate that the Pakistani kinship group system is actually much closer to the modern caste system than is commonly accepted in a lot of the literature.

Second, to help reconcile inconsistencies between the nature of the kinship group and various interpretations of caste, I propose an alternative definition of the institution. My definition builds on Srinivas' (1962) and Quigley's (1993) seminal contributions, and consistent with the 'newer' interpretation of the notion sees caste as a hierarchical, social institution with varying practices surrounding hierarchy, occupation, and restrictions regarding marriage and contact. The definition I propose in this essay by no means aims to supplant existing definitions though. Rather, its purpose is much more modest - it strives to provide an alternative lens through which to view the Pakistani kinship group. Overall, through both contributions, my underlying aim in this conceptual paper is simple: the reintroduction of the salience of caste as not only a construct important in the political arena - as several authors have highlighted already- but also as one that forms a distinct dimension of social stratification in Pakistan.

In the **second essay**, I move on to empirically consider the salience of caste by examining the extent of educational stratification based on the kinship group. To date, the education literature on the country has focused almost exclusively on socioeconomic class and/or gender as the key forms of stratification in the nation (see for e.g. Sathar and Lloyd 1994; Alderman et al. 2001; Rahman 2004; Khan et al. 2005; Aslam 2009; Fennell and Malik 2012). I depart from this scholarship by studying inequalities based on an individual's caste affiliation instead. In particular, I examine primary household survey data that I collected for approximately 2500 individuals, and original qualitative data that I solicited from over 65 in-depth interviews to analyse the influence one's caste has on educational outcomes such as literacy and enrolment in eight communities from rural Pakistan.

My quantitative analysis in this second essay indicates that low caste individuals on average are 7% less likely to be literate and 5% less likely to attend school than their high caste counterparts, even after conditioning on socioeconomic status. Strikingly, I also find indicative evidence suggesting that differences in the likelihood of being literate and attending school rise to over 20% for certain low caste groups such as the *Menghwars* and the *Solangis* - a statistic comparable to the extent of disadvantage documented for untouchable groups in India. My qualitative analysis corroborates these differences between caste groups, with informants attributing them – consistent with the



prevalent literature - to differing socioeconomic profiles, cultural orientations, expected returns to education, and village politics and dynamics.

Interestingly, my examination indicates that gaps between caste groups have likely narrowed over time as well. My quantitative evidence for instance shows that caste-based inequalities for attending school are *not* statistically significant for the youngest cohort in my sample, while my qualitative evidence suggests that preferences for education across caste groups have converged in recent years. Indeed, anecdotal evidence abounds of low caste children studying to become doctors and engineers. At the same time, however, my overall analysis strongly suggests that on the ground caste continues to remain a critical dimension of social stratification in Pakistan – a dimension that, due to its fragmentary nature, merits much more attention than it has thus far received in the scholarship.

I take on the latter topic of the fragmentary nature of the Pakistani caste system in the **third essay** of this collection. A substantial literature examines social heterogeneity of participants as a determinant of collective action (see for e.g. Alesina and La Ferrara 2005; Banerjee et al. 2005; Ostrom 2009). I contribute to this scholarship by developing a unique theoretical framework in which caste fractionalization, land inequality and the imbalance in power between castes – or what I refer to as caste power heterogeneity – jointly influence the level of collective activity for education provision. Through this theoretical framework, I formulate detailed predictions of how these three dimensions of social heterogeneity function and interact with each other in order to influence educational outcomes such as literacy in rural Pakistan.

The model I present in this essay differs from frameworks commonly employed in this body of work in two ways. First, unlike much of the extant work which neglects differences in economic, political and social power between different groups as a source of heterogeneity, I borrow the idea of dominance from related scholarship (see for e.g. Srinivas 1962; see Collier 2001) to consider how ascendancy of certain castes on these factors can alter local dynamics in a way that affects collective activity. In this way, I merge ideas from the collective action as well as the dominant caste literatures to provide what I argue is a much more comprehensive model for studying education provision. Second, while the empirical scholarship by and large focuses on single sources of heterogeneity at a time, in line with a growing literature (e.g. Waring 2011; Casey and Owen 2013), I specifically incorporate the possibility of each of my three dimensions of social heterogeneity working independently as well as interacting with each other.

I test the plausibility of my unique theoretical framework using a blend of quantitative analysis of original data for over 2500 individuals, and qualitative comparative case studies of a total of eight communities from rural Pakistan. On the whole, my framework stands up to the hard empirical

evidence. My quantitative results confirm the interdependence of the three dimensions of social heterogeneity, while my case studies serve to corroborate the specific predictions I make on the effect of caste power heterogeneity. Although generalizability of my findings in this third essay may be limited due to a small sample, my results nonetheless highlight the importance of unpacking the structural variable of heterogeneity of participants in order to better understand the likelihood of collective action.

In the **final essay**, I shift my focus to the relationship between social capital and educational outcomes. Much of the existing literature that examines the association between these two parameters interprets social capital along Coleman (1988; 1990) as a set of interpersonal ties individuals can utilize to compensate for wider inequalities in educational outcomes (see Dika and Singh 2002 for a good review). In contrast to these contributions, I follow the contemporary interpretation of social capital popularized by Putnam (1995: 67) and define it in this essay as “features of social organization, such as networks, norms and trust that facilitate coordination and cooperation for mutual benefit” in a particular community. Using this conceptualization, I analyse unique data I collected from rural Pakistan to present an original empirical analysis of the role social capital plays in facilitating collective action for education provision.

In what to my knowledge is one of the only analyses of the extent of trust and social networks in the country, in this final paper I document the presence of moderate levels of bonding social capital within kinship groups, yet relatively low levels of bridging capital across kinship networks and between people of different religions. Then using statistical analysis of data from over 350 households combined with an in-depth comparative case study of social capital and collective action surrounding education in two rural villages, I show that there are weak associations between the two parameters of interest. In particular, through my case analysis I demonstrate how in one village high social capital is accompanied by high levels of collective activity for education provision, whereas in the other village high social capital has not only resulted in the exclusion of other caste groups, but has also allowed the development of an elaborate system of patronage. While I acknowledge that the statistical analysis presented in this final paper is suggestive rather than deterministic due to concerns of endogeneity, my qualitative analysis nonetheless highlights the importance of understanding the downside of social capital, and of recognizing that rather than being driven by social capital alone, collective action is often embedded in a wider system of village politics.

## **v. Key Research Themes**

Each of the essays in this PhD collection is presented as a standalone contribution to knowledge. Yet the essays also build on each other and are closely linked by three overarching themes. As mentioned earlier in this note, the most fundamental of these themes is the “salience of kinship networks” in Pakistan – this theme forms the main driving force behind this thesis. Two other themes are also essential – first, the “centrality of micro-level power relations” in determining community collective action for education provision because this theme captures some of the most significant findings I propose in this collection; and second, the value of “interdisciplinary, mixed method approaches” to research as this theme encapsulates my principal stance on how to create knowledge in the social sciences. The contributions I make through these three themes feed directly into the short research agenda I discussed earlier in this chapter and, as the reader will discover shortly, also into the detailed literature reviews I present in the essays themselves.

### **Salience of Kinship Networks**

A sizeable literature studies the Pakistani kinship group. For a long time the topic was considered the exclusive domain of anthropologists who, through detailed ethnographic work, stressed the pivotal role kinship plays in explaining the local social structure (e.g. Eglar 1960; Alavi 1972; Rouse 1988; Lefebvre 1990). More recently, there has been a wider interest on the subject, particularly with respect to *biraderi* politics, and this interest has expanded the breadth and depth of this scholarship considerably (see for e.g. Gilmartin 1994; Alavi 1995; Nelson 2011; Mohmand 2014; Chaudhary and Vryborny 2013).

The research remains underdeveloped on two fronts though. First, stratification on the basis of the kinship group particularly in areas such as education and health has been mostly neglected, especially in recent decades during which class-based stratification has taken centre stage instead (see Gazdar 2007; Shah 2007). Second, politics on the basis of the kinship group has until recently taken a back seat when compared to the explanatory power attached by scholars to politics on the basis of the Pakistani “feudal” landlord or *zamindar* (Gardezi 1983; Talbot 1998; Easterly 2003). To address these shortcomings in the literature, one of the overarching themes that binds the essays in this collection together is the stress it places on the kinship group and – crucially – on the kinship group’s defining role in both educational stratification and as a stakeholder in local education politics in Pakistan. In this way, this thesis takes works on kinship-based stratification such as Gazdar (2002) and Jacoby and Mansuri (2011) as well as recent scholarship on *biraderi* politics such as Gilmartin (1994) and Mohmand (2014) as the key points of departure.

### *Caste as a Form of Social Stratification*

The contributions of the first two essays towards this theme of the salience of kinship networks are plain to see - the main purpose of the first essay is to highlight the importance of the kinship group by advocating for its status as a dimension of stratification worthy of independent study; while the aim of the second essay is to support this stance by documenting the presence of kinship group based stratification in educational outcomes. And overall, as shown in the previous section, the findings of both essays support my contention that the kinship group is fundamentally important.

### *Narrowing of Inequalities and Ethnicization of Caste*

Yet these first two essays also highlight two specific trends without reference to which discussion on this theme would not be complete. The first trend on the salience of kinship that is crucial to mention here is the empirical narrowing of kinship-based education inequalities over time, which is a core finding of my second essay. This is undoubtedly an optimistic result, but one for which I recommend caution in interpreting as an artefact of a declining importance of caste stratification. I do so specifically for three reasons that I discuss in greater detail in the essay itself, but which are worth enumerating here. First, my sampling design focuses on villages from two of the most developed regions in the country, which may not necessarily be representative of villages in less developed ones. Second, there is a possibility that a reduction in inequalities in access to schooling will not automatically translate into a reduction in inequalities in learning. And finally, it is likewise possible that instead of disappearing, caste-based inequalities have simply moved to higher levels of education which are not considered in my analysis. In short, narrowing of inequalities is a positive sign but one that must be viewed in light of the context of my study rather than as an undisputed broader trend in Pakistan.

The second of these trends is the *ethnicization* of caste, a phenomenon I describe in the first essay as the process through which traditionally hierarchical castes begin to compete more or less equally with each other, thereby taking on characteristics of unranked quasi-ethnic groups (see Dumont 1980). Several scholars have noted evidence of this phenomenon for caste groups in India (see Reddy 2005), and I likewise acknowledge similar trends for Pakistan more broadly, highlighting how the features of the kinship group are evolving into those comparable to ethnic groups<sup>6</sup>. This

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<sup>6</sup> Note that the broader stance on the meaning of ethnicity and caste taken in this thesis is along Horowitz (1985). According to Horowitz's seminal text on the subject (p.53), ethnicity is an umbrella term that "easily embraces groups differentiated by color, language, and religion; it covers 'tribes,' 'races,' 'nationalities,' and castes". That said, Horowitz does go on to distinguish caste from other types of ethnic groups based on the presence of ranking, or what he calls hierarchical ordering. This latter difference between ranked and unranked groups is brought out particularly in the first two essays of the thesis, while the second two essays acknowledge this basic difference but empirically treat Pakistan's kinship groups as one would treat any other type of ethnic group in the related literature. Both approaches, it should be highlighted, are not only in line with Horowitz's (1985) conceptualization, but are also in keeping with much of the newer theoretical and empirical literature written in the same vein (see for e.g. Reddy 2005; Banerjee and Somanathan 2009; Anderson 2011).

*ethnicization*, it is important to highlight here, nonetheless does not alter my argument at the most basic level of the salience of the kinship group. Regardless of whether this kinship group's features more closely resemble those of a caste or an ethnic group in the future, the more important message here is to concede that Pakistani society is stratified by multiple dimensions of stratification of which kinship is an inherently important one.

It is of course important to consider how these two trends relate to each other. More specifically, how does the empirical finding of narrowing inequalities based on caste relate to the extent and nature of caste *ethnicization* that I witnessed on the ground in my sample villages? Consistent with findings presented from contemporary India (see for e.g. Asadullah and Yalonetzky 2012), one key result of my fieldwork was that in practice, the discrimination and marginalization of low caste groups has reduced over time, and the stigma associated with belonging to a low status caste group has also dissipated to some extent. More importantly, I also find evidence that indicates that kinship groups are increasingly being viewed as distinct horizontal – and not vertical - entities. This phenomenon was best described by a study participant from one of the villages as follows:

“In the olden days, our fathers and forefathers would not let the *Khaskelis* (descendants of house servants) sit on the same *charpoy* (a woven bed or bench) as us, while the *Menghwars* (scheduled Hindu caste) were considered untouchable because they were Hindu. Now, although the *biraderis* are still considered distinct, this hierarchy is less strong.” High caste head teacher, Village 6, Hyderabad.

Participants attributed this kind of change to a number of factors, including media and awareness, economic modernization, as well as increase in education and wealth among several members of groups traditionally considered low caste (see also a more detailed discussion on this matter in Essay Two). Stressing some of the former mentioned reasons for this shift, an elite informant commented:

“Part of it is that we know what it is like to be discriminated against. Before independence, we Muslims were subservient to wealthy Hindus (referring to circumstances in specific village). And even today, as Shias we continue to be treated as different...Our great grandparents may not have willingly sat on the same *charpoy* (a woven bed or bench) as a *Menghwar* (scheduled Hindu caste), but we now do it all the time because we know better.” Retired university professor, Village 6, Hyderabad.

That said, unlike instances documented in the literature on *Sanskritization* in India, the successful shifting of traditionally low caste status groups to higher status ones was less apparent in my sample villages. Based on knowledge of caste status passed on through generations, informants in fact continued to refer to families which had acquired education, wealth or political power in recent decades but belonged to traditional low status groups as having a less noble heritage. Thus, although acquisition of these elements did alter local dynamics surrounding education provision considerably, as I show in my final two essays, respondents still insisted on separating the traditional lineage – which they associated with caste ranks - from more recent changes in the social, economic or

political status of groups. The following statements illustrate how informants made these distinctions and the importance they attached to the traditional caste status of villagers:

“There are so many cases I can tell you of low caste *Masihis* (Christian caste) in our village who are now working in offices. One is even a doctor.” Parent of school-going girl, Village 2, Faisalabad.

“Have you met Arshad sahib yet? He belongs to a low caste, his family used to work as servants for the Rajputs (landowning caste). Now he is one of the most active members of the village, and has one of the biggest houses on the *kammi* (artisan castes) side of Village 4.” High caste head teacher, Village 4, Faisalabad.

“They don’t belong to a high status caste (referring to the low status caste that had economic and political power in the village). They are not Syeds (descendants of Prophet Muhammad) – we do have a few Syed families here but they do not get involved in the problems of the village. So these low caste group members do what they want.” Head of low caste *biraderi*, Village 5, Hyderabad.

My essays naturally highlight these cases in more detail, albeit not always using the lens of *ethnicization*, which is why it is critical that I point out two specific cases to further illustrate this idea here. In the fourth and final essay of this thesis, for instance, I describe in some detail the case study of Village 5. I show the extent of political power the dominant, *low* caste group possessed, which was accompanied by significant economic status as well – yet informants in this village continued to refer to this kinship group in derogatory terms where heritage was concerned. In Essay Three on the other hand, I describe the instance of Village 4, where a *low* caste group had mobilized against the local, large landlord. Again, this low caste group possessed wealth, education, and a political office in the previous local government. But yet again, their less noble past was repeatedly stressed to me by several informants. Interestingly, had I conducted a caste ranking exercise (in the vein of Marriott’s 1960 contribution or Ahmad’s 1977 piece) in my sample villages, I suspect many informants may have placed this particular low caste group above some of the other artisanal castes in ranking. But at no point during my fieldwork did it appear that informants would knowingly rank artisanal groups above those with a traditional association with agriculture. This lack of wider rank mobility, in spite of the narrowing of inequalities, is perhaps in itself an important yet underexplored finding of this thesis that may merit further work.

#### *Caste as a Vehicle for Collective Action*

In the final two essays of this thesis, the Pakistani kinship group takes on a role beyond that of a simple dimension of stratification. In these essays, the kinship group is instead analysed as a unit of economic and political power and a vehicle for collective action through which groups of villagers work together towards the common purpose of enhancing education provision.

The import of my findings related to this theme is not comprehensively captured in the headline results I presented in the previous section. One of the many findings presented in my third essay for instance is that the commonly alleged adverse effect of land inequality is likely predicated on the degree of caste fractionalization in a village. This result demonstrates the inadequacy of prevalent views in the literature that landlord politics unanimously offer greater explanatory power for community outcomes than do kinship politics. In the fourth essay, the salience of the kinship group is likewise emphasized but this time in the context of measuring social capital. In this final paper, among my other findings is the significant conclusion that closeness, frequency of contact and trust within the kinship network serves as a better measure of social capital in the context of Pakistan than does the more commonly employed indicator of “participation in voluntary associations”. All in all, each of my four essays concur on the subject – they show that a consideration of the Pakistani kinship group is key to understanding educational outcomes in rural communities.

### **Centrality of Micro-Level Power Relations**

Another key theme that runs through my essays, specifically through the third and fourth contributions, is the centrality of micro-level power relations in determining collective action for education provision. In the existing literature, the mechanisms that facilitate collective activity are not that well understood. Authors writing in this strain of scholarship commonly assert that heterogeneity of participants hinders collective action, but how it does so is often left as a black box. In the research that does consider these causal mechanisms in greater depth, multiple pathways have been advocated. These range from differing preferences, taste-based discrimination, and difficulties in sanctioning noncompliance (Habyarimana et al. 2009) on one hand, to suggestions that ethnic dominance and polarization may be better predictors of collective activity on the other (Doane 1997; Collier 2001; Waring 2011). The burgeoning literature on social capital has additionally suggested yet another pathway – that of networks and trust, which proponents posit can bring about cooperation and thus facilitate a number of positive community outcomes (see Woolcock 1998).

### *Central Proposition on Caste Group Power, Social Capital and Collective Action*

My third and fourth essays add to this literature and provide significant insights from inside the black box of micro-level collective action. Indeed the core contribution of the third essay is the theoretical framework it builds which explicitly incorporates, among other factors, imbalances in ‘power’ – defined here as the chance of a “group of men to realize their own wills in communal action even against the resistance of others who are participating in the action” (Weber 1946: 180) - between kinship groups. In my proposed framework, this power imbalance within communities serves as an important dimension of heterogeneity – a dimension that drives negotiation between self-interested actors over education resources in rural villages. One of the contributions of the fourth essay on the other hand is also related to power. The comparative case studies in this fourth

essay highlight the inadequacy of the notion of social capital in accounting for the hierarchical or asymmetrical relationships across and within kinship groups, which ultimately exert a substantial influence on the nature of collective activity that occurs.

Theoretically, these two essays can be thought of as examining slightly alternative pathways that can lead to collective activity surrounding education. In line with the political economy view, the third essay examines the role of power asymmetries; whereas consistent with the arguments posited by social capital proponents, the fourth essay examines the weight of the fashionable social capital concept. My confirmatory results in the former essay, and my contradictory results in the latter are thus instructive – on a more precise level, they indicate that caste fractionalization, land inequality and caste power heterogeneity are better than social capital in explaining collective activity for education in rural societies. But put in more generalized terms, their various findings related to the importance of unequal economic, political and social power both across and within kinship groups are consistent with this second theme. These essays independently and - perhaps much more persuasively - when taken together emphasize the centrality of micro-level power relations in driving educational outcomes in developing countries such as Pakistan.

#### *Contextualizing Importance of Micro-Level Politics for Education Provision in Pakistan*

Do my results on the salience of micro-level politics then imply that this is the most important factor holding back rural Pakistan's progress on education? Not necessarily. As I noted earlier, experts attribute poor performance on education metrics both globally and in Pakistan in particular to a myriad of demand and supply side factors including, but not limited to, poverty, conflict, governance, financing, culture, and social divisions. While several of these other factors likely continue to hold weight in the Pakistani context, my methodology allows me to hold many of them constant in my sample villages in order to argue in favour of the importance of local politics.

One of the most important issues experts highlight with respect to education in Pakistan, for instance, is the lack of schooling supply. To rule out the influence of broader supply side problems biasing my findings, I thus selected study sites that had at least one government middle school in their main settlement. Indeed, in all eight of my sample villages, these middle schools had been around for over 50 years. This standardization in terms of the basic infrastructure then allowed me to consider how local politics and power dynamics affected collective activity for education provision, particularly in areas such as raising additional funds for schooling, monitoring teacher behaviour, and undertaking political action for improving local education.

Differences in this kind of collective activity, defined here a number of people working together towards some common objective, were in fact prominent throughout my case studies and thus justify



my stress on micro-politics. In one village, for example, I found that villagers had pooled their resources to build an extra room in the local school. In another, I demonstrate how villagers had mobilized politically against an exploitative local landlord who was using the local school as an extension of his agricultural processing factory. In another village still, I show how villagers had worked together to repair a damaged school wall. Taken together, such modest yet important instances of collective activity in the face of standardized supply conditions permit me to persuasively argue in favour of the role of micro-political economy in influencing rural education performance. To the degree that my study villages are similar to other villages in Pakistan, micro-political economy is likely to feature just as prominently as a factor driving outcomes.

In other works, scholars have analysed similar local dynamics using Hirschman's (1970) lens of voice and exit. Although it is not the lens I adopt here, it is one that is important nonetheless. As the reader will see throughout this thesis, the lack of voice among marginalized groups and individuals – due to economic, political or social status – often does result in poor educational outcomes in my sample villages. Yet, as I show in my third essay in particular, marginalized groups do not always lose out – in fact, I find that there can be instances in which even those lacking voice end up with relatively decent educational outcomes. This disparity in fact adds even more fuel to my micro-political economy argument in which the caste composition, land inequality and nature of caste dominance in a village provide the most comprehensive explanation for differing outcomes.

### **Value of Interdisciplinary, Mixed Method Approaches**

For a long time, economics has dominated the field of development studies, while other disciplines such as sociology, political science and anthropology have often been relegated to the background. To be sure, the underlying differences between these disciplines has led to serious tensions in the field; tensions that arise largely because of the traditional characterization of economics as a “hard”, quantitative and thus rigorous field, and of sociology, political science and anthropology as relatively “soft”, qualitative and thus less rigorous traditions. Yet there is now a growing consensus that economics, and the associated quantitative tradition, by itself may be inadequate in addressing the many complexities associated with development issues (see Kanbur 2002; Hariss 2002).

At the same time, there is also some agreement that our understanding of such complexities may be greatly enhanced by incorporating insights and methods from quantitative and qualitative traditions. This stance of complementarity between both traditions is the one I take throughout this thesis. With the exception of the first essay, which is theoretical in nature, each of the essays in this PhD series utilizes a blend of methods. Moreover in line with the broader education and international development literature, each of the papers - including the first one - engages with discourses in economics, sociology, political science, and anthropology.

### *Different Questions, Different Methods*

My interdisciplinary, mixed methods approach is advantageous for two main reasons. First, different research methods are often suited to answering different types of questions (Goertz and Mahoney 2012). On one hand, quantitative analysis can provide statistical transparency and generalizability, and is thus good at answering questions related to the presence of relationships between variables. On the other, qualitative work facilitates construct validation and theory generation, and is therefore particularly useful in addressing questions related to the how and why behind key relationships (George and Bennett 2005; Goertz and Mahoney 2012).

These various benefits of both traditions are evident in my essays, where they are often described in some detail. One of the most obvious benefits though has to be the level of construct validation that my qualitative undertakings provided for this overall endeavour. Indeed the basic premise of this thesis rests upon the conceptual discussions presented in the first two essays, which use qualitative analysis to argue that stratification on the basis of a social construct that so many Pakistanis consider their key identity marker should not be ignored. The application of construct validation is also apparent in the final two essays. Much of the quantitative work similar to my third essay for instance tends to summarize the slippery concept of fractionalization into the probability that two randomly selected individuals belong to different ethnic groups. However, the use of qualitative analysis allows me to improve this measure in two ways. First, on the basis of empirical realities I end up measuring fractionalization not on the basis of ethnicity but instead on the basis of the kinship group, which I show is the more relevant level for considering the effect of fractionalization. Second, I also use qualitative analysis to help me unpack the ‘heterogeneity of participants’ variable and consider how caste power heterogeneity may be relevant. The usefulness of qualitative construct validation likewise applies to my final essay. Contemporary social capital scholarship by and large uses proxy indicators related to networks and trust to consider the usefulness of the notion. Yet, as I show through careful qualitative work, these quantitative indicators of social capital fail to account for two vital factors that are also relevant: the downside of social capital and the wider village politics in which collective activity is embedded.

### *Method Triangulation*

The second benefit of an interdisciplinary, mixed methods approach is that it permits methodological triangulation. Data, regardless of whether they are quantitative or qualitative, are seldom perfect. Consequently, as I highlight repeatedly in each of the essays that follow, the ability to arrive at similar conclusions using different methods permits my conclusions to be sounder than those I could have arrived at using any one method alone. This specific advantage should be plain to see for the reader while perusing through this thesis, but is especially relevant for the third and fourth essays. In the third essay for instance, the use of mixed methods helps me address some of the challenges

associated with drawing inferences from a small sample. My conclusions on the concept of caste power heterogeneity in this essay are based primarily on qualitative analysis of just eight rural communities. However, my validation of hypotheses on this front through larger N quantitative analysis in the same paper adds considerable weight to my findings, making my arguments on caste power heterogeneity all the more persuasive.

The same is true of the fourth essay. The quantitative analysis in this paper, as I noted in the preview of findings section earlier, examines the relationship between social capital and educational outcomes. My findings suggest a weak, often mixed, statistical relationship between these parameters. However, I also acknowledge that these findings are suggestive rather than deterministic because, like most other contributions to the social capital arena, my analysis is likely to suffer from endogeneity concerns. These concerns arise primarily due to the possibility of causality running in both directions i.e. from social capital to educational outcomes and from educational outcomes to social capital. My use of method triangulation in this essay through a rich comparative case study, however, provides critical corroboration and allows me to more firmly assert my position that social capital is neither a necessary nor a sufficient condition for enhancing educational outcomes.

#### *Challenges Associated with Mixed Methods Approach*

All that said, the use of mixed methods in this thesis does not imply that the traditional trade-off between nuance - which is widely associated with qualitative work - and parsimony - which is commonly assumed to be provided by quantitative analysis - is no longer relevant. On the contrary, this trade-off continues to be important, as is evident for instance in this thesis' most basic presentation of the institution of caste. To elaborate, in much of the theoretical as well as qualitative empirical work that follows, caste and caste status are acknowledged to be multi-faceted, dynamic constructs; whereas in the quantitative analysis, as is common in quantitative work, these constructs are necessarily operationalized through the use of single, static indicators instead.

To address this persisting challenge, every effort has been made to incorporate the nuance about caste dynamics gathered through qualitative work into the final choice of static statistical indicators and regression specifications. In the second essay, for example, to incorporate the possibility of fluidity in caste group status, in addition to using a single dummy indicator of low caste status in the regression analysis, I also present alternative analysis in which I include a full set of individual caste group dummies. The results of this latter analysis do not rely on the accuracy of my high/low ranking, but rather evaluate the educational performance of each group independently. In the third and fourth essays, on the other hand, I explicitly add quantitative parameters related to factors known in the literature to contribute to the dynamic nature of caste status such as economic, numerical and political dominance. In these essays, in fact, I also provide detailed, comparative case

studies that shed light on caste dynamics. The former approach is meant to quantitatively capture the multiple dimensions of stratification that may cause changes in caste rankings, while the latter approach is supposed to qualitatively highlight some of the politics that dictate this. In sum then, the analysis presented here admittedly suffers from some of the standard shortcomings associated with the relevant quantitative or qualitative methods; however, what sets this overall effort apart from others is that it presents these sets of analyses together in order to attempt to mitigate their limitations.

## **vi. Policy Implications and Directions for Future Research**

Many of the efforts emanating from the subdiscipline of education and international development sit at the nexus of academia and policy, and this thesis is no different. My findings on educational stratification, for instance, not only inform policy on the presence of inequalities in outcomes based on kinship, but also imply that initiatives targeted at the most marginalized groups may be warranted to address this inequity. My results on the interplay between caste fractionalization, land inequality and caste power heterogeneity on the other hand suggest that policy solutions in Pakistan must address power imbalances between privileged and non-privileged groups if they are to be successful in facilitating local collective action. Meanwhile, my conclusions on the inadequacy of social capital in explaining collective activity indicate that policy solutions that rely on improving social capital alone in the hope that it will improve community outcomes are unlikely to be successful.

Undoubtedly, there are also several limitations associated with the research I present. While I describe these limitations in detail in each of the papers that follow, I highlight two chief constraints here as they both are important drivers for further research. First, as described in more detail in the methodological appendices, a number of practical constraints limited the size of my sample and the scope of my study. Depending on the nature of analysis in any given paper, this sample consisted of 2500 individuals, 350 households, 30 kinship groups and/or 8 villages from the provinces of Punjab and Sindh. The restricted size of this sample is why one avenue for further research is a larger scale validation, particularly of findings related to the quantification of caste-based inequalities given in the first essay, and the theorization of the effects of caste power heterogeneity presented in the third paper. This replication would go a long way in corroborating my results, and in testing the external validity of my analysis.

Second, as I note in all four constituent essays of this thesis, the field would greatly benefit from additional research that delves even deeper into dynamics within kinship groups. Although I provide insights on this front throughout this effort, the results of my essays pose a set of additional queries

that need to be addressed through greater study. For instance, the findings of my first two essays raise the question of whether educational stratification may extend from the caste to the sub-caste level; the findings of my third essay beg the question of how factors such as individual agency and personality, as well as conflicts of power within dominant castes can play a pivotal role in determining whether or not these castes mobilize as a group; while the discussion presented in my final essay highlights the importance of exploring the specific circumstances under which the downside of social capital may manifest. More research on caste dynamics should help shift the debate from whether the kinship group is important to why and how it works in different situations to influence educational outcomes.

To sum, one of the key messages of this thesis is that the interplay between kinship and education in Pakistan is crucial. More research on this subject matter will significantly advance our understanding of the factors that hinder progress on the educational front. Moreover, this deeper understanding is likely to have serious implications for not just education policy in Pakistan, but also for domains such as health and infrastructure in the nation, and in other similar developing countries.

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## ESSAY ONE

# Does Pakistan have a Caste System? A Critical Examination of the Nature of Pakistani Kinship Groups

### Abstract

The traditional “book view” conceptualization of caste was one of a hierarchy based on the religious ideology of purity and pollution. However, the anthropological understanding of the notion has since then moved on to an empirically grounded “field view” which sees caste not as a religious but rather as a social institution fraught with inconsistencies. Unfortunately, the literature on Pakistan has not entirely kept pace; although a number of scholars have adopted this newer approach in analysing Pakistan’s *caste-like* kinship groups in recent decades, several other researchers have continued to dismiss the presence of a local caste system based on the older “book-view” conceptualization of the notion. In this essay, I attempt to provide a deeper understanding of Pakistani kinship groups in two ways. First, I systematically compare their features to those of class and caste systems to argue that the local kinship group is much closer to a caste than is commonly acknowledged in a lot of the literature. And second, to help reconcile inconsistencies between the nature of the kinship group and various interpretations of caste, I build on seminal “field view” contributions to propose an alternative definition of caste – a definition that easily accommodates the local kinship group. Through these contributions, my underlying aims in this essay are twofold: to provide an alternative lens through which to view the Pakistani kinship group, and – critically - to help reintroduce the salience of caste as a distinct dimension of stratification in Pakistan.

Key words: caste, kinship groups, ethnicity, South Asia, Pakistan

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## 1.1. Introduction

With a history spanning over 3500 years, the institution of caste has proven to be a durable one. In spite of significant progress on the Indian subcontinent in recent decades, this longstanding institution continues to exert a substantial influence on social, economic and political outcomes for individuals and communities. As a result even today, caste-based discrimination, conflict, and stratification in areas such as health and education continue to persist in countries such as Nepal and India (see Jeffrey 2001; Borooah and Iyer 2005; Stash and Hannum 2001; Asadullah and Yalonetzky 2012). In recent years, the enduring influence of caste has served to bring it to the policy limelight again - so much so that Nepal recently enacted legislation to prohibit discrimination against the lowest castes in the country; while in neighbouring India, rows continue over whether or not to officially include a caste indicator in the census for the first time since 1931 (UN News 2011; Mahapatra 2015; Aiyappa 2015).

In contrast to Nepal and India, caste-based stratification has received scant attention in the scholarship on Pakistan (Gazdar 2007; Jacoby and Mansuri 2011; Gazdar and Mallah 2012). A key challenge in academic and policy circles has been disagreement over whether a caste system exists in Pakistan in the first place. This was not always the case – early ethnographic work on post-partition Pakistan followed the same terminology of caste used in pre-partition India to describe rural society. In this body of work, scholars documented Pakistani villages as being stratified into two main “castes” - the *zamindars* or landowners, and the artisan and service castes referred to jointly as the *kammis* – which were then divided into numerous distinctly named caste groups based on patrilineal descent (see Eglar 1960; Marriott 1960; Barth 1960). However since then, the treatment of these kinship groups has changed dramatically in the literature. In fact, several researchers working on the country have dismissed the presence of a caste system (see for e.g. Ahmad 1972; Alavi 1972) on the basis of comparisons drawn against an older interpretation of the institution, commonly known as the “book view” (see Dumont 1980).

This *book view* draws primarily on Hindu scripture to present rigid conditions that characterize a caste system – conditions that have been widely contested, leading to a newer conceptualization of the notion often referred to as the “field view”. The *field view* in contrast sees caste as a social rather than a religious institution fraught with inconsistencies (see Jodhka 1998; Quigley 2002), and as I will argue in this essay, a construct not too different from the Pakistani kinship group. The fundamentals of this argument itself are not new – in recent years, a small but growing scholarship (see for e.g. Gilmartin 1994; Lyon 2004; Gazdar and Mallah 2012; Mohmand 2014,) has not only highlighted the salience of the Pakistani kinship group, particularly with respect to local politics, but

has in effect also treated this kinship group largely in line with treatments seen in the *field view* literature from contemporary India. What is original in this conceptual essay, however, are the two interrelated sets of analyses I present in order to provide a deeper theoretical discussion on the nature of Pakistani kinship groups.

The first is the systematic comparison of the features of the Pakistani kinship group to the accepted characteristics of class and caste systems. Based on my reading, I contend that class is an inadequate characterization of the kinship group for two key reasons – first, unlike in a class system, there is restricted mobility across kinship groups and second, the commonly accepted feature of similar economic status of members in a specific class does not necessarily obtain. On the other hand, my comparison of the kinship group with the complex notion of caste as documented by post-partition scholars working on India - particularly surrounding the parameters of hierarchy, association with traditional occupation, and restrictions on marriage and contact – reveals several similarities. These similarities lead me to argue that the Pakistani kinship group is much closer to a caste than is commonly accepted in a lot of the literature.

The second set of analysis I provide is the critical examination of the definition of caste, and the challenges associated with reconciling its various interpretations with the features of Pakistan's kinship group. I make a modest attempt to address this challenge by proposing an alternative definition of the notion in the penultimate section of this essay. My definition builds on Srinivas' (1962) and Quigley's (1993) seminal contributions, and consistent with the *field view* sees caste as a hierarchical, social institution with varying practices surrounding hierarchy, occupation, and restrictions regarding marriage and contact, which are often dictated by - among other factors - religion, ideology and localized group norms. By no means though does my definition attempt to supplant existing *field view* definitions; its purpose is really much more modest. It aims to provide a concise viewpoint that should allow empiricists to acknowledge the inconsistencies between the Pakistani kinship group and the *book view* of caste, while at the same time conceding its similarities to various modern *field view* interpretations of the term. Through these two sets of discussion, my underlying aims in this paper are twofold: to provide a concise, alternative lens through which empiricists can view the Pakistani kinship group, and to extend the literature that aims to reintroduce the salience of caste as a distinct dimension of social structure and stratification in Pakistan.

Before proceeding with my analysis, it is important to clarify my usage of the term kinship group more broadly. By Pakistani kinship groups, in this essay I refer to the social structure variously called *biraderi* (brotherhood, clan), *quom* (tribe, sect, nation) or *zaat* (ancestry, caste) in the local vernacular. Many authors differentiate between these terms, arguing that they refer to distinct social constructs that differ either based on geographic location, or in that they represent different levels of

kinship grouping, or even because they connote relationships that are based on select political, economic or ritualistic processes (see Alavi 1972; Quigley 1993; Chaudhary 1999; Lyon 2004; Mohmand and Gazdar 2007). Yet, in practice all three local terms are often used by laymen to denote a similar underlying concept – that of a uniquely named, primarily endogamous kinship group based on patrilineal descent (see Gazdar 2007). Thus for the sake of simplicity, in this essay and in this thesis more generally, I use the term kinship group or sometimes the local word *biraderi* as umbrella terms to refer to this same underlying construct.

This essay proceeds as follows: Section 1.2 provides the conceptual background for this paper; Section 1.3 reviews the treatment of Pakistan’s kinship groups in the scholarship, and assesses their features against those of class and caste systems; Section 1.4 presents a short discussion on theorizing about caste in the modern era; Section 1.5 concludes by considering what broader implications the key arguments I make in this conceptual essay have for the literature.

## **1.2 Conceptual Background: The Contested Meanings of Caste**

The institution of caste has long been the subject of theoretical and empirical study. This interest is not altogether unexpected – not only is the caste system the most prevalent form of social organization in the Indian subcontinent, but it is also a form of organization that is markedly different from structures found in the West. According to Ghurye (1969), it is this “ubiquity and strangeness” that have fuelled the longstanding attention on the topic.

In spite of this attention, however, both the definition of caste and more importantly its characteristics have *to date* remained the subject of contradictory claims. In this section, I set the stage for this paper by providing a platform to understand this institution better. I begin by briefly describing some of the earliest texts on the notion, highlighting how this text was largely descriptive in nature. I then move on to examine the views of prominent theorists in the arena, emphasizing the shift in the caste literature from an ideological *book view* to an empirically grounded *field view*. I conclude this section by presenting Srinivas’ (1962) definition of caste, which not only sums up conventional wisdom on the subject according to the latter *field view*, but also serves as my working definition of caste until I return to the idea again later in this paper.

Countless books and essays have been written on this institution; for the sake of brevity the following section reviews only works and concepts that are particularly relevant to the discussion at hand. The reader should bear in mind that while my intention is not to mask the underlying complexities of caste narratives and arguments, I am often forced to simplify and summarize. For a

more thorough treatment of the concept's theory and history, see Hutton (1946); Srinivas (1962); Ghurye (1969), Dumont (1980); and Quigley (1993).

### 1.2.1 Early Literature

The earliest accounts on the matter came from foreign historians and colonial bureaucrats, and tended to be descriptive in nature (David 1977). As early as 300 BC, for instance, the Greek politician and historian Megasthenes documented the division of Indian society into seven groups comprising of sophists, farmers, herdsmen, artisans, soldiers, councillors and administrators (Kulke and Rothermund 2010). The French missionary Abbe Dubois wrote his widely read account of Hindu manners and customs in 1906, describing in some detail not just the division of Indian society into four groups but also detailing each of these group's separate functions in society. In 1915, British ethnographer Herbert Risley made a similar contribution to the field.

These earlier descriptive works also explored the reasons for the existence of the caste system in the first place. Although even today there remain fundamental disagreements about its ideological underpinnings, the prominent explanations traced the institution's history back to the traditional Hindu hierarchy of four *varnas* (colours) given in classical religious text<sup>7</sup> (Quigley 1993). The *varnas* employ the ideological precepts of purity and impurity to divide society into the four categories described by Dubois and Risley. In this *varna* structure, the highest category is comprised of the *Brahmans* or priests, below them are the *Kshatriyas* or warriors, next follow the *Vaishyas* or merchants and then finally the *Shudras*, or servants (Dumont 1980). Officially falling outside these categories and thus at the bottom of the status hierarchy are the outcastes or *Dalits*, who comprise of individuals involved in occupations considered ritually impure such as leatherwork, butchery and the removal of rubbish and sewage (Jodhka 2010). Of course *varna* is a broader organizational system – this system, according to the prevalent view, then corresponds to smaller operational units known as *jatis* or castes<sup>8</sup>, with each having a distinct caste name and identity (Hutton 1946). Exact estimates vary but according to Ghurye (1969), in each linguistic area of India there are over 200 *jatis* that are then further divided into some 2000 groups or subcastes.

### 1.2.2 Book View of Caste

By the middle of the 20<sup>th</sup> century, researchers on the topic were ready to move away from such descriptive accounts towards theorizing about caste and specifically, towards attempting to define it. The task did not prove to be straightforward. Hutton (1946), for example, noted that it was hard to

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<sup>7</sup> See Dirks (2001) for the alternative view that caste is a colonial construct. See Risley (1915) for a racial theory of caste origin. See Dubois (1908) for a presentation of an earlier view that caste is a Brahmanic construct. See Bidner and Eswaran (2015) for a recent, fascinating gender-based theory on the origins of the caste system.

<sup>8</sup> The commonly held, although not necessarily correct, view is that *jatis* arose from intermarriages between individuals of different *varnas* (Sharda 1977). Incidentally, the ancient Veda mention the concept of *varna* only once and that of *jati* not at all (Weber 1946a).

define caste because of its fluidity – people belonging to one caste in one locality could be considered to belong to a different one in another. In his renowned work on the topic, Ghurye (1969) highlighted that the institution manifested numerous inherent inconsistencies. According to him, it was due to these inconsistencies that there was a lack of a precise definition in the literature.

In spite of these challenges, theorists soon began to define caste by way of identifying its key characteristics or features. Hutton (1946) contended that the features of a caste were that: one's caste was determined by birth unless one was expelled for some reason; castes were endogamous groups; there were fixed occupations for some castes; there were restrictions surrounding contact between different castes; and importantly there was a hierarchy, with *Brahmans* occupying the top rung of this hierarchy. Similarly Ghurye (1969) expounded that six features were critical for a system to be defined as one of a caste: (1) segmental division of society, (2) hierarchy, (3) restrictions on feeding and social intercourse, (4) civil and religious disabilities and privileges of different groups, (5) lack of choice on occupation and (6) restrictions on marriage. In his reading of the institution, Bogle (1935) summarized the key features of a caste system into three: (1) separation in matters of marriage and contact, (2) division of labour and (3) hierarchy.

The most influential theorist in the arena, Dumont (1980), first published *Homo Hierarchicus* in 1966 by taking Bogle's proposed features further and arguing that these three criteria laid out the basis for the theory of caste. In his seminal contribution, he viewed caste as a comprehensive and -critically - undisputed hierarchy based on the religious concept of pollution. Dumont highlighted that those who had economic and political power may not necessarily have had the highest status, while those with the highest status (i.e. the *Brahmans*) may not have necessarily had economic or political clout. This disjunction between status and power, he argued, was due to the Hindu idealistic principles of pure and impure, which took precedence over any material inequalities. Dumont's conceptualisation of caste is to date considered the embodiment of the traditional or "book view" of the institution, which overwhelmingly relies on classical Hindu scripture and colonial ethnography for its convictions about caste and the caste system (Jodkha 1998).

### **1.2.3 Field View of Caste**

Most, if not all, empiricists criticize the rigidity of the *book view*'s descriptions, noting that the documented characteristics of a caste system are "at best inadequate, at worst misleading" (Quigley 1993: 2). The alternative camp, commonly referred to as advocates of the "field view" of caste, asserts that no amount of theoretical reflection or abstraction can substitute for experience of how caste is actually practiced on the ground. In line with this viewpoint, beginning in the late 1950s, there was a virtual explosion of empirical village studies in India that aimed to examine the caste system and importantly its inherent frictions in their natural settings (see Jodkha 1998).



Through these empirical studies, the *field view* poses a number of challenges to the *book view*'s reading of caste. For one, they report instances where not all members of the caste society accept a universal and unambiguous hierarchy (Dirks 2001; Lindt 2013). For another, they argue that empirically the role played by the Hindu religion and the *varnas* is less prominent, if not insignificant, in influencing caste origins and customs than that suggested by Dumont and his peers (Quigley 1993). Many also contest the validity of the impurity feature as a religious precept, noting that privileged individuals in almost all forms of stratification use such concepts to maintain their positions of superiority (Berreman 1979; Jaiswal 1997; Quigley 2002).

Moreover, authors writing in this strain highlight multiple disparities and inconsistencies in caste practices across India, while at the same time documenting a number of non-systematic developments in local caste customs – developments that directly contest the reductive book view definitions. Most prominent amongst these developments is perhaps that of *Sanskritization*, whereby lower castes are seen to be emulating *Brahmans* in the hopes of changing their caste status (Srinivas 1962). Also influential is the concept of dominant caste, which denotes a caste that has gained power in a village not because of its hierarchical status as the *book view* would have expected, but because it owns land, or is numerically preponderant or perhaps because it possesses modern education or political clout (Srinivas 1959). Such contradictory reports on the ground lead the empiricists to arrive at an important conclusion: the unambiguous closure and universal hierarchy posited by the traditionalists as defining features of castes do not necessarily obtain.

As one of the key proponents of the *field view*, Srinivas defines caste in a marginally less restrictive manner than his predecessors, primarily to capture its fluidity. His definition, which sums up the conventional wisdom on the subject, is the definition I prefer to take as the starting point of our understanding on caste. Srinivas (1962: 3) posits that caste is:

*“...a hereditary, endogamous, usually localized group, having a traditional association with an occupation and a particular position in the hierarchy of castes. Relations between castes are governed, among other things, by the concepts of pollution and purity and generally, maximum commensality occurs within the caste.”*

### **1.3 Does Pakistan have a Caste System?**

The patrilineal, primarily endogamous kinship group in Pakistan, referred to sometimes as *biraderi* (brotherhood, clan), *quom* (tribe, sect, nation) or *zaat* (ancestry), has increasingly been

acknowledged as a pivotal unit of factional difference in the nation (Qadeer 2006; Lieven 2011; Gazdar and Mallah 2012). Yet whether or not this kinship group structure can be considered a caste system and more importantly, whether or not it constitutes a distinct dimension of social stratification worthy of examination has been the subject of lively academic and political contest.

To build my argument surrounding the nature of the Pakistani kinship group system, I first examine caste practices among Muslims in pre-partition India. In this introductory section, my purpose is to establish that the institution of caste has historically never been restricted to practitioners of Hinduism in the subcontinent. I then move on to trace the intellectual shifts in the post-partition literature on Pakistan, highlighting two problematic trends in the most recent body of work – the primacy assigned to class-based stratification, and the theoretical unresolved status of the kinship group. In the final two sections, I take some time to deliberate on the appropriate categorization for the *biraderi*. I first argue that class is an inadequate characterization of the features of this institution; and then, by drawing comparisons with the notions of caste presented by the *field view*, I posit that the Pakistani kinship group is much closer to a caste than is commonly acknowledged.

### **1.3.1 Pre-Partition Scholarship on Caste System among Muslims**

Of particular interest in this paper is whether the concept of caste can be applied to Pakistan, the majority of which professes Islam and not Hinduism as its faith. Given that many Western authors have located the ideological justification of the Indian caste system in Hindu scripture and the associated puritan *varna* estates, at first glance the two appear incompatible. This is even more so as authors such as Blunt (1931) and Nazir (1993), among others, stress that the fundamental concept of a caste-based hierarchy is inconsistent with the most basic Islamic precept of egalitarianism.

Regardless of such idealistic limitations, numerous empirical accounts tell us that the practice of caste has historically been widespread among Muslims. The Census of India 1901, for instance, listed some 130 castes which were wholly or partly comprised of Muslims (Ahmad 1977b). And, the Imperial Gazetteer of India (1908: 329 as cited in David 1977) observed, “In India, however, caste is in the air; its contagion has spread even to Mohammedans<sup>9</sup> and we find its evolution proceeding characteristically on Hindu lines.” On the basis of structural similarities between the caste system prevalent in Hindu-dominated areas, and the systems of social stratification found in Muslim-dominated areas, many scholars conceded that in pre-partition India, the caste system cut across religious, regional and class divisions.

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<sup>9</sup> Mohammedans is a misnomer that is meant to refer to Muslims or followers of the faith of Islam.

One obvious reason for its adoption by Muslims in the region may have been the long history they shared with Hindu society. This is the stance taken by Weber (1946a), who argues that castes in Muslims are a product of extended interaction with Hindus. Based on his study of the state of Bihar in India, Ahmad (1977b) concurs that the practice of caste found in Bihari Muslim societies is the result of historically mimicking the same practice followed by Hindu societies in the same state. He adds that the mass conversion of Hindus to Islam, particularly from the *Shudra* and *Dalit* categories, combined with an inability to abandon deep-rooted customs and beliefs also played a significant role in the development of aspects of castes in Muslims. Others such as David (1977) and Munda (2000) highlight that caste-like gradations in Muslim societies have been commonplace throughout Islamic history, and are even found among Muslims outside of the South Asian region.

Based on the 1901 census, Muslim castes in pre-partition India were divided into three categories. The noble *Ashrafs* were comprised of converted Hindus of high birth or descendants of foreign Muslims such as the *Syeds*, who claimed to be direct descendants of the Prophet Muhammad (Dumont 1980). Below them were the *Ajlaf* or artisanal classes such as carpenters, milkmen, barbers and the like, followed by the *Arzal* or the converted untouchables such as the sweepers and scavengers (Ahmad 1977b). According to descriptive accounts, the *Ashrafs*, who many likened to the *Brahmans*, sat at the top of the Muslim hierarchy, while the *Arzal* sat at the bottom and were thus forbidden to enter mosques or use the public burial grounds (Munda 2000).

The above notwithstanding, scholars working in this strain of literature do highlight one feature of the caste system amongst Muslims in pre-partition India that distinguished it from the one practiced by followers of Hinduism. They note that the lack of the ideology of purity combined with the Islamic teaching of universal brotherhood forced caste systems among Muslims to be less rigid, and thus to allow for much more commensality across castes. In spite of this fluidity, however, even the staunchest proponent of the *book view*, Dumont, concluded that among the Muslims of the Indian subcontinent, “Caste is weakened or incomplete, but not lacking altogether” (1980: 210)<sup>10</sup>.

### **1.3.2 Post-Partition Scholarship on Caste System in Pakistan**

Following the partition of Pakistan and India in 1947, many of the early ethnographic accounts continued to describe the kinship system in Pakistan using the same terminology of caste that had been applied to the South Asian subcontinent previously. In her study of a village from the Gujarat district of Pakistani Punjab, for instance, Eglar (1960: 28) noted that society was stratified into two main descent-based “castes” – the *zamindars* who were the landowners, and the *kammis* who were the village servants or artisans. The *kammis*, she added, were further divided into castes based on

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<sup>10</sup> See Ali (2002) for an updated account of caste among Muslims in contemporary India.

their traditional occupations such as *Nai* (barbers), *Tarkhan* (carpenters), *Kumhar* (potters), *Musalli* (sweepers), etc. The status of the *zamindars* differed based on their landholdings, while the *Nais* were considered the most refined of the *kammi* castes. While studying *Pathans* from Swat in North Pakistan, Barth (1956) observed a similar system. Although as Muslims these groups did not adopt the ideological concepts of purity and impurity, Barth (1960: 131) claimed that their structural system could still “...meaningfully be compared to that of Hindu caste systems”. Marriott (1960) concurred – the fact that the Pakistani kinship groups could be ranked, he asserted, was a clear sign that predominantly Muslim Pakistan had a hierarchical caste system after all.

The stratification of rural Punjab was a theme also stressed upon by Ahmad (1972, 1977a) in his writings from Sargodha. But in contrast to Eglar (1960), Barth (1956) and Marriott (1960), Ahmad opined that the kinship group was not comparable to a caste. He described division of society at his study site into first the same two main occupational categories of *zamindar* and *kammi*, which were then further split into several “*quoms*” or extended patrilineal groups. In his reading of the local customs, these *quoms* did not possess a universally accepted hierarchy and changing one’s kinship group was easily accomplished – these two characteristics, he argued, were in sharp contradiction to the main criteria laid out for a caste system by Hutton (1946) of hierarchy based on descent. Ahmad (1972) also emphasized other inconsistencies with the *book view* of caste such as poor correspondence with traditional occupation, the lack of a purity / impurity ideology and the failure to follow strict endogamy customs. As a consequence, Ahmad (1977a: 84) dismissed caste as a useful analytical tool for examining social organization, and instead argued that “village social structure can best be described in terms of class, or occupational categorization..” with the two main classes comprising of “the landlords and the rest of the villagers”<sup>11</sup>.

Alavi (1972) took a similar stance. Although he acknowledged endogamy within kinship groups and their basis in descent, like Ahmad (1972: 26), he argued that in the Pakistani context, “The central criteria of caste-oriented behaviour, namely that of ritual pollution and associated purificatory rites, do not exist...Nor are there any restrictions on commensality. There is no hierarchy of castes”<sup>12</sup>. According to Alavi, because the kinship system did not meet these critical criteria, it was not a caste system at all. Rather, he likened *biraderis* to layers of economic stratification or classes because they were stratified by economic resources and political power. Albeit he made these arguments while also acknowledging that economic circumstances within *biraderis* did sometimes differ, and that “the ideology of caste ranking is not wholly absent” (1972: 20).

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<sup>11</sup> Note that Ahmad’s latter classification of villagers was not based on descent, but on their actual occupational status – this is a critical point, but one that many authors referencing Ahmad’s views on the topic miss almost completely.

<sup>12</sup> Note that Alavi differentiates between *biraderi*, which he translates roughly to the kinship group, and *zaats* which he considers as smaller groupings within the *biraderis*. He argues *zaats* are not castes.

Shortly after the abovementioned landmark studies were published, the discussion on caste stratification in Pakistan faded (Gazdar 2007). On one hand, policymakers and politicians actively deflected the issue due to the taboo associated with a predominantly Muslim country following a practice conventionally associated with Hinduism (Shah 2007). Highlighting this deflection, Gazdar (2007: 86) notes, “There is little tolerance in the public domain of any serious discussion about caste and caste-based oppression, social hierarchies, and discrimination.” On the other, theoretical consideration of the notion also fell out of fashion in academic circles for a significant period of time (Gazdar 2007; Gazdar and Mallah 2012). That is not to say that Pakistan’s kinship groups were thenceforth completely ignored in the scholarship – on the contrary, few studies on Pakistani society and politics exist today which do not explicitly refer to the kinship network (see for e.g. Talbot 1988; Lyon 2004; Qadeer 2006; Nelson 2011; Lieven 2011). But the centre of the debate did shift dramatically - from one that had often engaged with the classification of the kinship group into class or caste systems to one that became much more concerned with the examination of if, how and why kinship shaped individual and community outcomes, particularly in the arena of politics<sup>13</sup>.

Scholars writing in this vein over the past few decades have held various viewpoints on the importance of the Pakistani kinship group. For the sake of simplicity, these viewpoints can be broadly classified into two distinct approaches on the matter. The first camp takes its cue from the work of Ahmad (1977a) and Alavi (1972) and dismisses kinship as a viable analytical tool for understanding stratification in the country. Instead, this school of thought often assigns primacy to socioeconomic differences – especially between landowning and landless groups - in explanations of Pakistan’s social organization (Talbot 1988; Lyon 2004; Gazdar 2007). Consistent with this view, Hafeez (1985) and Sathar and Lloyd (1994) for example employ class frameworks to examine the country’s changing social fabric and stratification in educational outcomes, respectively. Along a similar line, Farooq and Kayani (2013: 33) revisit Eglar’s (1960) study site almost 50 years later to confirm the growing importance of class, arguing that “..the class system has partially replaced the caste based stratification in the village”. Some authors in this camp, on the other hand, appear to conflate kinship and class. In his study on landowner politics, for instance, Javid (2011) views the social status conferred by kinship groups as important solely as one of the determinants of class in Punjab. Interestingly, Javid (2011: 366) also dismisses “*biraderi*” as a caste group, asserting (albeit in a footnote) “Often incorrectly equated with castes or tribes, *biraderis* are occupationally stratified, endogamous kin groups”.

The second camp, in contrast, has not only been growing in size of late, but is also increasingly reasserting that kinship is a critical component of social dynamics in rural areas of Pakistan. As a

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<sup>13</sup> See Gazdar and Mallah (2012) for excellent discussions on land legislation in pre-partition India, and its relationship with kinship group identity.

result, unsurprisingly, work by scholars in this latter camp, which is characterized by its elevation of the importance of the kinship group, serves as the critical departure point for this essay, as well as for this thesis more broadly. A classic example from this camp comes from Gilmartin (1994). In his significant work on *biraderi* and bureaucracy, Gilmartin asserts that kinship group solidarity has not only played a clear role in elections in Pakistan in recent decades, but also stresses that the *biraderi*'s political role today reflects precedents established under colonial rule. Along the same line, Chaudhry and Vyborny (2013) and Mohmand (2014) present more recent evidence on the matter – both examine kinship groups in the context of rural politics to highlight their consequence, arguing that kinship-group based politics offer significant insights into voting behaviour in rural Pakistan.

Within this camp, there is also a small scholarship in which the status of kinship groups continues to be debated. In his important contribution to the subject, Lyon (2004) for instance acknowledges the contested standing of the kinship group. He (2004: 125) clarifies his position on the matter, stating “Although I am sympathetic to the argument that caste does not exist in Pakistan (Alavi 1972), something called caste, clearly does. Equally clearly, however, it is not the same entity Dumont describes.” Gazdar and Mallah's (2012) recent textured analysis of the interplay between class, kinship, group identity and occupational caste takes the stance on similarities between the Indian caste system and the Pakistani kinship group further. The authors analyse a rural housing project to contend that this interplay is critical in shaping social disadvantage, even going so far as to “argue for a re-engagement with caste as a valid category” for understanding dynamics in Pakistani Punjab (Gazdar and Mallah 2012: 311). Similarly, in his analysis of bonded labour in Pakistan, Martin (2009) boldly reverts to the terminology of caste used by pre-partition ethnographers, signalling an important shift in the literature. Jacoby and Mansuri (2011) and Karachiwalla (2013) follow suit, and present rare efforts that examine caste in their empirical studies on educational stratification in the country – using this same terminology of caste to refer to the Pakistani kinship group, they show that caste plays an important role in determining who gets educated and who is excluded.

### **1.3.3 Assessing the Kinship System as a Class System**

Caste and class are undoubtedly linked. One link between the two is on the basis of their categorization as extreme versions of stratification systems, with class representing the theoretically most open and caste representing the arguably most closed (see Giddens 2001; Quigley 2002). Another important link is on the basis of an alleged older, almost perfect correlation between the two in pre-partition India, referred to technically as *status summation* (see Driver 1982). In light of these links, and the political deflection of the issue of caste in Pakistan on one hand, and the academic preoccupation with socioeconomic status on the other, it is not surprising that in certain social, policy, and academic circles, kinship groups are sometimes conflated with class divisions.

But is even a casual conflation of the two justifiable? To consider this question, it makes sense to start at the beginning and examine the definition of class and its applicability to the features of the Pakistani kinship group system systematically. Giddens (2001: 282) defines class as "...a large scale grouping of people who share common economic resources, which strongly influence the type of lifestyle they lead." He adds that, "Classes depend on *economic* differences between groupings of individuals." This definition is at best only partially applicable to the *biraderi* system - although many members of traditional landowning castes do have more economic resources than members of traditional artisanal groups (see Mohmand and Gazdar 2007), there is by no means a perfect correspondence between the kinship group and economic resources today. Indeed, the related scholarship on modern India argues that although there may have been a time before partition when such a correspondence existed in this geographic region, status summation has lessened considerably particularly during the 20<sup>th</sup> century due to economic redistribution, industrialization and political movements (Sharda 1977; Driver 1982; Chaudhury 2012). Importantly, each of these changes has also been witnessed in contemporary Pakistan, thereby weakening any class and kinship group link that may have existed in the first place.

Corroborating this view, in her detailed examination of the same village Ahmad (1977a) studied in Sargodha, Rouse (1988: 73) observes "...*quom* differences do not necessarily correspond to the 'class' placement of a particular household, although there has traditionally been a close correlation between the two." More recently, Martin (2009) demonstrates instances where members of the *kammi* groups of *Lohar* (ironsmith) and *Tarkhan* (carpenter) kinship groups are well-off businessmen. In fact, even the class proponent Ahmad (1972) himself acknowledges that within Sargodha, there are members of *zamindar quoms* who are not cultivators – an indicator of high class status in his interpretation – and members of *kammi quoms* who are. Given that it is difficult to consider all members of the traditional cultivator *biraderis* as belonging to the upper socioeconomic (SES) class and all members of non-cultivators *biraderis* as belonging to the lower one without additional reference to the parameters of wealth and income, we can see that the term class alone cannot completely explain the nature of the kinship group system.

Besides a similar type of lifestyle based on a common level of economic resources, a further defining feature of class systems is one of unrestricted group mobility, at least theoretically, that can be brought on by changes in economic resources (see Weber 1946a; Giddens 2001). Ahmad, among others, contends that this mobility actually is a feature of the local *biraderi* system. If a *zamindar* can be relegated to a *kammi* kinship group if he has no land, and a *kammi* can be upgraded to a *zamindar* caste once his SES improves, then indeed this group mobility would help qualify the kinship system in Pakistan as being close to a class. But again, there is empirical evidence that the kinship system is one that is based almost entirely on descent. Eglar (1960: 28) illustrates this in her study by noting

that “Although some *zamindars*, as a result of the subdivision of land through inheritance, own hardly any land at all, the fact that at some time in the past their ancestors did own land makes them still belong to the *zamindar* caste.”

One key reason for the persistence of one’s *biraderi* grouping is that the lack of official records forces belonging to a particular kinship group to be based on recognition (see Alavi 1972). This recognition relies on interaction with other kinship groups in the same village over the previous few generations, and claims of amended kinship group based on changing circumstances are often met with as much scepticism as claims of amended caste are in India<sup>14</sup> (see Srinivas 1962; Lyon 2004). Gazdar (2002: 4) highlights this scepticism in rural Pakistan by noting how he verified the *biraderis* of students in his study: he states, “On enquiring about the caste background of a particular pupil the teachers would volunteer whether the child in question came from a ‘true’ *Jatt* or *Rajput* family or a ‘fake’ or self-made one.” Similarly, Alavi (1972) documents a household that originally belonged to the *Nai* (barber) group but since then had come to own land – the household self-identified its kinship group as *Nai Bhatti*, with the suffix of Bhatti (a traditional land-owning kinship group) signifying its attempt to obtain a higher status. Yet the household continued to be recognized as one belonging to the *Nai* caste in the village. The point here is that for every anecdotal account of a successful change in kinship group, there are perhaps even more instances of kinship groups continuing to be dictated by descent just as they are for castes in India.

Low group mobility, together with the lack of perfect status summation highlighted earlier, implies that the term class alone is an inadequate characterization of the kinship structure in Pakistan. Table 1.1 summarizes my arguments on this matter, comparing the key features of class systems to those of the Pakistani kinship group system.

**Table 1.1: Class System vs. Biraderi System**

Key Features of Class Systems	Applicability to <i>Biraderi</i> system
1. Similar economic resources/ lifestyle	<i>Inconsistent with definition</i> Members of same kinship group may have differing levels of economic resources
2. Theoretical mobility across groups if economic resources change	<i>Inconsistent with definition</i> Membership based on recognition implies that mobility limited at least in short-term

### 1.3.4 Assessing the Kinship System as a Caste System

Of course, the above does not necessarily imply that the kinship group system is one of caste either. We must first consider how the kinship group in Pakistan fares against the caste system in

<sup>14</sup> See Cassan (2012) for a fascinating account of caste group manipulation for material gain in pre-partition India.



contemporary India on the three key characteristics propagated by Bougle (1935) and Dumont (1980) of hierarchy, traditional occupation, and restrictions on marriage and commensality. I look at each of these criteria set forth by the *book view* in turn below, providing a comparison both with the empirical practices of caste seen on the ground in contemporary India as well as with the features of the *biraderi* system. My systematic comparisons are summarized in Table 1.2.

Let's begin with the all-important hierarchy feature. On one hand, a number of scholars report hierarchical gradations in the Pakistani *biraderi* system (see Eglar 1960; Mohmand and Gazdar 2007). On the other, Ahmad (1972) among others observes that this hierarchy between kinship groups is not universally accepted in the nation. However, as we noted earlier, the *field view* of caste acknowledges that a universal hierarchy is not accepted even in India. To reiterate, there are a number of critics that question whether caste hierarchies in Hindu society are as internalized as previously thought (see Dirks 2001). While the hierarchy of the four *varnas* appear to be clear cut, Srinivas (1962) and Jaiswal (1997) maintain that hierarchy in *jatis* or caste groups is unclear, especially in the middle. Indeed, Quigley (1993) posits that difficulty in mapping and ranking groups is inherent in *all* caste systems. This is certainly analogous to the setting in rural Pakistan – the noble castes such as the *Syeds*, *Jats* or *Rajputs* are generally accepted to sit at the top of the rung, while the *Musallis* and non-Muslims are generally considered to be at the bottom. The remaining middle is subject to contest and competing claims of superiority – but like in India, these competing claims do not negate the fact that a basic hierarchical structure still exists.

A similar comparison with the traditional occupation feature as witnessed in contemporary India yields further clarity on the correct categorization of the Pakistani kinship group. Ghurye (1969), for instance, reports that not all Indian caste groups bear names of professions. In fact, there are many that employ ethnic names, names associated with cities or towns of origin and even names emphasizing personality traits or peculiarities – each of these groups are recognized as castes regardless of whether they have an occupational link or not. Beteille (1992) takes this further, arguing that the historical correspondence of caste and occupation has been greatly misrepresented in the literature. Even before independence, he shows, most castes had half their members working outside their traditional occupations. In a more recent study post partition, Jodhka (2010) finds that the occupation and caste link has almost disintegrated in India. Unsurprisingly many attribute this disintegration to factors such as market liberalization, democratization, land reforms, migration and affirmative action (Krishna 2002; Desai and Dubey 2012). Significantly though, again a parallel situation is witnessed in rural Pakistan – links to traditional occupations are often recognized, although a similar weakening in the occupation and caste association is also commonplace. Thus, a lack of perfect association between the *biraderi* and traditional occupation cannot be used to argue against the presence of a caste system in contemporary Pakistan any more than it can in India.

I already noted in a previous section that the lack of a purity ideology in Islam allowed for more commensality across castes among Muslims in pre-partition India, resulting in what some refer to as an *incomplete* form of a caste system. That said, due to cultural changes and legislation preventing discrimination against Dalits, even Hindus in India have seen more commensality across castes in recent years. Where the related restrictions on marriage are concerned, Ghurye (1969: 87) summarizes classical Hindu text on marriage to conclude that “Endogamy was rather a universal custom than a rigid rule of caste.” In modern India, although caste remains prominent in matters of marriage, exceptions do abound. Banerjee et al. (2009), for instance, examine matrimonial advertisements in India from 2003 to report that 30% of the advertisers did not marry someone from their own caste. In rural Pakistan, comparable statistics are available – Alavi (1972), for example, notes that over 80% of villagers marry within the same caste while the other 20% marry outside it. More recently, Mohmand and Gazdar (2007) agree – they contend that the basis for Pakistan’s kinship system is in fact endogamy.

To sum, the reader should take away two conclusions from the short discussion above. First, the rigidity of the criteria to qualify as a caste as defined by the *book view* was seldom fulfilled even in traditional India – countless exceptions have been noted by the empiricists, many of which were also reviewed in an earlier section. Pakistan’s *biraderi* system falls short of the *book view*’s caste criteria more or less as much as the caste system does in contemporary India. Yet it is still a form of descent-based hierarchical stratification, where one’s rank is determined by one’s historical association with noble occupations. This feature is already consistent with the *field view* version of caste, thus placing the Pakistani kinship group rather close to the modern interpretation of the notion.

And second, the modern era has seen a weakening in many of the characteristics commonly associated with the caste system. Although this had led to an amended system of caste, features that set the caste system apart from that of a class such as lack of group mobility still persist. Following from these two conclusions, my line of argument here is fairly simple - as much as the *book view* of caste continues to apply to castes in contemporary India, it is not difficult to see that it also does so to the kinship groups in Pakistan. By corollary, if the system in contemporary India is still considered one of caste, then I argue so should be the one in Pakistan.

**Table 1.2: Caste System vs. Biraderi System**

Key Feature of Caste System	Caste Systems as per Book View	Caste System as per Field View/ Practice in Contemporary India	Applicability to Biraderi system
<b>Hierarchy</b>	Universal and unambiguous hierarchy	Hierarchical gradations but with contested rankings, several local variations and disputes on status particularly in middle caste rungs	<i>Consistent with field view</i>
<b>Traditional occupation</b>	Segmental division of society based on occupation and lack of choice surrounding vocation	Traditional association with occupation for many groups, together also with castes denoted by ethnicity, geography and personality. Disintegration of caste and occupation links, particularly in recent decades	<i>Consistent with field view</i>
<b>Restrictions on marriage and commensality</b>	Strict endogamy and ritual purity/ impurity ideology based in Hindu scripture	Endogamy a custom rather than rigid rule. Purity/ impurity ideology less strong and also likely not grounded in religion	<i>Consistent with field view</i>

## 1.4 Theorizing About Caste in the Modern Era

Changes associated with the modern era such as economic diversification, urbanization and political mobilization have all served to highlight the inadequacy of existing theories and definitions of caste. Indeed, according to Lindt (2013: 86), “..no comprehensive theory exists that would help to understand caste in modernity.” In this section, I shift my focus from caste in Pakistan back to caste in general to consider the challenges associated with theorizing about this institution in today’s day and age. I begin by briefly returning to the *book view* versus *field view* contest to highlight the reasons for the continued prevalence of the former interpretation. Next, I propose a simple definition of caste in order to help reconcile its various conceptualizations, while at the same time accommodate the features of Pakistan’s kinship group. By no means is this definition meant to supplant existing *field view* versions; nor is its proposal meant to constitute an alternative theory of caste. My goal here is much more modest – through it, I aim to provide empiricists a slightly different lens through which to view the Pakistani *biraderi* system. I conclude this penultimate section by pointing to the salience of two concepts – *ethnicization* and dominant castes – both of which I argue are likely to shape how caste is understood, studied and theorized about in the future.

As noted earlier, the scholarly debate on caste has been framed by its interpretations according to the *book view* versus the *field view*. While the former viewpoint has been repeatedly challenged and

disputed, it has nonetheless persisted for the very same reasons it has been criticized: its overly theoretical stance, and its reductive definitions. On the other hand, in spite of being grounded in reality, *field view* definitions such as for example the one proposed by Srinivas (see Section 1.2.3 of this essay) have been criticized for being too vague. In fact, more broadly speaking, the *field view* school of thought's piecemeal empirical findings and all-encompassing approach to the notion of caste have found it difficult to dispose of the more systematic, clear-cut approach advocated by the *book view* – this is so especially in disciplines outside of anthropology where researchers have found the *book view* of caste much more accessible (see Lindt 2013). According to Quigley (2002), one more factor has contributed to the continued influence of Dumont and his peers on the subject – the restraint many anthropologists in recent years have shown in dealing with caste theory. Each of these factors have contributed to both the continued permanence and prominence of the *book view* interpretation in South Asia more generally, but also in Pakistan in particular as the discussion in the previous section highlighted.

Having said that, in recent years a handful of theorists have attempted to propose theoretical models of caste as alternatives to Dumont's conceptualization. Quigley (1993) is one important example. He builds on Hocart (1950) to present caste as an interaction of the forces of local lineage organization on one hand, and the forces of political, ritual and economic centralization found in monarchical institutions on the other. In his reading of the origins of the caste system, the ideological pivot of caste is not the purity of Brahmins as advocated by Dumont, but rather the nobleness of the "kingship". Caste ranking in his view thus derives from how close a kinship group was to royal or other noble landowning kinship groups. Quigley (2002: 141) asserts that "The removal of Hindu kings in India with the advent of colonialism does not negate this thesis". This is because, he argues, on the ground the allegedly noble local landowning castes continued to serve as the centre around which complex village relationships revolved even during colonial times.

I take this latter view as the point of departure for my own conceptualization of the notion of caste, and combine it with key aspects of *field view* interpretations discussed earlier to propose an alternative definition of the term. In light of my earlier discussions, the applicability of this proposed definition to caste as it is practiced in modern India, as well as to the Pakistani kinship group should be plain to see. I define caste in particular as:

*A form of social division that confers a rank in society based on whether an individual's descent is from a noble or a less noble occupational group or lineage. Ranks in society may be subject to competing claims of superiority, which are made on the basis of differences in actual or imagined historical transcendence. Commensality and endogamy within a caste are universal customs but not rigid*

*rules, and adherence may vary based on, among other factors, religion, ideology, and localized group norms.*

Thus, in my resultant reading, caste is not a religious institution but rather a social one, the defining feature of which is a hierarchy based on a historical association with noble occupational groups or lineages. My specific definition of the term differs from existing ones in three ways. First, my definition explicitly allows for more fluidity in the features of a caste system. It does so by acknowledging that customs of endogamy and commensality across castes are often dictated by religion and group norms, the latter of which may change over time. Second, to make the definition more complete I include not just a historical association with noble occupational groups, but also historical relationships with other noble lineages that may not necessarily correspond to traditional occupations. By doing so, I merge conventional *field view* definitions with specific aspects of Quigley's theories on caste origins. Finally, in my conceptualization, I specifically acknowledge that claims of superiority may be contested – I do so to rule out notions of undisputed hierarchies that are prevalent in narrower interpretations of the features of caste systems.

In such a definition, delineating clear boundaries between caste and related constructs such as class and ethnicity is critical. Thus, in line with the discussion in the previous section, I differentiate caste from class due to (1) its hereditary nature and (2) the lack of caste mobility. Along Weber (1946a) and Horowitz (1985), I further differentiate caste from ethnicity due to the presence of ranking between the social divisions; albeit I do so with the broader understanding of the two notions as theoretically close to each other. For Weber, to elaborate, caste is an extreme form of ethnicity; meanwhile for Horowitz, caste falls under a broader classification of ranked ethnic group systems. Thus, the understanding of unranked, parallel groups being defined as ethnic divisions, while ranked, hierarchical ones being more commonly referred to as caste divisions is the stance I take in this essay - this key distinction justifies the existence of a unique institution called caste in the first place.

That said, in light of recent trends it is also a distinction that is likely to disintegrate in the future. In literature on contemporary India, a tendency in recent decades has already been to move away from the idea of a religion-based hierarchy towards thinking of caste as a form of quasi-ethnicity (Reddy 2005; Lindt 2013). This move is supported by a phenomenon commonly referred to as the *ethnicization* of caste, whereby instead of being interdependent, vertical entities, castes become identical groups competing against each other (Dumont 1980; Reddy 2005; Ali 2002). Srinivas (1962) develops this point further, postulating that the horizontal consolidation of castes is being accompanied by a weakening in the vertical ties between groups as well as the dissolution of the division of labour. In the resultant modern interpretation, Lindt (2013) claims, caste is considered an

extension of the family or kinship group, endogamy is practiced to preserve cultural tradition, while traditional occupation is known but has become mostly irrelevant.

At first glance, this initial closeness and then anticipated eventual merger of caste and ethnicity may appear to be at odds. This is because on one hand, there are authors who contend that caste has historically been an externally imposed identity (see for e.g. Dirks 2001; Rawat 2011); while on the other, several schools of thought view ethnicity as an ever-changing but essentially self-accepted identity (see Varshney 2009). Yet two factors justify my adoption of not only the Weber and Horowitz philosophy of the two constructs being related, but also my subsequent stress on Srinivas' views on the *ethnicization* of caste. First, the widely accepted constructivist school of thought on ethnicity argues that ethnicity "can be a product of the very political and economic phenomena that they are used to explain" (Chandra 2012: 5), thereby making ethnicity for many authors just as externally driven as caste is for scholars such as Dirks (2001).

And second, authors such as Reddy (2005: 547) highlight an important feature of caste in modern India, stressing "its fluidity, in contrast to its presumed doctrinally-given rigidity, and therefore its capacity to strategically deploy established, essentialized notions of itself in a movement..." This feature of mutability that can and often does translate into political mobility renders the modern caste and caste movements as functionally similar to notions of ethnicity and ethnic movements<sup>15</sup>. Importantly, this characterization, as I showed in the previous section, is just as representative of the Indian caste system as it is of the *biraderi* system in Pakistan, which is increasingly taking on the flavour of a quasi-ethnic group – perhaps even more so than caste is in India. Indeed, the fact that much of the literature on the Pakistani kinship group in recent years has focused on the role of *biraderi* in politics rather than as a dimension of hierarchical stratification bears testament to this shift (see for e.g. Gilmartin 1994; Mohmand 2014).

As these differences between caste and ethnicity blur, a further element that is critical to understanding the future of the institution is the concept of a dominant caste. Recall that in an earlier section I defined the term as referring to a caste group that has 'power' in a particular village. This power derives not from hierarchical status of the caste but rather, from factors such as numerical strength, economic and political status, land ownership, and modern education (Srinivas 1959; Dumont 1980)<sup>16</sup>. But what does power in such a context imply? It implies that caste groups which

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<sup>15</sup> Note that although there are likely differences in processes of identity formation between ethnicity and caste, these do remain contested in the literature. Regardless of this, I would argue that it is important to draw parallels between these two forms of social divisions that can result in similar kinds of stratification and political actions as has been done here. For more nuanced discussions on the processes of identity formation, the reader should refer to for example Horowitz (1985); Reddy (2005) and Varshney (2009)

<sup>16</sup> Note that the concept was originally used to refer to a caste that had numerical preponderance in a village. Later understandings of the term began to include factors such as power derived from education, landholdings, and economic and

have derived power from one or more of the factors mentioned above are able to “realize their own wills in communal action even against the resistance of others who are participating in the action” (Weber 1946b: 180).

Because of this ability of caste groups to act together as corporate entities, there has been a recent revival of interest in dominant castes in the collective action literature, where researchers for instance are showing that caste dominance is often better at explaining differences in local provision of goods than is just the presence of a caste system itself (for e.g. Anderson 2011; Waring 2001). That this might be the case is not so unexpected; in a related literature on ethnic conflict, scholars have likewise been arguing for the important role played by ethnic dominance - a similar concept that denotes power of one ethnic group over another (see Collier 2001; Kaufmann 2004)<sup>17</sup>. Given that caste groups in Pakistan have already started taking on this kind of corporate identity, as they have been doing in India for some time now, the dominant caste concept is likely to become even more critical in explaining not just the nature of caste-based political mobilization but also the kind of collective efforts these caste groups might take in areas such as public good provision.

## 1.5 Conclusion

In this paper, I critically examined the status of kinship groups in Pakistan with the purpose of highlighting caste as a distinct aspect of social structure in the country. I also proposed an alternative definition of caste which is consistent with modern interpretations of the institution, and also easily accommodates the Pakistani kinship group. The main point I make in this essay on the nature of these groups is this: their features are comparable not only to those seen in the caste system of contemporary India, but also to the scholarly *field view* conceptualizations of the term. Consequently, the lack of correspondence to *book view* interpretations of caste should not negate the argument that Pakistan has a caste system any more than it does so in its neighbouring countries.

Does my theoretical consideration of whether the Pakistani kinship group is closer to a caste, a class or even an ethnic group matter in practical terms? Absolutely. Conceptual and definitional clarity are essential to advancing the study of any phenomenon. The extant literature that examines the *biraderi* makes certain assumptions about its features; and any claims then made about how kinship affects say social or political outcomes rely fundamentally on what features are attributed to it through these assumptions. If we are to reasonably assess or build on such assertions, then the manner of

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political status. Empirically, most scholars either use the demographic majority (along Srinivas 1959) or the collective landholding (along Dumont 1980) as measures for dominance, but the essence of the term is related to power and say in a particular village.

<sup>17</sup> See also Oommen (1970) and Mendelsohn (1993) for critiques of the dominant caste concept.

conceptual discussion I present in this essay is useful not only because it provides an analytical anchor on which to base our judgments, but also because it facilitates comparison and learning across contexts. This latter ability is paramount; my likening of the characteristics of a *biraderi* to those of a caste opens up a substantial literature on the institution which scholars can lean on to evaluate and build theory - as I do, for example, in the third essay of this PhD series where I borrow ideas from the literature on dominant castes to study *biraderi* dynamics.

Moreover, distinguishing the *biraderi* system from other social structures helps highlight the importance of studying it as a distinct source of stratification in the country. To date, the literature on educational stratification in Pakistan, for instance, has by and large neglected the role played by kinship in determining educational outcomes. The implicit belief deriving from the anthropological literature in the primacy of class, combined with the everyday conflation of kinship into the broader categories of socioeconomic status have likely contributed to the extent of this neglect. Thus my clear separation of kinship from other aspects of social structure in this essay paves the way for dedicated attention on the caste group as a source of educational inequalities in Pakistan. Following from this, the second essay in this PhD collection provides just this kind of dedicated attention in that it examines the extent of disparities in educational outcomes on the basis of caste.

Finally, the implications of my reading of the *biraderi* as a type of hierarchical or ranked group based on descent should not be underestimated. On one hand, this opens up a pernicious role for the kinship group in areas such as conflict and discrimination because relative group worth in caste systems are both acknowledged and reinforced (see Horowitz 1985). On the other, it also has several implications for social identity and collective action given that scholars argue caste has proven to be a much more durable marker of identity than have unranked ethnic groups (see Kanbur et al. 2011). In short, conflict, stratification and collective action on the basis of unranked and ranked ethnicities are likely to be different and ignoring this distinction will result in incomplete explanations of the role of the *biraderi* in determining social, economic and political outcomes in rural Pakistan.

Of course, as I highlighted in the penultimate section of this essay, at a broader level the boundaries between ethnic groups and castes are blurring, and in fact are likely to do so even more in the future. Moreover, there are scholars who are increasingly predicting the imminent decline of caste even in India (see Mendelsohn 1993; Desai and Dubey 2012). Does this imply that my effort to reconcile the various interpretations of caste into an alternative definition that accommodates the Pakistani kinship group has been wasted? Not at all. As long as the institution exists in some form or another as a mode of stratification in Pakistan, and in South Asia more generally, it remains necessary to have a definition that captures its essential features while also acknowledging its inconsistencies. My definition, together with the theoretical engagement I present in this essay, offers a view of the



Pakistani kinship group quite different from many of the characterizations provided in existing work on the subject. Applied to empirical research, this alternative view may be able to facilitate further valuable insights into an important, evolving social institution.

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## ESSAY TWO

# A Neglected Dimension of Stratification: The Influence of Caste on Education in Rural Pakistan

### Abstract

I employ mixed methods to examine educational inequalities in rural Pakistan based on caste, a dimension of social stratification that has received scant attention in the scholarship. Using a unique dataset that I collected for approximately 2500 individuals from across eight rural communities, I find that low caste individuals are 7% less likely to be literate and 5% less likely to attend school than their high caste counterparts. These differences rise to over 20% for certain low caste groups. I analyse qualitative data from over 65 in-depth interviews with elite informants to corroborate these results, and to provide evidence on the widely accepted factors contributing to such caste-based inequalities. In addition to differences in socioeconomic status, major factors include differing cultural orientations towards education, varying expected returns to schooling, and the nature of local political dynamics. Interestingly, both my quantitative and qualitative findings also suggest that gaps between caste groups may have narrowed over time. At the same time, however, my overall analysis indicates that on the ground caste remains a critical dimension of social stratification in Pakistan – a dimension that, due to its fragmentary nature, merits much more attention than it has thus far received in the scholarship.

Key words: caste, equity in education, educational stratification, South Asia, Pakistan

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## 2.1 Introduction

Equity in education has long featured prominently on the policy agenda of developed and developing countries alike. Proponents contend that not only is fairness in educational opportunities regardless of ethnic descent a basic human right (Sen 1985), but education's close association with private returns to labour renders its equitable distribution an important precursor to equitable economic opportunities for all individuals. Other advocates support equity in education by emphasizing the critical role it plays in increasing social mobility, as well as in enhancing social cohesion and trust (see Causa and Chapuis 2009; OECD 2012). Others still highlight education's broader advantages such as, for instance, its vital role in promoting civic participation, in reducing social ills and in improving health outcomes (Auld and Sidhu 2005; Dee 2004; Lochner 2010).

Regardless of the manifold arguments in favour of equity in education, the reality is that disparities on this front remain a common phenomenon in most countries, and are especially prevalent in multi-ethnic societies. Illustrating this, scholars in recent years have reported persistent descent-based education stratification in countries such as the US (e.g. Cook and Evans 2000), Germany (e.g. Gang and Zimmerman 2000) and France (e.g. Brinbaum and Cebolla-Boada 2007). In addition, authors have also highlighted the presence of similar ethnic and caste-based gaps in education in developing nations such as India (e.g. Asadullah and Yalonetzky 2012), Nepal (e.g. Stash and Hannum 2001), and Turkey (e.g. Kirdar 2009), to name just a few. Understanding the nature and extent of these descent-based inequalities is crucial to finding ways to reduce such gaps, increase the stock of human capital and provide disadvantaged individuals with reasonable chances out of poverty.

In this essay, I contribute to the education stratification literature by examining inequalities in Pakistan, a multi-ethnic society that lags behind the South Asian region on most of its education indicators. To date, the education literature on Pakistan has focused almost exclusively on socioeconomic class and gender as the key forms of stratification in the nation (e.g. Sathar and Lloyd 1994; Alderman et al. 2001; Rahman 2004; Khan et al. 2005; Aslam 2009; Fennell and Malik 2012). I depart from this scholarship by studying inequalities based on an individual's caste<sup>18</sup> affiliation instead, a dimension of stratification that has been largely neglected in the literature. In particular, I examine primary household survey data that I collected for approximately 2500 individuals, and original qualitative data that I solicited from over 65 in-depth interviews to analyse the influence of caste on education in eight villages in rural Pakistan.

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<sup>18</sup> I use caste here to refer to the patrilineal kinship groups in Pakistan. See Essay One for a more detailed discussion on kinship groups and caste.

My results show that caste affiliation is a significant determinant of educational outcomes, a term I use broadly in this paper to refer to metrics such as literacy and enrolment. I find that belonging to a low caste group is associated with a 7% reduced likelihood of being literate and a 5% reduced likelihood of attending school as compared to belonging to a high caste group. The latter quantitative results are robust to the inclusion of socioeconomic indicators and village fixed effects, as well as to altering controls and specifications. I also find indicative evidence on the presence of heterogeneity within the broader high-low caste groupings, with the reduced likelihood of being literate or having attended school rising to over 20% for certain low caste groups such as the *Menghwars* and the *Solangis*—a statistic comparable to differences seen for untouchable groups in India.

My qualitative findings corroborate the presence of these caste-based inequalities, with respondents attributing them most commonly to differences in socioeconomic status, differing cultural orientations towards education, varying expected returns to schooling, and the nature of local political dynamics. Interestingly, both my quantitative and qualitative findings also suggest that gaps between caste groups may have narrowed over time. Education inequalities are not statistically significant for the youngest cohort in my sample, and qualitative anecdotal evidence abounds of weakening in the traditional caste hierarchy as well as of members of low caste groups studying to become doctors, engineers and businessmen. At the same time, however, my overall analysis also indicates that on the ground caste remains a critical dimension of social stratification in Pakistan – a dimension that, due to its fragmentary nature, merits much more attention than it has thus far received in the scholarship.

This paper is similar in topic to contributions by Gazdar (2002) and Jacoby and Mansuri (2011), both of which analyse the relationship between educational inequalities and caste in Pakistan to highlight the critical role played by an individual's caste affiliation. My own work complements their findings but also extends this small body of work in three distinct ways. First, by collecting primary data for over 2500 individuals from approximately 350 households, I add a rich dataset to the existing scarce statistical resources available on this dimension of stratification in the country. Second, in addition to the quantification of inequalities, I am able to provide qualitative insights into the fragmentary nature of caste in Pakistan. These insights not only permit me to draw firmer conclusions about caste stratification than those that would have been possible by using a single method alone, but also allow me to examine additional avenues of research that I could not have explored fully using just quantitative techniques such as for instance the widely accepted factors driving inequalities. Finally, unlike much of the broader caste literature, I acknowledge the possibility of heterogeneity within the broader high-low caste categories and consider caste effects for ten key caste groups individually using both quantitative and qualitative techniques. Each of

these three elements advances key debates surrounding the nature, extent and causes of educational stratification in developing countries.

This paper proceeds as follows: Section 2.2 presents a short review of the relevant educational stratification literature; Section 2.3 introduces my case study of Pakistan and summarizes my overall mixed methods strategy; Sections 2.4 and 2.5 present my quantitative and qualitative analysis, respectively; the Conclusion at the end concludes.

## **2.2 Literature Review**

This essay is located in a sizeable education and social stratification research that examines inequalities in educational outcomes<sup>19</sup> based on descent. To set the stage for my analysis, I begin this literature review by considering empirical scholarship that originates primarily from developed countries and focuses on performance gaps between students of differing racial and ethnic origins. I contend that this literature has helped attract policy attention to the issue of equity in education in the specific nations studied, often by quantifying the size of such gaps. However, I highlight, there does remain a notable lack of consensus on the extent to which socioeconomic factors can explain between-group disparities. Next, I move on to describe the studies that look at educational stratification by caste in particular. Although this body of work unanimously reports the presence of inequalities for low caste groups, I note that this evidence generally fails to account for the possibility of heterogeneity within the broader categories of high and low caste. The latter may be problematic as authors writing in the wider strain of scholarship increasingly acknowledge that the magnitude, nature and causes of inequalities in education often differ based not just on the country in question, but also on the basis of the specific subgroup involved.

### **2.2.1 Education Stratification by Ethnicity and Race**

The seminal work of Coleman et al. (1966) first brought disparities in educational achievement between different ethnic groups to attention in the United States. Although all ethnic groups were covered in the Coleman report, the statistic that garnered the most public concern was perhaps that of the black-white gap in achievement – the authors found that the average score of black students was one standard deviation below that of white students. The Swann (1985) report brought similar ethnic differentials in outcomes to light in the UK – it reported that black Caribbean students in the nation had consistently underperformed against other groups. Quantification of these gaps using

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<sup>19</sup> Note that I use the term educational outcomes broadly in this essay to refer to an array of education related metrics ranging from the more general enrolment in school and literacy to the more specific indicators such as total years of schooling, achievement test scores, and school progression and completion.



nationally representative data not only brought the issue to the forefront of education policy discussions in both countries, but also fuelled a sizeable literature on the topic.

Much of the literature that followed in the US in particular examined the trends in, reasons for, and implications of the black-white education gap in some detail. In one of the most comprehensive accounts on the topic, Jencks and Phillips (1998), for instance, showed that in spite of efforts to minimize the black-white achievement gap over the previous three decades, the median black American student still scored below 75% of white American students. Reducing this gap, they stressed, would significantly reduce economic and social inequality between the two groups. The conventional wisdom (see Armor 1992; Sirin 2005) until then had almost always accounted for this black-white gap by invoking the differences in socioeconomic status (SES) argument. Proponents of this explanation posited that educational disparities between the two groups arose due to substantial differences in parental wealth, income and education. In sharp contrast to views prevalent at the time, Jencks and Phillips contended that scholars and policymakers greatly overestimated the explanatory power of differences in home and school resources between black and white students on one hand while gravely underestimating the effect of cultural and psychological factors on the other.

In a more recent paper, Cook and Evans (2000) agree where the explanatory power of the differences in economic resources explanation is concerned. Arguing that resources account for only a part of the outcome differential, they speculate that the residual is probably the result of dynamics within a school such as discrimination, access to remedial classes, and teacher expectations. Fryer and Levitt (2004) offer yet another explanation. They show that upon entry to school, a small number of SES characteristics explain score gaps between the two groups but as school progresses, that explanatory power disappears. They hypothesize that the school quality attended by different ethnic groups might be one reason for this phenomenon. In their controversial book *The Bell Curve*, Herrnstein and Murray (1994) take a completely different tack – they suggest instead that genetic differences in intelligence between black and white students account for the differences in academic achievement.

The literature that focuses on the educational performance of other minority groups similarly highlights the prevalence of between-group differences. Strand (2011) and Rothson (2011), for instance, both confirm that there is a perceptible variation in the performance of students of white, Pakistani, Bangladeshi, black African and black Caribbean origin in the United Kingdom. Gang and Zimmerman (2000) agree for the performance of immigrant groups in Germany, while Brinbaum and Cebolla-Boado (2007) concur for the performance of students of North African ancestry in France, as do Timaeus et al. (2013) for South Africa. Along a slightly different vein, Tas et al. (2014) analyse data from Bolivia, Mexico, Peru, Senegal, and Sierra Leone to show that gender-based differences in educational performance are significantly larger for minority groups.

Meanwhile, Posselt et al. (2012) and Triventi (2013) take their arguments on the matter to the higher education level in the US and Europe, respectively, to show broader findings in line with those before them – perceptible differences in a variety of educational statistics for different ethnic groups, with many minority groups consistently underperforming as compared to their counterparts<sup>20</sup>.

Echoing the discord in the black-white literature, however, few scholars in this strand agree on how much of such gaps can be explained by socioeconomic factors alone. In their summary of several papers on the topic from the developed world, Heath and Brinbaum (2007: 295) conclude that socioeconomic factors go a “considerable way” in accounting for the underperformance of minority groups. Along a similar vein, Timaeus et al. (2013) demonstrate that poverty and maternal education account for most, if not all, of the differences in enrolment, repetition and matriculation statistics between ethnic groups in South Africa. Strand (2011), on the other hand, disagrees for the UK – he hypothesises that while socioeconomic factors explain the gap for some ethnic groups, they do not for others. Similarly, Kirdar’s (2009) examination of inequalities in Turkey suggests that socioeconomic factors are less able to explain dropout for Kurdish boys than they are for boys from other groups. These varied findings have led many to arrive at a similar conclusion - the magnitude, nature and causes of inequalities often differ based not just on the country in question but also on the ethnic subgroup involved.

### **2.2.2 Education Stratification by Caste**

The size of the academic literature examining educational stratification by caste is not only relatively smaller than the body of work described above, but it is also skewed in geographic scope. Both differences are understandable – due to the traditional association of a caste system with Hinduism, this literature focuses on a small set of nations that have a predominantly Hindu population such as India and Nepal. But this body of work also differs from the ethnic stratification literature in yet another important way. Unlike the ethnic stratification scholarship that usually accounts for each minority group separately, much of this research is forced to use the two broad groupings of high and low caste because of the sheer number of caste groups involved. Estimates indicate there are over 200 caste groups in India (Ghurye 1969) and no less than 60 in Nepal (Stash and Hannum 2001), making it difficult to take heterogeneity within the broader classifications into account.

Although there are a few exceptions (see for e.g. Dostie and Jayaraman 2006), most empirical studies in the arena from India find that not only is caste group an important determinant of enrolment, but that belonging to a higher caste group generally enhances educational attainment. In one of the earlier contributions to the arena, Sharda (1977), for example, studies 11 villages in Indian

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<sup>20</sup> See also a related literature that examines differences in attainment based on religion such as Hajj and Panizza (2009) and Suryadarma (2009), who study inequalities in Lebanon and Indonesia, respectively.

Punjab to argue that the effects of caste on education are stronger than those of any other factor. Along the same line, Borooah and Iyer (2005) use large N evidence from 16 states to further emphasize the importance of caste in determining whether children enrol in school. Bhalotra and Zamora (2007) also agree – they use a nationally representative sample to corroborate that there are statistically significant caste disparities in enrolment in the nation, with lower caste groups trailing behind the higher caste ones.

Three recent papers shed light on the persistence of these caste inequalities in India. Desai and Dubey (2012), for example, use nationally representative data to suggest the existence of persistent inequalities between different castes. Low caste men such as Dalits and Adivasis, they report, have fewer years of schooling than high caste Brahmin, while low caste children are less likely to be able to read a simple paragraph than their higher caste counterparts. Asadullah and Yalonetzky (2012) document changes in educational opportunity in India by comparing data from 1983 to data from 2004. They find that although there is an overall modest decline in inequality, there is also considerable variation in the performance of different states. Hnatkovska et al. (2012) concur where the decline in inequality is concerned – they add in survey data from the interim years not included in the previous study to report convergence in education outcomes between high and low caste groups although, they concede, overall disparities have not disappeared completely.

Comparable caste inequalities are present in Nepal as well. Using data from almost 800 households from the Terai region, Jamison and Lockheed (1987) examine schooling patterns of three generations within each household to conclude that caste is a significant determinant of enrolment in the country. Stash and Hannum (2001) use a larger dataset to support these findings – they report that although caste inequalities have decreased in Nepal, like in India they do still persist. According to them, lower caste children are not only less likely to be enrolled, but conditional on enrolling they are also less likely to complete primary schooling than are their high caste counterparts.

## **2.3 Empirical Context and Strategy**

The previous section highlighted that the nature of educational inequalities most likely vary by country and subgroup. This section provides the empirical context in which my focused examination of educational inequalities by caste in Pakistan is set. I start the section by providing descriptive statistics on equity in education in the country. Next, I briefly introduce the caste system in Pakistan and highlight that although the inequalities scholarship in the country has historically neglected caste, two notable exceptions exist that establish the platform for my own analysis. I then move on to outline the broader empirical strategy I adopt in this paper. To that end, I explain how I selected

eight rural communities as the sites for this study and briefly summarize the rich data I collected from these sites by conducting more than 350 structured household surveys, and holding over 65 in-depth discussions with elite informants.

### **2.3.1 Education in Pakistan**

The World Bank classifies Pakistan as a lower middle income economy. For its level of income, however, Pakistan lags behind on most social indicators including education (Easterly 2003). In 2011 for instance, adult literacy rates stood at 55%, as compared to 93% for India and Sri Lanka (UIS; PBS 2013). Although primary Net Enrolment Ratios (NER) for ages 6 to 10<sup>21</sup> increased from 51% in 2002 to 68% in 2013 (PBS 2005; PBS 2013), slow progress on this indicator implies that the country is going to fail to achieve the Education For All goals of universal primary education by end of 2015.

Underlying the country's low enrolment indicators are persistent gaps in provincial, gender and urban-rural progress. Based on 2013 figures, the two more developed provinces of the nation – Punjab and Sindh – for instance, had a 10 percentage point gap in the enrolment indicator alone, with Punjab's NER standing at 72% against Sindh's 62%. The pan-Pakistan gender gap was 8 percentage points in favour of men, while the urban rural divide was even higher at 15 percentage points – urban primary NER stood at 79% compared to 64% for rural areas.

Understandably, these disparities have spurred a substantial academic literature on the failings of the education system in the country. In terms of stratification, this scholarship however has historically favoured studying inequalities based on socioeconomic status or class (e.g. Sathar and Lloyd 1994; Rahman 2004; Baluch and Shahid 2008; Fennell and Malik 2012), institution type i.e. public or private (e.g. Alderman 2001; Khan et al. 2005; Andrabi et al. 2008; Amjad and MacLeod 2014) and gender (e.g. Aslam 2009; Halai 2011; Alam et al. 2011). The scholarship on caste stratification, in sharp contrast, is severely limited. Yet the caste gaps in education opportunities are striking; based on the second round of the Pakistan Rural Household Survey (PRHS), in 2005 about 77% of high caste children aged 9 to 15 had ever attended school against only 61% for their low caste counterparts, indicating a substantial 16 percentage point gap (Jacoby and Mansuri 2011).

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<sup>21</sup> Pakistan's official age for primary schooling is 5 to 9, although most students enter grade 1 at the age of 6 or later. As a consequence, the official statistics are reported for both the 5-9 and the 6-10 groups. I use the latter group for all the enrolment analysis in this paper.

### 2.3.2 Pakistan's Caste System

The caste or kinship group in Pakistan, referred to commonly as *biraderi* (brotherhood), *quom* (tribe, sect, nation) or *zaat* (ancestry, caste) in the local language<sup>22</sup>, is a primarily endogamous group based on patrilineal descent. Like the caste system in neighbouring India, the status of different kinship groups is often based on historical occupational differences, with the most basic categorization being between the traditional *zamindars* or landowners who are considered as belonging to a high caste and the *kammis* or village artisans or servants who are considered low caste (see Eglar 1960). Importantly, among millions of Pakistanis this kinship group is perceived as a critical marker of identity leading many authors to highlight its pivotal role in norm formation (Eglar 1960), social networks and mutual assistance (Alavi 1972; Lyon 2004) and political power (Lieven 2011), particularly in rural areas of the country.

In spite of the salience of the caste group, study of disparities based on this dimension of stratification has historically been neglected<sup>23</sup>. To my knowledge, only two exceptions exist. The first is due to the most outspoken advocate of the salience of the caste group in Pakistan, Haris Gazdar, who sheds light on educational inequalities in his paper from 2002. Gazdar (2002) uses primary data from four villages to demonstrate that an individual's kinship group is significantly associated with both literacy and enrolment, even after controlling for socioeconomic factors such as land ownership and parental education. His caste-wise results are consistent with those of others in the broader field – castes commonly thought of as belonging to a higher status are more likely to have better education outcomes than castes considered to belong to a lower status.

The second exception is a relatively recent econometric contribution from Jacoby and Mansuri (2011), which complements Gazdar's findings on education inequalities by caste in the country. The authors exploit a representative household survey dataset from 165 villages to focus on caste fragmentation dynamics, reporting that low caste children and particularly girls are statistically less likely to enrol if the nearest school is dominated by high caste children<sup>24</sup>. Both studies provide the platform on the basis of which I build my own empirical strategy and analysis.

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<sup>22</sup> Several authors differentiate between these three terms arguing that they are different (see Quigley 1993; Chaudhary 1999), although I use them here, as they are often used in practice, to refer to a kinship group based on patrilineal descent. See also the first essay in this thesis for a detailed discussion on these kinship groups.

<sup>23</sup> See also the first essay in this thesis in which I argue that this neglect is driven by a number of factors including the dismissal of the kinship group system as a system of caste by academics and politicians alike, the lack of recent theorizing on the nature of these kinship groups as well as the primacy attached to class stratification explanations, and sometimes even the conflation of kinship groups with class.

<sup>24</sup> In a recent working paper, Karachiwalla (2013) also explores this topic. She uses a longitudinal dataset from 112 rural villages to examine the effects of student caste, teacher caste, and the interaction between the two on primary school learning outcomes. Her results indicate that low caste male children perform better on tests when taught by high caste teachers.

### **2.3.3 Overall Empirical Strategy**

My mixed methods empirical strategy in attempting to understand the nature of disparities related to the caste system in Pakistan relies on two core components: (1) statistical analysis of household survey data, and (2) qualitative analysis of in-depth key informant interviews. I collected the data used for both elements from eight rural communities during fieldwork conducted in 2012.

The eight rural communities in the sample were selected from two of the most developed districts of Pakistan in terms of economic performance indicators as well as human development indices – Faisalabad from Punjab and Hyderabad from Sindh. Both districts are not only home to the second largest cities of their respective provinces, but also have large rural areas that belong to comparable agricultural zones. Moreover, the two districts have similar Human Development Indices, which stand at 0.68 and 0.67 for Faisalabad and Hyderabad, respectively, against 0.62 for Pakistan overall (Jamal and Khan 2007). In line with these indices, education statistics of the rural areas of both districts are marginally better than those of the rural areas of the rest of their provinces.

Within each district, I purposively selected four rural villages to get a variety in caste composition and land ownership patterns. Thus half the communities in the sample are dominated in terms of numbers by members of one caste, while the rest have numerous castes in their settlements. Similarly, half the villages are dominated by one big landlord, while the other half have more egalitarian land-ownership patterns. Besides providing variety on these characteristics, villages had to meet a short list of standardized criteria for selection. Each village chosen had to: be of average size (250 - 400 households), be spatially concentrated in one geographic location and have at least one government middle school within the main settlement. Moreover, villages had to derive a sizeable portion of their livelihood from agriculture and could not be more than 120 minutes away from a main town or city.

In addition to enhancing the manageability of the fieldwork, these criteria served to ensure comparability of villages on my key parameters of interest. The spatial concentration and presence of a government middle school, for instance, standardizes schooling supply conditions. The agrarian nature of villages on the other hand is important to observe caste relations in the conditions in which they tend to be most prominent (see Quigley 1993), while a similar distance from a big settlement ensures comparable access to employment opportunities as well as market connectivity, both of which often drive enrolment decisions. In light of these criteria, results of this study should be indicative of similar villages, but may not necessarily prove representative of the whole province.

The quantitative data collected through household surveys in the selected eight rural communities comprises of demographic, socioeconomic and educational attainment indicators solicited for

approximately 2500 individuals from some 350 households. Importantly, this survey data contain details on caste affiliation for each of these households – to my knowledge this makes it one of only a handful of datasets containing this information on this parameter from Pakistan<sup>25</sup>. In order to select households for my survey, I used a stratified random sampling method within each of the eight villages. Because official census reports in Pakistan are outdated<sup>26</sup> and there are no alternative sampling frames available, after selecting each village I conducted a census of the entire settlement with the assistance of a local expert. Members of the same caste groups tend to live near each other in rural Pakistan, and thus I first stratified villages by caste groups and then systematically sampled each caste-based neighbourhood by surveying approximately every 7<sup>th</sup> household. In total, I sampled approximately 14% of the households in each village. Data from these households was collected in the local language with the assistance of a survey team that I supervised, using an instrument I had designed specifically for this study. Because I initiated contact through local informants in the villages, the response rates for my survey were above 99%.

The qualitative data collected from these study sites comprises of information on a variety of topics, including the history of the village, its caste composition, collective action and caste relationships in the village, government facilities, and - critically - schooling and educational performance. This data was solicited by interviewing over 65 elite informants through semi-structured interviews either independently or in a focus group format using a standardized topic guide. The elite informants in each village were selected using either purposive or snowball sampling methods. I purposively arranged interviews with prominent village members such as village heads or *lambardars* (sometimes also called *numberdars*), head teachers of schools, and big landlords in the landlord-dominated villages. In addition, I also used the snowballing sampling technique to select elite informants that were either local politicians, the heads of key caste groups, or members of school management councils such as teachers or parents. In each village, I spoke to at least 8 respondents. More details on the instruments used and data collection processes employed are available in Appendix A at the end of this thesis.

## 2.4 Quantitative Analysis

This section describes the results of my quantitative analysis. I begin it by detailing my estimating equation. Next, I summarize descriptive statistics in order to highlight notable differences between

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<sup>25</sup> To my knowledge, there are two other prominent sources of multi-district data on caste affiliation (1) the PRHS-II survey collected by the Pakistan Bureau of Statistics for over 3,500 households in Punjab and Sindh and (2) the LEAPs survey collected by the World Bank, the local government and Harvard University for over 12,000 primary school students from 3 districts in Punjab.

<sup>26</sup> The last census in Pakistan was conducted in 1998. The following census was originally scheduled for 2008 but has been repeatedly delayed primarily due to political and security reasons.

the performances of high and low caste groups on three key education metrics. I then present the results of my statistical regression, which appear to confirm the presence of caste-based inequalities in rural Pakistan. I find that being a member of a low caste group is significantly associated with a 7% reduced likelihood of being literate and a 5% reduced likelihood of attending school as compared to members of high caste groups. These lower probabilities are robust to the inclusion of socioeconomic indicators and village fixed effects. On the other hand, the significance of my negative low caste effect appears to erode for the school-age children in my sample, implying that inequalities may have narrowed over time. In the penultimate section, I provide preliminary evidence to suggest that there may be some heterogeneity in education outcomes within the broader caste groupings. Finally, I conclude this section by contending that my findings are robust to the inclusion of other potentially confounding variables, to the use of alternative regression models and different dependant variables, and to the clustering of errors at the household level.

#### **2.4.1 Quantitative Estimation Strategy**

My primary interest in this paper is in understanding if and how inequalities in education are related to an individual's caste group. To that end, I use a reduced-form specification that models educational outcomes as a function of individual and socioeconomic factors commonly found in the education literature (see for e.g. Hanushek 1986; Todd and Wolpin 2003), as well as caste affiliation which of course is my key parameter of interest.

I use three dependant variables in my analysis – the first, Literacy, measures inequalities in reading outcomes between different caste groups; the second, Ever Attended, measures inequalities in attending school; while the final, Currently Enrolled, measures inequalities in enrolment specifically for the youngest cohort of school-age children in the sample. Each of these three dependant variables are binary indicators. For Literacy, this binary indicator takes on the value of 1 if an individual aged 15 or above can read the newspaper in any language, and is 0 otherwise. For Ever Attended, the dummy variable takes on the value of 1 if an individual aged 6 and above has ever attended school in the past or was enrolled in school at the time of survey. Finally for Currently Enrolled, the indicator takes the value of 1 if an individual of the school-going ages of 6 to 17 was enrolled in school at the time of the survey and is 0 otherwise.

To simplify the analysis, my key independent variable is a dummy indicator for Low Caste, which takes on the value of 1 if the individual belongs to a household that is a member of a Low Caste group and is 0 otherwise. There are over 30 distinct caste groups in my sample, which I sorted into High Caste and Low Caste for this specific purpose. The sorting was based on three sources: (1) classifications found in the existing literature on castes in Pakistan, (2) clarification obtained during fieldwork from local informants and (3) my own knowledge of the caste system, which is a product



of having lived in the nation for almost a decade. In general, the high caste group includes traditional landowning castes while the low caste category comprises of non-agricultural castes that have historically been dependant on the landowning castes. Some authors suggest that caste is a fluid concept in that not only can the status of caste groups change over time, but also in that families may themselves begin to identify with different caste groups in order to improve their own status<sup>27</sup>. To address this potential fluidity, two measures were taken. First, during qualitative fieldwork, key informants were asked about any historical changes in caste status. Responses revealed that in the eight sample villages, rankings of caste groups had not changed dramatically over time. In fact, although several low caste groups appeared to have acquired education and wealth, villagers continued to classify them as low ranking groups based on their historical ascendance<sup>28</sup>. Second, in order to check whether these broader high/low rankings may be masking kinship group level differences, I also use an alternative specification with a full set of caste dummies benchmarked against the other status group. This additional analysis allows me to look at the performance of each caste group individually and explore whether caste group effects may be heterogeneous.

Unless otherwise stated, results in this paper are estimated using a nonlinear probit regression model with the following specifications:

$$LITERACY_{ijk} = \alpha + \beta_1 LOWCASTE_{jk} + \beta_2 INDV_{ijk} + \beta_3 SES_{jk} + \chi_k + \varepsilon_{ijk} \quad (1)$$

$$EVERATTEND_{ijk} = \alpha + \beta_1 LOWCASTE_{jk} + \beta_2 INDV_{ijk} + \beta_3 SES_{jk} + \chi_k + \varepsilon_{ijk} \quad (2)$$

$$ENROL_{ijk} = \alpha + \beta_1 LOWCASTE_{jk} + \beta_2 INDV_{ijk} + \beta_3 SES_{jk} + \chi_k + \varepsilon_{ijk} \quad (3)$$

Where, LITERACY, EVERATTEND and ENROL are binary indicators of literacy, of ever attending school and of being currently enrolled in school, respectively, for individual  $i$  from household  $j$  and village  $k$ . LOWCASTE is a dummy variable indicating whether the household belongs to a low caste, referenced against the high caste group. INDV is a vector of individual level characteristics such as gender and age, SES is a vector of socioeconomic indicators for household  $j$  such as assets, income, landowning status and number of children in the household while  $\chi_k$  captures village effects.

To limit the chances of omitted variables biasing my findings, the covariates I include in the full specifications are based on the broader literature on the education production function, as well as region-specific accounts of the determinants of enrolment (see for e.g. Alderman et al. 2001; Dostie and Jayaramam 2006; Baluch and Shahid 2008). Moreover, my preferred specification also includes

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<sup>27</sup> See Introduction and Essay One for a more detailed discussion on the fluidity of caste and the challenges this poses for analysis

<sup>28</sup> To incorporate such changes in education and wealth though, my quantitative analysis does include these variables as regressors.

a full set of village fixed effects which should limit endogeneity issues arising from systematic differences between the villages. Where simultaneous causality is concerned, however, it is more difficult to rule out in my specifications. Although many of my independent variables of interest such as caste and gender are arguably exogenous, there is still the possibility that education outcomes drive for instance the included SES variables and not the other way round. I perform some robustness checks towards the end of this section that suggest that my overall conclusions are unlikely to be biased due to this issue. In spite of this, I would remain cautious about contending that the statistical relationships presented in this paper are necessarily causal.

#### 2.4.2 Descriptive Analysis

**Table 2.1: Selected Descriptive Statistics of Sample**

	Overall
Villages #	8
Households #	353
Household Members #	2,521
Average Household Size	7.1
% of Households with Electricity	93
% of Households with Agri-related Income	55
% of Households that are Low Caste	44
% of Households that are Landless	57

Table 2.1 on the left introduces the sample. As compared to rural Pakistan, which has electricity coverage of 90% (PBS 2013), 93% of the households in my sample have electricity. This statistic is nonetheless in line with my selection of villages with government school facilities and market connectivity from the most developed districts in the country.

Just over 50% of respondents in my sample derive a significant share of their livelihood from agriculture related activities either from self-cultivation, tenant cultivation, salaried employment in agriculture or through agricultural labour. Of the 353 total households, however, only 43% own their own land while 57% are landless. A total of 44% households belong to low caste groups. Interestingly, the correlation between belonging to a low caste group and being landless is 0.42, while the correlation between caste group and a proxy for household income is 0.11 and that between caste group and an index of household assets is 0.36. This lack of perfect correlation between caste group and three distinct measures of socioeconomic class signals support for my contention that caste is an important yet distinct dimension of stratification.

Table 2.2 below summarizes average educational statistics for the sample by broad caste classification, landholding status as a proxy of socioeconomic status, and gender<sup>29</sup>. The differences in educational outcomes between the caste groups are striking – the adult literacy rate for members of high caste groups for instance is 25 percentage points higher than that of members of low caste groups. This gap increases to 30 percentage points when we segregate the indicator by gender and

<sup>29</sup> As expected, due to the sampling criteria the overall education statistics stand substantially higher than those for rural Pakistan. Adult literacy, for instance, is 65% in the sample against 45% for overall rural Pakistan.

compare literacy among high caste women directly to that of low caste women. Similar inequality trends are visible between the landowning and landless groups - although gaps are marginally narrower - and are also mirrored in the Ever Attended data.

Interestingly, while these gaps are still noticeable in the Current Enrolment statistics - which reflect the performance of the latest school-age cohort - they are much narrower and particularly so between the landowning and landless groups. Comparing the two enrolment-related statistics for both advantaged high caste and landowning groups yields a counterintuitive trend as both groups show lower Current Enrolment rates than Ever Attended rates. When I compare Ever Attended rates for those below the age of 25 and those above, however, I do see the expected increase in enrolment for the newer generation, particularly so for women (results not presented).

**Table 2.2: Education Statistics for Sample**

	Literacy (15 & above)			Ever Attended (6 & above)			Currently Enrolled (6 - 17)		
	Overall	Male	Female	Overall	Male	Female	Overall	Male	Female
Total	<b>65%</b>	74%	55%	<b>68%</b>	76%	58%	<b>62%</b>	70%	53%
High Caste	<b>76%</b>	84%	67%	<b>77%</b>	85%	68%	<b>71%</b>	78%	65%
Low Caste	<b>51%</b>	63%	37%	<b>56%</b>	66%	45%	<b>54%</b>	63%	42%
Landowning	<b>76%</b>	85%	67%	<b>76%</b>	85%	66%	<b>69%</b>	79%	59%
Landless	<b>56%</b>	66%	44%	<b>61%</b>	70%	51%	<b>59%</b>	66%	51%

### 2.4.3 Caste Inequalities in Education

Are these differences between caste groups statistically significant after conditioning on my covariates? Tables 2.3, 2.4 and 2.5 present the results of the regression described above with Literacy (Ages 15 and above), Ever Attended School (Ages 6 and above) and Currently Enrolled (Ages 6 to 17) as the dependant variables, respectively. Results are calculated using a probit regression model and coefficients for each specification are accompanied by a separate column presenting the marginal effects of each covariate. These marginal effects represent the average marginal probabilities of each covariate for the actual persons in the data.

#### *Inequalities in Literacy*

The first two columns of Table 2.3 present a parsimonious baseline specification, which includes only caste status, gender and age as covariates, as well as a dummy indicator to account for older respondents who may have been born before there was a school in the relevant village. The results of this specification are statistically significant for my variable of interest – belonging to a low caste as compared to a high caste group is associated with a 27% lower probability of being literate.

Columns (3) and (4) introduce a vector of socioeconomic indicators for the household an individual belongs to based on the existing scholarship. There is for instance a large literature that demonstrates that the number of siblings is negatively associated with educational outcomes, while the education of the head of household is positively associated with outcomes (see Glewwe and Kremer 2006). I thus include both variables, and they enter my model with the expected signs and are significantly associated with Literacy.

Besides these covariates, I also introduce four regressors that specifically take into account the class or socioeconomic status of a household as measured by that household's wealth and income. The first variable, *Landless*, is a dummy indicator that takes the value of 1 if the household does not own any land and is 0 otherwise. In the rural Pakistani context, possession of land is considered to be the most important indicator of economic well-being (Panos 2011). The second variable is a proxy of household income using the log of self-reported annual household expenditure. The third variable, *Asset Index*, is a composite index of sixteen durable assets owned by a household such as a house, television, refrigerator, or car combined using factor analysis. Finally, I also include an indicator of comparative wealth self-reported by the household relative to the wealth of other households in their village. As expected, these four variables are positively correlated, with correlation ratios ranging from 0.20 to 0.45. Although none of these variables is by itself a perfect measure of class, using all four in my view should capture most of the key components of this metric.

As one would expect, the pseudo R<sup>2</sup> of the model after adding these SES increases substantially. Both the *Asset Index* and the *Wealth Comparison* variables are positive and significantly associated with Literacy. Moreover, in line with expectations, being *Landless* has a significant and negative relationship with Literacy. On the contrary, the *Income Proxy* has the expected signs but is not statistically significant. Interestingly, introducing this whole set of SES variables does reduce the marginal effect of belonging to a low caste. As compared to the baseline specification, the probability differential of being literate between high and low caste groups drops from 27% to 9%, although the parameter continues to be significant at the 1% level.

In the final two columns of the same table, I present my preferred specification using a village fixed effects model. The marginal effect of belonging to low caste drops slightly to 7% but remains robust to the inclusion of village effects. My results suggest that although differences in class can explain a large part of the inequalities in education outcomes between castes in rural Pakistan, they cannot account for all of the variation that exists. This result is of course in line with that of many scholars such as Jencks and Phillips (1998) and Strand (2011) who similarly contend that SES explains most, *but not all*, of the visible between-group education differentials.

Another notable result I find is that through all my specifications, being female is consistently negatively related with literacy at the 1% level. Being female is associated with an approximately 20% lower likelihood of being literate as compared to being male. Surprisingly, this effect does not seem to be conditional on belonging to a low caste – I ran my preferred specifications using interactions between the female and low caste indicators but in none of the equations was the interaction significant (results not presented for the sake of brevity). This particular finding is in contrast to Stash and Hannum (2001) and Tas et al. (2014), who show that the gender and caste interaction is important in other countries. In fact, the lack of statistical significance on my gender-caste interaction term can also be considered somewhat contrary to Jacoby and Mansuri (2011) and Lall (2009). Jacoby and Mansuri (2011) suggest that low caste girls are the most marginalized group in Pakistan, whereas I do not find any evidence to support this contention. Lall (2009) uses qualitative data to argue that while in the Punjabi ethnic group attitudes towards female schooling are no different from those of male schooling, there are differences among the Sindhi ethnic group – again I find little support for this contention in my sample.

### *Inequalities in Enrolment*

The same analysis is replicated for the two enrolment-related indicators, first for the wider sample aged 6 and above that has ever attended school and then for school-age children enrolled in school at the time of the survey. These results are presented in Tables 2.4 and 2.5, respectively.

The inequalities related to enrolment for the wider sample mimic those in the literacy inequalities data - belonging to a low caste group is associated with a reduced 5.2% probability of ever attending school in the preferred village effects specification, which is significant at the 1% level. This is of course an expected result – although attending school does not necessarily always lead to the ability to read, the two are closely related and therefore it is easy to see why the results might be consistent with those presented for Literacy earlier. On the other hand, when I examine the probability of currently being enrolled in school, I find that the negative effects of belonging to a low caste group have disappeared. A member of a low caste group is 4% less likely to be enrolled if they are of school-going age, but this relationship is no longer significant. This finding is consistent with Gazdar (2002) who reports erosion of the caste effect for the latest cohort in some villages in Pakistan.

Why does this relationship disappear in the data that pertains to the youngest generation in my sample? One technical explanation for this phenomenon could be that the size of the sample is much smaller and therefore may not have enough variation to estimate the results precisely. While this is possible, it is important to note that the enrolment regression is run on approximately 600 individuals and the smallest village sample stands at 59 individuals. If we study the first two columns of Table 2.5 presenting the baseline findings, we observe that the estimates of low caste are in fact significant,

with the negative marginal effects comparable in magnitude to the estimates seen with the previous two dependent variables. Adding the SES controls, as before, reduces the size of the negative effect but does not eliminate its significance altogether. In fact, in sharp contrast to the previous two response variables, other than the education of the head of the household, none of the SES indicators are significant predictors of current enrolment. The significance of the caste parameter actually disappears once I introduce village effects in column (5), signalling that there may be some other systematic difference between the villages that is not accounted for in the previous specification.

While remaining agnostic on the nature of these latter systematic differences between the eight rural communities, it is still possible to draw some important conclusions for my primary line of inquiry on the differences in educational attainment between high and low caste groups. Where literacy is concerned, members of low caste groups over the age 15 and above are 7% less likely to be literate as compared to their high caste counterparts even after controlling for socioeconomic status. Where enrolment is concerned, low caste groups aged 6 and over are approximately 5% less likely to be enrolled in school. Both associations are significant at the 1% level.

This caste-based inequality, however, does not appear to be a serious issue for the school-age cohort in the sample - belonging to a low caste group for this subgroup is not significantly associated with a reduction in the probability of enrolling in school. Ostensibly, comparing this result to those seen in the adult sample implies that caste gaps have narrowed over time in these villages. A reduction in caste-based inequalities in recent years is consistent with many studies from India that also report declines in inequalities based on this dimension of social division (e.g. Asadullah and Yalonetzky 2012), but remains contrary to findings from Nepal where Stash and Hannum (2001) witness no narrowing of the caste effect on education at all.

#### **2.4.4 Within Group Heterogeneity**

Largely due to the sheer number of distinct caste groups found in the South Asian region, previous scholarship on caste stratification has often restricted itself to examining inequalities in attainment using broad caste groupings such as those used in the above analysis. However, it is possible that not all high caste groups are more likely to participate in schooling as compared to all low caste groups. This kind of heterogeneity has been widely documented in the literature comparing the performance of ethnic minorities in developed countries (see for e.g. Strand 2011).

In this section, I try to draw some tentative conclusions regarding heterogeneity within the broad caste groupings by focusing in particular on five high caste and five low caste groups. Although it may be mechanically pragmatic to simply consider castes with the largest numbers in my sample, I instead select the castes for which I have a priori reasons to expect better or worse schooling

outcomes. This is because like in neighbouring India (see Quigley 1993), there tend to be competing claims of ranking in the middle for caste groups in Pakistan, but there is a lot more consensus on ranking at the top and bottom. Because the sample size for some of these distinct castes shrinks considerably, the results that follow are provided for the Literacy and Ever Attended dependant variables only and use a model that controls for socioeconomic covariates but does not use village fixed effects.

**Table 2.3: Probit Regression: Literacy (Ages 15 and Above) as Dependent Variable**

	(1) Baseline	(2) Marginal Effects	(3) SES Controls	(4) Marginal Effects	(5) Village Effects	(6) Marginal Effects
Low Caste	-0.825 (0.067)***	-0.267 (0.021)***	-0.323 (0.083)***	-0.087 (0.023)***	-0.280 (0.102)***	-0.071 (0.027)***
Female	-0.662 (0.067)***	-0.210 (0.020)***	-0.831 (0.074)***	-0.221 (0.019)***	-0.879 (0.078)***	-0.221 (0.018)***
Age in Years	-0.026 (0.002)***	-0.008 (0.001)***	-0.031 (0.003)***	-0.008 (0.001)***	-0.031 (0.003)***	-0.008 (0.001)***
Older than Local School	-0.004 (0.165)	-0.001 (0.051)	0.169 (0.185)	0.044 (0.048)	0.130 (0.209)	0.032 (0.051)
Head Education			0.110 (0.009)***	0.028 (0.002)***	0.109 (0.009)***	0.027 (0.002)***
Children in Household			-0.048 (0.021)**	-0.013 (0.005)**	-0.028 (0.021)	-0.007 (0.005)
Landless			-0.174 (0.083)**	-0.046 (0.022)**	-0.277 (0.092)***	-0.069 (0.023)***
Income Proxy (Log)			-0.072 (0.080)	-0.019 (0.021)	-0.085 (0.080)	-0.021 (0.020)
Asset Index			0.194 (0.054)***	0.050 (0.014)***	0.150 (0.056)***	0.037 (0.014)***
Wealth Comparison			0.207 (0.064)***	0.054 (0.017)***	0.204 (0.067)***	0.050 (0.016)***
SES Controls	N	N	Y	Y	Y	Y
Village Effects	N	N	N	N	Y	Y
Pseudo R2	0.16		0.29		0.32	
N	1,831		1,780		1,780	

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Robust standard errors in parentheses. Reference categories for binary indicators are High Caste, Male and Landowning. Marginal effects show the average marginal effect of the covariate among the actual persons in the data. Pseudo R2 is McFadden's pseudo R2.



**Table 2.4: Probit Regression: Ever Attended School (Ages 6 and Above) as Dependent Variable**

	(1) Baseline	(2) Marginal Effects	(3) SES Controls	(4) Marginal Effects	(5) Village Effects	(6) Marginal Effects
Low Caste	-0.755 (0.061)***	-0.235 (0.018)***	-0.305 (0.075)***	-0.080 (0.020)***	-0.208 (0.092)**	-0.052 (0.023)**
Female	-0.623 (0.060)***	-0.192 (0.018)***	-0.775 (0.067)***	-0.202 (0.016)***	-0.799 (0.069)***	-0.202 (0.016)***
Age in Years	-0.026 (0.002)***	-0.008 (0.001)***	-0.033 (0.002)***	-0.008 (0.000)***	-0.033 (0.002)***	-0.008 (0.000)***
Older than Local School	-0.078 (0.163)	-0.023 (0.049)	0.100 (0.181)	0.026 (0.046)	0.044 (0.192)	0.011 (0.048)
Head Education			0.112 (0.008)***	0.029 (0.002)***	0.110 (0.008)***	0.027 (0.002)***
Children in Household			-0.049 (0.018)***	-0.012 (0.005)***	-0.036 (0.019)*	-0.009 (0.005)*
Landless			-0.072 (0.078)	-0.018 (0.020)	-0.173 (0.083)**	-0.043 (0.021)**
Income Proxy (Log)			-0.050 (0.072)	-0.013 (0.018)	-0.047 (0.072)	-0.012 (0.018)
Asset Index			0.196 (0.049)***	0.050 (0.012)***	0.141 (0.050)***	0.035 (0.012)***
Wealth Comparison			0.138 (0.059)**	0.035 (0.015)**	0.152 (0.062)**	0.038 (0.015)**
SES Controls	N	N	Y	Y	Y	Y
Village Effects	N	N	N	N	Y	Y
Pseudo R2	0.15		0.28		0.30	
N	2,285		2,223		2,223	

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Robust standard errors in parentheses. Reference categories for binary indicators are High Caste, Male and Landowning. Marginal effects show the average marginal effect of the covariate among the actual persons in the data. Pseudo R2 is McFadden's pseudo R2.

**Table 2.5: Probit Regression: Currently Enrolled (Ages 6 to 17) as Dependent Variable**

	(1) Baseline	(2) Marginal Effects	(3) SES Controls	(4) Marginal Effects	(5) Village Effects	(6) Marginal Effects
Low Caste	-0.548 (0.105)***	-0.194 (0.036)***	-0.391 (0.127)***	-0.129 (0.042)***	-0.141 (0.155)	-0.043 (0.048)
Female	-0.491 (0.104)***	-0.175 (0.036)***	-0.529 (0.110)***	-0.174 (0.035)***	-0.626 (0.116)***	-0.194 (0.034)***
Age in Years	-0.072 (0.015)***	-0.025 (0.005)***	-0.087 (0.017)***	-0.028 (0.005)***	-0.087 (0.019)***	-0.027 (0.006)***
Head Education			0.069 (0.012)***	0.022 (0.004)***	0.067 (0.013)***	0.021 (0.004)***
Children in Household			-0.038 (0.035)	-0.012 (0.011)	-0.003 (0.035)	-0.001 (0.011)
Landless			0.045 (0.136)	0.015 (0.044)	-0.013 (0.147)	-0.004 (0.045)
Income Proxy (Log)			0.131 (0.124)	0.042 (0.040)	0.173 (0.128)	0.053 (0.039)
Asset Index			-0.008 (0.084)	-0.003 (0.027)	-0.088 (0.093)	-0.027 (0.028)
Wealth Comparison			0.145 (0.112)	0.047 (0.036)	0.256 (0.121)**	0.078 (0.036)**
Distance to School					-0.031 (0.044)	-0.010 (0.013)
SES Controls	N	N	Y	Y	Y	Y
Village Effects	N	N	N	N	Y	Y
Pseudo R2	0.08		0.14		0.19	
N	650		634		634	

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Robust standard errors in parentheses. Reference categories for binary indicators are High Caste, Male and Landowning. Marginal effects show the average marginal effect of the covariate among the actual persons in the data. Pseudo R2 is McFadden's pseudo R2.

### *Heterogeneity within High Caste Groups*

Table 2.6 presents the marginal effects of belonging to five distinct high caste groups, referenced against the broader low caste group. I include brief descriptions of the relevant caste groups in the table to help guide the reader in understanding the significance of each presented group.

**Table 2.6: Marginal Effects for Select High Caste Groups**

Description of Caste Group		Literacy (15 and above)		Ever Attended (6 and above)	
		Marginal Effects	N	Marginal Effects	N
<b>Arain</b>	Muslim descendants of an agricultural caste	0.255***	92	0.184**	109
<b>Jat</b>	Muslim descendants of a Hindu cultivator caste - sometimes empirically ranked above Syeds	0.078**	269	0.082***	326
<b>Rajput</b>	Muslim descendants of the Hindu warrior castes - associated with second varna of Kshatriya	0.198***	143	0.147**	175
<b>Syed</b>	Descendants of Prophet Muhammad and generally ranked above all Muslim castes - Arab in origin	-0.002	26	0.081	28
<b>Talpur Mir</b>	Descendants of the Talpur tribe, which ruled Sindh in the 18th and 19th centuries - mostly Shiite Muslims	-0.100*	99	-0.085*	117

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Reference category is broad Low Caste group. All results calculated using SES controls.

The analysis suggests some interesting findings. In line with expectations, the *Arain*, *Jat* and *Rajput* castes appear to have a statistically significant higher probability of being literate and of attending school than members of low castes. This significant positive high caste effect, however, is not uniform across all five categories. The *Syed* high caste coefficient is close to zero and not significant, albeit of course it is possible that the *Syed* caste has too few observations for precision. Even more interesting is the marginally negative coefficient on the *Talpur Mir* caste that is statistically significant at the 10% level – this caste includes descendants of the rulers of the vast *Talpur* dynasty in Sindh. Although only indicative, these findings together suggest that not all high caste groups in Pakistan necessarily have education outcomes different from low caste groups once we control for SES.

### *Heterogeneity within Low Caste Groups*

Similar heterogeneity is witnessed when we look within the low caste group at five key castes, presented in Table 2.7. The *Khaskeli* and *Solangi* castes not only have significant and negative coefficients, but the negative marginal effect of belonging to either caste is generally over 20% as compared to a high caste group. Importantly, this magnitude is comparable to gaps reported for untouchable groups in India (see for e.g. Desai and Dubey 2012). Admittedly, again, for the former this is based on a very limited number of observations. The only two non-Muslim castes in the sample – the Christians *Masihs* and the Hindu *Menghwars* – have the expected negative signs, but surprisingly for the *Masihs* the effect is not significant. The Hindu *Menghwars* in contrast are 23% less likely to be literate, and 13% less likely to have attended school as compared to high caste groups. The difference between attending school and being literate for this caste group may be an artefact of discrimination within the school or some other related factor that affects learning directly.

In sum, it is likely that there is just as much heterogeneity in the lower caste groups as there is within the higher caste groups.

**Table 2.7: Marginal Effects for Select Low Caste Groups**

Description of Caste Group		Literacy (15 and above)		Ever Attended (6 and above)	
		Marginal Effects	N	Marginal Effects	N
<b>Khaskeli</b>	<i>Descendants of house servants and slaves of Talpur Mir tribe - mostly Muslim</i>	-0.284***	16	0.269***	23
<b>Masih</b>	<i>Christian tribe, descended mostly from Hindu converts belonging to the Shudra and untouchable castes</i>	-0.094	39	-0.070	41
<b>Menghwar</b>	<i>Hindu tribe, descended from Hindu untouchable castes and currently listed as a scheduled caste in Pakistan</i>	-0.232**	75	-0.134***	94
<b>Sheedi</b>	<i>Descendants of Black African tribes brought to South Asia as slaves - mostly Muslim or Christian</i>	-0.190*	23	-0.072	34
<b>Solangi</b>	<i>Muslim descendants of a fish trading tribe - sometimes referred to as Machi</i>	-0.220***	76	0.264***	106

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Reference category is broad High Caste group. All results calculated using SES controls.

#### 2.4.5 Robustness Checks

Based on the literature, three variables not included in my specification could potentially confound the quantitative findings of this paper. First, one could argue that the negative low caste effect seen for my first two dependent variables is actually a religion effect. Although my within low caste analysis above already presents marginal effects for the Christian and Hindu castes separately and demonstrates that this is probably not the case, to further ensure robustness of my findings I added a dummy indicator for minority religion. This addition did not change the sign, significance or magnitude of my low caste effect (results omitted for the sake of brevity).

A further confounding variable could be occupation. Even though I use four different indicators to control for socioeconomic class of the household, it is possible that my variables do not reflect the concept of class completely. Occupation type has often been demonstrated to be a component of class in the education literature. Furthermore, because caste groups often had a historical association with a particular occupation, it is possible that my results actually reflect nature of work rather than caste effects. To check whether this might be the case, I added dummy variables for broad occupation groups. My results were again robust to this inclusion (results omitted for the sake of brevity). Because this variable did not add to the explanatory power of my model, I left it out of the analysis.

Another omitted variable that could bias my findings is based on the arguments propagated by scholars that different ethnic groups have inherent differences in intelligence. We saw this line of argument earlier with Hernstein and Murray (1994), who posit that the black-white score gap in the US can be attributed to genetic variations in intelligence. In the region, many colonial surveyors have suggested that certain caste groups possess superior personality traits such as honesty, diligence

and common sense while others do not (see Census of India 1931). Given that this racist line of reasoning has been generally discredited due to a lack of empirical evidence (see Kao and Thompson 2003), this factor is unlikely to be confounding my findings and thus, I do not explore it further.

As already mentioned earlier, it is nevertheless possible that my analysis suffers from reverse causality. While education outcomes cannot change an individual's caste group *per se*, it is possible for these same outcomes to affect the SES indicators of a household such as income, assets and even number of children. Nonetheless, this should not worry us where the significance of the low caste effect is concerned for the primary reason that my baseline specifications, which arguably include only exogenous variables, are significant. Adding the SES variables reduces the size of the low caste effect but does not remove it completely.

To explore this issue further, I ran my preferred specification using only the Landless indicator as a measure of SES and excluded everyone older than 65. I did this because my qualitative research indicates that land ownership patterns in the villages under study have remained unchanged at least since partition from India in 1947 for Punjab, and probably for much longer for Sindh. Therefore causality is highly unlikely to run from the direction of any of the education outcomes towards the ownership of land after partition as there have been almost no land transactions in these villages over the past six decades. The marginal effects of belonging to a low caste group in this specification remain significant and are almost twice the size of those in the results presented above (results omitted for the sake of brevity).

As final checks for robustness, I checked my standard errors, my choice of dependant variables as well as my chosen regression model. For the errors, I repeated my preferred specification while clustering my errors at the household level to correct for any serial correlation. Although the results lost some of their degrees of significance, overall they remained consistent with the presented findings. To ensure that my results were not influenced by my choice of dependant variables, I performed a similar analysis first using number of years of schooling as the dependant variable for ages 15 and above, and then using the official age of school-going children (5 to 16) for the enrolment specification. Again, this did not alter my findings (results omitted for the sake of brevity). Finally, as a check on the regression model, I performed the same analysis using a logit as well as linear regression model. Marginal effects of the key indicators comparing the three models are given in Table 2.8, and appear to be similar further validating my analysis.

**Table 2.8: Marginal Probabilities for Select Indicators Using Alternative Models**

<b>Literacy (Ages 15 and above)</b>			
	Probit	Logit	Linear
Low Caste	-0.071 (0.027)***	-0.070 (0.027)**	-0.091 (0.027)***
Female	-0.221 (0.018)***	-0.222 (0.018)***	-0.222 (0.019)***
Head Education	0.027 (0.002)***	0.027 (0.002)***	0.029 (0.002)***
Landless	-0.069 (0.023)***	-0.070 (0.023)***	-0.068 (0.023)***
Asset Index	0.037 (0.014)***	0.039 (0.014)***	0.025 (0.012)**
Wealth Comparison	0.050 (0.016)***	0.048 (0.016)***	0.045 (0.017)***
<b>Ever Attended School (Ages 6 and above)</b>			
	Probit	Logit	Linear
Low Caste	-0.052 (0.023)**	-0.057 (0.024)**	-0.075 (0.023)***
Female	-0.202 (0.016)***	-0.203 (0.016)***	-0.202 (0.017)***
Head Education	0.027 (0.002)***	0.028 (0.002)***	0.029 (0.002)***
Landless	-0.043 (0.021)**	-0.043 (0.021)**	-0.043 (0.021)**
Asset Index	0.035 (0.012)***	0.037 (0.013)***	0.025 (0.011)**
Wealth Comparison	0.038 (0.015)**	0.035 (0.015)**	0.031 (0.016)*
<b>Currently Enrolled (Ages 6 to 17)</b>			
	Probit	Logit	Linear
Low Caste	-0.043 (0.048)	-0.047 (0.048)	-0.053 (0.049)
Female	-0.194 (0.034)***	-0.196 (0.034)***	-0.195 (0.035)***
Head Education	0.021 (0.004)***	0.020 (0.004)***	0.021 (0.004)***
Landless	-0.004 (0.045)	-0.010 (0.046)	-0.005 (0.045)
Asset Index	-0.027 (0.028)	-0.028 (0.029)	-0.031 (0.028)
Wealth Comparison	0.078 (0.036)**	0.083 (0.037)**	0.080 (0.038)**

## 2.5 Qualitative Analysis

The aims of the qualitative approach used in this paper are twofold: first, to triangulate my main quantitative results by using the responses of key informants on (a) differences in schooling patterns

between high and low caste groups and (b) the nature and magnitude of heterogeneity within the broader high and low caste categories. And second, to shed light on the widely held beliefs surrounding why some caste groups may have better outcomes than others. To that end, I begin this section by providing evidence on the fractionalizing nature of the caste system in rural Pakistan, highlighting how caste differences dictate physical segregation and marriage, as well as politics and conflict resolution. Next, I discuss the prevalent views of elite informants on differences in education performance both between and within caste groups, highlighting that in addition to socioeconomic status, differing cultural orientations towards education, varying expected returns to schooling, and village political dynamics are all reasons respondents offer to explain this performance. I conclude this chapter by examining the durability of this dimension of division, arguing that although some of the inequalities associated with caste appear to have decreased, I remain cautious about interpreting this erosion as an artefact of a declining importance of caste stratification in the country.

### 2.5.1 Stratification by Caste

My qualitative interviews and focus groups confirmed the salience of the caste group or *biraderi* as an important form of fractionalization in rural life, thus endorsing it as an appropriate dimension for studying educational stratification in Pakistan. Conversely, class stratification, while mentioned often in discussions on livelihood and poverty, mostly took a back seat to the driving force that was clearly the caste group. In fact, not only did most individuals introduce themselves to the research team by giving their name followed by their caste affiliation, but almost all discussions about village dynamics were couched in terms of *hamaari* (our) *biraderi* versus *un ki* (their) *biraderi*.

That this kind of division still permeates local dynamics is visible at first glance when entering the villages under study. In Faisalabad, where the villages in the sample were all established during the time of British rule (1858 to 1947), settlements were generally comprised of 8 to 10 parallel streets of residences that to this date continue to be distinctly segregated by caste. High caste groups tend to live in the lanes towards the centre of the village, while low caste communities reside in their own designated lanes that are often furthest from the village centre. In one village in Faisalabad, the traditional *zamindars* (landlords) lived in the old *abaadi* (settlement), which was then separated by an empty plot of land from the other one third of the village, which was designated the new *abaadi*.

When questioned about the purpose of this segregation, the village *lambardar* answered as way of explanation:

“This is where the *chotay* (smaller or lesser) people live – you know, the *kammis* (artisans) and some Christians. They can’t live with us on this side (pointing to the old settlement as he said this), so we gave them this side (pointing to the newer settlement) to allow them to prosper for themselves.” Lambardar 1, Village 4. Faisalabad.

That this new *abaadi* had several houses the sizes of which were comparable to the sizes of the houses in the old *abaadi*, it was explained to the research team, was irrelevant because:

“People should live near their own people.” School teacher, Village 4. Faisalabad.

The studied villages in Hyderabad were mostly established during the Talpur Mir dynasty in the 18<sup>th</sup> century and thus were not as geographically structured as the Faisalabad ones. Nonetheless, a similar segregation pattern was apparent even in Sindh where many scholars have noted that caste hierarchies are less strong than in Punjab (see Mohmand and Gazdar 2007). Caste members tended to live near each other physically, with members of higher caste groups residing in standalone houses towards the village centre. Low caste groups, and the *Menghwars* (scheduled Hindu caste) and the *Sheedis* (caste of Black African descent) in particular, usually lived in neighbourhoods further away from the centre. The less advantaged members of these groups also tended to live with their extended families and other kinsmen, with each nuclear family unit occupying a one room accommodation inside a gated compound. It was not allowed for members of other castes to enter these gated compounds without express permission, especially if they were unaccompanied men.

Attributing this social segregation to one’s perceived rank and status in society, a high caste head teacher in Faisalabad remarked:

“Everything is physically divided along *biraderi* lines. Not just in this village. Have you been to the renowned Agricultural University in the main city? Even their student hostels are arranged by *biraderi* because the children of the cultivator castes think it is beneath them to live with the non-cultivator castes, and the *Jats* – the *Jats* don’t want to live with anyone because no one is good enough for them” High School Head Teacher, Village 1. Faisalabad.

Besides this segregation based on status, matters of marriage, politics, and even conflict resolution are largely dictated by what one insightful *lambardar* coined as “Biraderism<sup>30</sup>”. Of the 350 odd households that participated in the survey, for instance, approximately 88% admitted to marrying within their own caste. The following quotes further illustrate how critical villagers consider the role of the caste group in these matters.

“Are you joking with me? Why would my daughter marry outside the community? We are *Syed*, our daughter will marry a *Syed* or she will sit at home unmarried.” High Caste *Syed* Housewife, Village 7, Hyderabad, responding to a question on how she would react if her daughter married outside their *biraderi*.

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<sup>30</sup> Lambardar 1, Village 1, Faisalabad.



“Nowhere is *biraderi*-based favouritism more apparent than in Faisalabad. *Jat* will only vote for *Jat*, *Rajput* will only vote for *Rajput*.” Local Politician, Village 2, Faisalabad, explaining how people determine who to vote for in the village.

“All the *biraderis* in the village have a head, even the *Solangis* and the *Khaskelis*. If there is a problem between our members and theirs, then their head will come to me and I will help resolve the issue” Head of Dominant Caste and Government Official, Village 5, Hyderabad, elaborating on how *biraderis* interact with each other to handle conflict.

That said, in line with other literature on the topic (see for e.g. Lyon 2004; Lieven 2011), I did observe a certain level of dispute and confusion surrounding the meaning of the local terms of *quom*, *zaat* and *biraderi* amongst some respondents. However this discord, it is important to note, is not at all inconsistent with my findings on education inequalities. While it is beyond the scope of this paper to delve into how villagers interpret these related terms, the key message here remains – the caste system on the ground is seen by almost all villagers as fractionalizing because it continues to play a role in segmenting villagers in their daily lives.

### **2.5.2 Schooling Outcomes among High Caste Groups**

Villagers generally acknowledged stratification in educational outcomes that went beyond that explained by socioeconomic status, especially for high caste members. Elite informants in the studied villages expressed the view that most high castes generally sent their children to school more often than did low caste parents regardless of how wealthy they were, attributing this disparity to group norms and culture. This cultural orientation argument, of course, is not new at all. Rather, after socioeconomic status, it is perhaps the most common explanations offered in the broader stratification literature for differences in ethnic group performance on education (see Kao and Thompson 2003).

Consistent with the findings of my quantitative analysis, many villagers also highlighted numerous examples of heterogeneity within the high caste groups on the matter. For example, the high caste *Legharis* in one of the villages in Hyderabad, on one hand, were renowned for the importance they placed on educating their members. This was true of even landless *Legharis* in that village. A retired university professor explained:

“Our *biraderi* has been notorious on this matter since Independence – people from nearby villages joke that even before our babies have been weaned off their mothers, we give them a hard kick and send them off to school.” Retired University Professor of Leghari caste, Village 6, Hyderabad.

According to the respondents, a similar cultural enthusiasm for education, particularly for male children, was present in the *Rajputs* of Faisalabad, the *Agheems* of Hyderabad and the *Syeds* in general. Except for the *Syeds*, for whom my quantitative sample is rather small, my statistical results are in line with these widely believed disparities in cultural orientation towards education by caste.

Surprisingly, on the other hand, for the high caste of *Talpur Mirs* from Hyderabad a slightly differing point of view was offered. Many of the members of this politically well-connected family were wealthy but uneducated, and elite informants suggested that the hedonistic culture of these traditional landlords was inconsistent with the demands of a formal education. The following comments made by the family patriarch during an interview typify the evolving attitude of his family towards education.

“In the olden days, when we became of age, all of us were sent off to the West to be educated. It was part and parcel of being a *Mir* – we went abroad and enjoyed ourselves, then came back to the villages and ruled like kings because we had money and this foreign education that made us superior. Now, the land has been divided between sons, and then their sons and then their sons. Not everyone is as rich as they used to be. And the thinking in many members is that schooling doesn’t even matter – our sons have to tend to the lands anyways, so why force them to get bored in some school? Let them enjoy life. We can always get them a fake degree if they want to run for elections later on.<sup>31</sup>” 100 year old patriarch of Mir family in Village 8, Hyderabad.

This kind of change in attitudes towards schooling in some of the landed high castes may partially explain why having land is no longer a statistically significant determinant of enrolment for the school-age children in my sample, although it is one for the older cohorts. In the fitted model for enrolment presented earlier, for instance, the probability of a high caste member aged 6 to 17 attending school is 72% regardless of whether the member’s household has land or not. On the contrary, the probability of a high caste member having attended school if they are 18 years or older is 75% if they have land, and 5 percentage points less at 70% if they do not.

This heterogeneity notwithstanding, one other theme for schooling outcomes for the high caste groups – but not the low caste ones - stood out from my qualitative fieldwork. Almost every village school, with the exception of one village in Hyderabad, noted the mass exit of high caste children from the public schooling system in favour of the private one. This finding is consistent with

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<sup>31</sup> Parts of the quoted comments were made in Urdu and had to be translated while the rest was stated in English. To stand for elections in Pakistan, there is a minimum education requirement that the speaker is referring to.

Andrabi et al. (2008) and Fennell and Malik (2012) - both show that although the proliferation of private schools in the country has allowed many households to opt out of the public schooling system, the poorest households usually only have the local government school as an option.

### **2.5.3 Schooling Outcomes among Low Caste Groups**

Unlike the almost unanimous cultural argument proffered for the high caste group's orientation towards schooling, respondents attributed poor schooling outcomes in low caste groups to a mix of the socioeconomic status, the cultural orientation as well as some other less prevalent arguments.

High caste respondents, when speaking of their low caste counterparts, on one hand again generally invoked some sort of a cultural explanation. They argued that the low caste groups just did not fully grasp the importance of schooling and thus had low schooling aspirations for their children. Low caste parents themselves, on the other, cited poverty, the associated need for children to work and prohibitive schooling expenses as key reasons for not sending their children to school. That said, based on my quantitative results, while socioeconomic status does explain a large part of the variation in education outcomes between the broad caste groups, it does not explain all of it<sup>32</sup>.

One related commonly offered challenge by low caste informants was that of expected returns to education and whether or not education offered a chance out of poverty for socially disadvantaged groups due to weak social connections. This very argument has been used to explain disparities for other developing countries by authors such as Patrinos (1995) and Armitage and Sabot (1987) and more broadly to explain education inequalities in the social capital literature (see for e.g. Bourdieu 1986; Coleman 1988). One low caste parent expanded this line of reasoning further, saying:

“Even if we educate our children, there are no jobs for them. To get a government teacher job, you have to pay PKR 500,000 (as a bribe); for a government office peon, you have to pay PKR 250,000. Who has that kind of money or connections other than the high caste members?” Low caste parent, Village 7, Hyderabad.

Another likely explanation for differences in schooling outcomes may be related to the dynamics within the villages that were studied. While I exploit only within village variation between caste groups in my quantitative analysis due to the use of village fixed effects, for the sake of completeness it is worthwhile to briefly discuss this line of reasoning here. Recall that half the selected sites were dominated by one big landlord, while the other half were peasant villages in which land ownership patterns were more egalitarian. Similarly, half the sites had a low degree of

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<sup>32</sup> Admittedly, it is possible that my measures of SES do not capture some of the more nuanced dimensions suggested by the SES school of thought such as identity (Akerlof and Kranton 2002), or social and cultural capital (DiMaggio 1982) and that these factors may be driving at least some of the remaining variation.

caste fractionalization while the other had a higher degree. In line with the political economy literature on rural Pakistan (e.g. Easterly 2003), most informants in landlord-dominated villages expressed concerns over how big landlords treated low caste groups. In one landlord dominated village in Hyderabad, one elite informant noted:

“If he (referring to the big landlord in the village) allows the masses to be educated, then who will work on his fields? Who will bow down and ask him for his assistance?” High caste elite informant, Village 8, Hyderabad.

Based on the extensive literature on the relationship between ethnic fractionalization and public goods provision (see Alesina and La Ferrara 2005), parallel arguments can be made for the degree of caste diversity in villages driving differences in education metrics. A number of elite informants noted how more diversity in their village had limited their chances of collective action related to schooling, while conversely others in less diverse villages argued that *biraderi* homogeneity, trust and enhanced social capital facilitated it<sup>33</sup>.

#### **2.5.4 Narrowing Inequalities between Caste Groups<sup>34</sup>**

In spite of the above, my qualitative results also provided indicative support for the quantitative finding that gaps in education between caste groups appear to have narrowed over the past few decades. Repeatedly, the research team was told anecdotes of low caste members who were now studying to become doctors, engineers, government officials and businessmen. Numerous elite informants also commented on how low caste members were now more open to the concept of schooling for their children. Attributing this change to modernization, economic growth, the media and recent Education For All (EFA) drives by the government, most villagers agreed that the inequalities in education between high and low caste groups were narrowing.

An important reason for the narrowing of such education gaps may also be weakening in the vertical links between caste groups as diversification in the economy has reduced dependence of some low caste groups on *zamindars*. A high caste head teacher from Hyderabad observed:

“In the olden days, our fathers and forefathers would not let the *Khaskelis* sit on the same *charpoy* (a woven bed or bench) as us, while the *Menghwars* were considered untouchable because they were Hindu. Now, although the *biraderis* are still considered distinct, this hierarchy is less strong.” High caste head teacher, Village 6, Hyderabad.

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<sup>33</sup> See also Essay Three of this thesis.

<sup>34</sup> See also related discussion on ethnicization of caste in Introduction to this thesis

A big landlord from Faisalabad on the other hand lamented on the erosion of his power, stating:

“Before everyone in the village would come to our family and ask for our permission to even move a piece of trash lying on the ground. However, these days everyone thinks they are their own *Chaudhary* (an honorary title usually reserved for landholders, *lambardars* and royalty). People just don’t have the kind of respect for my family that they had before.” Big landlord and *lambardar*, Village 4, Faisalabad.

Does this reduction in inequalities mean that caste stratification is becoming irrelevant in Pakistan? I would advise caution in such an interpretation. First of all, by design my sample includes rural respondents from the most developed districts in the country. My sample resides in relatively modern villages, located close to a big city and have dedicated public schooling facilities within their villages. Although erosion of caste inequalities may well be a phenomenon in other villages with largely similar characteristics, it is possible that this narrowing may not be a universal trend particularly so in more agricultural and remote villages. Second, even if this erosion is indeed representative of a change occurring in Pakistan more broadly, a reduction in inequalities in access to schooling may not necessarily translate into a reduction in inequalities in learning. Although most of my high caste elite informants had themselves studied in the village government school, their children have now been moved to private schools while lower caste children dominate in the government schools. Because learning is often associated with school resources, processes and student body, and numerous authors have noted the poor quality of Pakistan’s government schools (see Khan et al. 2005; Andrabi et al. 2008) it is not unreasonable to expect that due to this institutional stratification, caste stratification along the lines of learning outcomes may still persist even if the enrolment gap narrows. Besides the growing private-public schooling gap between castes, issues of discrimination within schools (see Hoff and Pandey 2006), caste mismatch with teachers (see Kingdon and Rawal 2010) and internalization of caste discrimination (see Akerlof and Kranton 2002; Bros 2014) may still continue to limit learning for low caste groups. Finally, it is important to note that in recent years, there has been a broad trend of greater enrolment in basic education in most developing countries. It is thus possible that the narrowing in my data reflects this broader trend rather than a reduction in the salience of one’s caste group per se<sup>35</sup>. If caste-based inequalities still persist now, but do so at say higher levels of education where the returns to education are also much higher, then caste-based stratification in Pakistan may become even more relevant in the future than it is now.

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<sup>35</sup> I am grateful to Haris Gazdar for highlighting this point to me.

## 2.6 Conclusion

In most developing countries, education is seen as a chance out of poverty for disadvantaged groups. Yet in Pakistan, some of the worst overall education indicators found globally continue to be accompanied by persistent inequalities in education based on the multiple dimensions of gender, socioeconomic status and caste group.

While the former dimensions of stratification have attracted considerable focus from academics and policymakers alike, caste inequalities in Pakistan have received scant attention. Both the quantitative and qualitative results presented in this paper suggest that this lack of attention is troubling. Based on analysis of data that I collected from eight rural communities, I find that not only is caste an important dimension of education stratification, but that there are also substantial differences in educational attainment between high and low caste groups - differences that persist even after conditioning on socioeconomic status, and importantly, are likely to be more acute for certain low caste groups. In general my evidence, which was triangulated through mixed methods, shows that a low caste individual in rural Pakistan is both (1) less likely to be literate and (2) less likely to have attended school than a high caste individual.

These pessimistic findings are of course tempered by the reduction in inequality trend witnessed for the youngest cohort in my sample. I report quantitative evidence that suggests differences in enrolment of low caste school-age children at the time of my survey were *not* statistically different from their high caste counterparts, as well as qualitative evidence that indicates that the traditional hierarchy between the castes appears to be somewhat narrowing. In spite of this optimistic result, however, I recommend caution in the paper in interpreting any erosion on this front as an artefact of a declining importance of caste stratification in the nation by first noting its enduring salience and then also highlighting (1) that the nature of my sampling design implies that my results are likely to be representative of only the more advanced villages in the country, (2) that there is a possibility that a reduction in inequalities in access may not necessarily translate into a reduction in inequalities in learning and (3) that instead of disappearing, it is possible that inequalities in opportunities have simply moved to higher levels of education.

These three considerations are of course key reasons why a larger scale replication of my results is an important avenue for further research. Such a replication would facilitate not just corroboration of studies that indicate caste-based disparities such as mine, but would also attract policy focus on the specific disadvantaged castes which would benefit most from policy tools such as affirmative action or targeted supply interventions. In addition to replication of my findings, another important avenue

for further research may be whether this kind of inequality extends to the sub-caste level as well. A number of caste scholars (see Ghurye 1969) have argued that it is not the broader caste grouping, but the sub-caste that poses the actual division in society. While my qualitative fieldwork suggested that there may be some substance to such arguments, I was unable to gather data on this parameter thus limiting my ability to draw any conclusions on this front. Finally, the most critical area for further work may be the mechanism that drives caste inequalities even after controlling for socioeconomic status. Although this line of inquiry was beyond the scope of this particular paper, I did briefly touch upon widely accepted reasons for disparities in my qualitative analysis. I explore such explanations more fully in two companion papers to this essay, which between them examine in some detail how both village-level political dynamics and social capital affect collective action surrounding education.

Before concluding I think it important to reiterate the importance of shifting the education debate in Pakistan in such a way that it refocuses on caste-based inequalities. On the ground, this caste system is deeply entrenched in the psyches of millions of rural residents who use their *biraderi* as the primary means of establishing and communicating their identities. If for no other reason than this, education stratification based on caste warrants a lot more attention that it has received thus far in the literature.

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## ESSAY THREE

# Caste Fractionalization, Land Inequality and Caste Dominance: Understanding the Drivers of Poor Educational Outcomes in Rural Pakistan

### Abstract

What factors determine the likelihood of collective action for education provision in rural societies? In this paper, I develop a theoretical framework in which caste fractionalization, land inequality and the imbalance in power between various castes – or what I call *caste power heterogeneity* – jointly influence the level of collective activity for provision. Through this theoretical framework, I formulate detailed predictions of how these dimensions of social heterogeneity function and interact with each other in order to influence educational outcomes such as literacy. I then test the plausibility of these predictions in the context of rural Pakistan using a blend of statistical analysis of original data for over 2500 individuals, and paired comparisons of a total of eight community-level case studies. On the whole, my framework stands up to the hard empirical evidence - my statistical analysis confirms the interdependence of my three proposed elements, while my comparative case studies serve to corroborate my specific predictions surrounding the understudied dimension of caste power heterogeneity. Although generalizability of the multiple findings I present in this essay may be limited due to a small sample, my results nonetheless highlight the importance of unpacking the variable ‘heterogeneity of participants’ in order to better understand the likelihood of collective action.

Key words: ethnic fractionalization, inequality, collective action, dominant caste, education, Pakistan

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### 3.1 Introduction

The proposition that there is an inverse relationship between high levels of social heterogeneity and the quantity and quality of public goods delivery is a widely accepted hypothesis on the political economy of public good provision (Banerjee et al. 2005). The essence of this hypothesis is simple – it posits that groups that are substantively different from each other have more difficulty in agreeing on collective action for public goods delivery. This difficulty manifests itself by, for instance, a lack of voting to provide the good, lower resource contributions, or by failure to act collectively for any community-based provision. Each of these, in turn, results in poor public good provision.

Of course, social heterogeneity is a complex concept with multiple dimensions, the individual effects of which can vary (Baland and Platteau 2007). Yet, the empirical literature appears to be overwhelming pessimistic on most dimensions. Authors such as Alesina et al. (1999), Okten and Osili (2004) and Miguel and Gugerty (2005), for example, examine the role of one aspect of diversity – ethnic fractionalization – to demonstrate that ethnically diverse communities display worse levels of cooperation. Other scholars such as Easterly (2007), Pal and Ghosh (2007) and Galor et al. (2009) analyse the effect of a different aspect of diversity – economic inequality – to arrive at a similar conclusion: economic heterogeneity undermines public provision.

Many of these pessimistic arguments are echoed in the political economy literature on Pakistan, a country which has underperformed on most education indicators since its independence in 1947. In 2011, for instance, adult literacy rates stood at 55% as compared to 93% for neighbouring India and Sri Lanka (UIS; PBS 2013). As a consequence of this underperformance, many consider Pakistan the “poster-child” of how both ethnic diversity and elite domination have contributed to poor social outcomes (see Easterly 2003). Authors such as Malik (1997) and Siddiqi (2012) on one hand demonstrate that the nation’s ethnic heterogeneity has resulted in widespread political instability and poor governance. On the other, scholars like Husain (1999) and Easterly (2003) explain the nation’s low educational attainment more directly by using the economic heterogeneity argument. They posit that high levels of land inequality have skewed economic and political power into the hands of the country’s landed elite who perpetuate illiteracy in order to maintain their own privileged status.

In this paper, I attempt to explain Pakistan’s poor educational outcomes by developing and testing an alternative theoretical framework in which caste<sup>36</sup> fractionalization, land inequality and the imbalance in power between various castes – or what I prefer to call caste power heterogeneity –

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<sup>36</sup> By caste, I refer to the patrilineal, primarily endogamous kinship groups in Pakistan variously referred to as *biraderi*, *quom* or *zaat*. For a detailed discussion on caste, see the first essay in this PhD thesis.

jointly influence the level of collective activity for rural education provision. In my stylized model, the first component of caste fractionalization serves as the intervening variable that mediates the effects of the other two components. According to my proposed framework, the theorized effect of the interaction between land inequality and caste fractionalization is straightforward. I posit that land inequality works unfavourably for educational outcomes in communities that have higher levels of caste fractionalization. In contrast, in my model, the predicted effect of the interaction between caste power heterogeneity and the mediating dimension of caste fractionalization is slightly more complicated. I theorize that power imbalances between caste groups work favourably for educational outcomes in communities with lower levels of caste fractionalization, but work unfavourably in communities with relatively higher levels of caste fractionalization.

Why would caste power heterogeneity have a favourable effect in contexts where there is less caste fractionalization but a detrimental one in the opposite scenario? In settings with lower caste fractionalization, I argue that the most powerful or “dominant” caste group has incentives to improve broader community-level schooling facilities without being exclusionary. This is because in such communities, not only is the dominant caste group likely to constitute the numerical majority of those benefiting from such broader-level improvements, but also because they are less likely to believe that their dominance can reasonably be threatened by a few, less powerful castes. Conversely, in settings with higher caste fractionalization, I assert that a powerful dominant caste group has incentives to engage in targeted caste patronage, while at the same time being exclusionary. This is because in such communities, divergences in schooling preferences across numerous castes, distaste for working with other caste groups, and fears that at least one of the other multiple resident castes may attempt to challenge the dominant group’s privileged status are more prominent than they are in caste homogeneous settings. As a consequence, these factors combine with a high level of caste power heterogeneity to result in dominant groups using their skewed power to seize a disproportionate share of village resources in order to improve educational outcomes only for their own group members or coethnics, thereby causing overall community outcomes to suffer.

This theoretical framework, given its interactions of three distinct dimensions of social heterogeneity that are often closely related to each other in rural societies, is not easy to test. Yet my attempt to check its plausibility by employing a blend of quantitative and qualitative methods yields results that are largely consistent with my predictions. I first test the generalized relationships between my proposed dimensions of heterogeneity and educational attainment, as well as the specific nature of interaction between caste fractionalization and land inequality, using quantitative analysis of an original dataset for over 2500 individuals collected from eight villages in rural Pakistan. This quantitative analysis exploits historically determined, exogenous village-level variation in caste composition and land ownership patterns to not only demonstrate the interdependence of my three

dimensions of heterogeneity, but to also corroborate that land inequality is indeed associated with lower educational attainment for individuals residing in communities with higher caste fractionalization. I then test my predictions related to the interaction between caste fractionalization and caste power heterogeneity in particular by conducting qualitative community-level case studies of the same eight villages. These case studies rely on rich controlled comparisons of village dynamics to confirm my expectations on this front: they indicate that in communities with low caste heterogeneity, a greater imbalance in power between caste groups improves community outcomes, while in communities of high caste heterogeneity such imbalances result in resource grabs by dominant caste groups that enhance educational outcomes for their members only.

Although my paper adds to a sizeable literature on heterogeneity and public good provision, it does contain several innovations related to approach that set it apart from many existing contributions. Unlike much of the current scholarship that overwhelmingly relies on a single method of analysis, for instance, in this essay I blend the use of both quantitative and qualitative methods. This strategy permits my conclusions to not only be based on more analytical rigour than either method can provide alone, but also – as I explain in more detail in Section 3.3 - allows me to explore several additional avenues of research that would not have been possible in a single method study. Moreover, while a significant proportion of work in this arena relies on an ethnolinguistic measure of fractionalization, in line with Banerjee and Somanathan (2007) and Naidu (2008) I instead measure fractionalization on the basis of caste or kinship group. This innovation is advantageous because, as many authors have argued, caste and tribe usually pose a much more durable form of division than does ethnicity (see Kanbur et al. 2011).

The main contributions of this essay pertain to two specific aspects of my theoretical model. The first is my introduction of the caste power heterogeneity component. This component borrows from the theory of dominant castes in the anthropological literature (see Srinivas 1959) and attempts to merge this scholarship into the mainstream empirical research on fractionalization and collective action by considering how economic, political and demographic dominance by certain caste groups in a village can alter local power dynamics in a way that affects collective activity for education provision. Extant work, in contrast, not only largely neglects the differences in power between castes as a source of heterogeneity but in the small related literature that does exist on the matter, it also proposes the ethnic dominance argument as an alternative to the ethnic fractionalization one (see Collier 2001; Baldwin and Huber 2010). The second is my consideration of if and how different dimensions of heterogeneity interact with each other. With the exception of a few (e.g. Waring 2011; Casey and Owen 2013), the current empirical scholarship by and large focuses on single sources of heterogeneity, making it difficult to parse out the relative importance of different sources. Yet this

latter ability to distinguish between the roles played by various dimensions of diversity is critical – as my paper will demonstrate, findings on this front can lead to drastically different policy solutions.

Pakistan poses a good case study for examining the relationship between social heterogeneity and education provision for a number of reasons. Most obvious is the fact that the country is representative of many other developing nations that are likely to fail to achieve its Education For All goals by the end of 2015. Besides this, the country itself also presents an inherently interesting context for analysis. Considered by many as a paradox due to its good economic performance and relatively poor social indicators (see Easterly 2003), Pakistan's 55% literacy rate conceals significant regional, rich-poor and caste-based disparities in attainment. This variety set within the same broader institutional setting allows the effective use of controlled comparative case studies that can shed light on how different aspects of heterogeneity influence educational attainment. Thus, inasmuch as my sample communities are representative of those in other similar developing countries, my analysis of this case both informs policy on key obstacles to enhancing educational attainment, and contributes to the wider debates on the role of heterogeneity in collective action for public provision.

This paper proceeds as follows: Section 3.2 critically reviews the existing literature to develop a stylized model of education provision for the context of rural Pakistan; Section 3.3 summarizes my empirical strategy and establishes the comparability of my eight sites of study; Sections 3.4 and 3.5 present my quantitative and qualitative findings, respectively; Section 3.6 concludes by summarizing my mixed methods findings, highlighting the policy implications of these results, and considering some of the shortcomings of my analysis that can be addressed through future work.

## **3.2 Theoretical Framework**

There is a sizeable literature that identifies heterogeneity of participants as a key structural variable that is detrimental for collective action<sup>37</sup>. In order to develop the theoretical framework for this essay, I begin this section by examining the strains of this research that focus on ethnic and economic heterogeneity in particular. For each dimension, I first examine the currently available theoretical and empirical evidence that considers the relationship between the relevant dimension of diversity and public goods provision or common pool resource management<sup>38</sup>. I then move on to contextualize this evidence for Pakistan using not just the available country-specific literature, but

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<sup>37</sup> This proposition derives from an extensive theoretical literature that proposes social heterogeneity as one of several factors that can affect the likelihood of collective action. For a comprehensive survey, see Ostrom (2009) or Banerjee et al. (2007).

<sup>38</sup> Although the focus of this paper is on education which is a public good that is both non-excludable and non-rival, the related literature on common pool resources (non-excludable but rival) is included in this review as it is similarly useful in understanding the outcomes of heterogeneity of participants on the likelihood of collective activity.



also some original insights on the salience of the kinship network and the reduced power of local landed elites, neither of which have as yet received adequate attention in the scholarship. In the penultimate section I borrow the concept of dominant castes from the anthropological literature, and posit that power imbalances between caste groups may serve as a further dimension of heterogeneity that has been largely ignored in empirical work. In this section, my goal is to merge insights from the dominant caste literature into the mainstream scholarship on fractionalization and collection action. Finally, I conclude this section by presenting a stylized model of education provision, four hypotheses, and a detailed matrix of predictions for education outcomes based on nature of heterogeneity. These arguments are then tested in later sections of this paper.

Throughout this critical review and in this essay more generally, I use the terms fragmentation, heterogeneity, and diversity interchangeably to refer to the phenomenon in which groups are substantively dissimilar to each other based on some specific dimension.

### **3.2.1 The Role of Ethnic and Caste Heterogeneity**

In the scholarship, cohesiveness in terms of ethnicity – i.e. colour, language, religion, tribe or caste – is often proposed as a factor that facilitates collective action<sup>39</sup>. Conversely, heterogeneity along these lines is commonly accepted as its deterrent.

There are several often overlapping explanations for why this might be the case. For one, heterogeneous subgroups may have different preferences for public goods – a lack of compromise over these divergent preferences may lead political actors to divert resources to private patronage instead (Alesina et al. 1999). Even if they have similar preferences, however, these subgroups may limit participation in community efforts because they dislike mixing across ethnic lines or because they prefer that only others who are like themselves benefit from the good (Alesina and La Ferrara 2000; Vigdor 2004; Okten and Osili 2004).

Within ethnic groups, in contrast, collective action might be easier for a variety of reasons. People belonging to the same ethnic group or *coethnics* may, for instance, be able to work together more efficiently than non coethnics because they understand each other better, or because they interact with each other much more frequently (Habyarimana et al. 2009). Moreover, homogenous groups may find it easier to sanction one another in the event of non-cooperation, thereby reducing transaction costs and increasing the chances of collective action (Miguel and Gugerty 2005).

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<sup>39</sup> The term ethnicity in this literature is used in line with the commonly accepted definition posited by Horowitz as an umbrella term that “easily embraces groups differentiated by color, language, and religion; it covers ‘tribes,’ ‘races,’ ‘nationalities,’ and castes” (Horowitz 1985, 53).

Regardless of the proposed mechanism though, theoretically all these arguments predict the same result - the more subgroups there are, the worse is the outcome (Banerjee et al. 2007).

### *Empirical literature*

There is a large body of work that examines the relationship between public goods or common pool resources and ethnic fractionalization to empirically arrive at this very conclusion. In probably the first paper of its tradition, Easterly and Levine (1997) demonstrate that ethnic diversity explains a significant part of “Africa’s growth tragedy.” They find that ethnic diversity in the region is negatively correlated with schooling attainment, as well as with the availability of other public goods such as electricity and roads. Their pessimistic findings are echoed in the seminal work of Alesina et al. (1999), who show that ethnic heterogeneity in US cities and counties is associated with increased overall spending financed by government transfers, but with reduced spending on productive public goods such as education, roads and sewers. This, the authors posit, is supportive of the hypothesis that “polarized societies will value public goods less, patronage more...” (Alesina et al. 1999: 1274).

Many others agree. Okten and Osili (2004) and Miguel and Gugerty (2005) examine the impact of ethnic heterogeneity on contributions in the context of community organizations in Indonesia and schooling facilities in Kenya, respectively, to find that diversity reduces community assistance. Dayton-Johnson (2000) assesses the level of canal maintenance in Mexico to demonstrate that heterogeneous communities display worse levels of cooperation, while Wade (1988) and Bardhan (2000) study irrigation communities in India to show that homogeneous communities display better ones. Banerjee and Somanathan (2007) concur, albeit to a certain extent – they examine the effect of fractionalization on the basis of religion and caste in India to argue that although both indicators are still statistically related to lower access to schooling, in the past few decades minority groups have gained political power thereby allowing such groups increased access to public facilities. Along a slightly different vein, Habyarimana et al. (2009) conduct a public goods experiment in Uganda to arrive at the expected conclusion - ethnic diversity has negative effects on public good provision.

That said, within this seemingly unanimous literature there are a handful of studies that fail to find that this empirical regularity holds. Varughese and Ostrom (2001), for instance, examine 18 forest user groups in Nepal to conclude that although social diversity does pose a challenge to cooperation, it is not a strong predictor of collective activity. Meanwhile, by examining data from 120 villages in the Indian states of Uttar Pradesh and Bihar, Bros (2010) reports that patronage has resulted in a positive relationship between caste fractionalization and several public goods instead. Gisselquist (2013) takes the latter argument further by re-examining the findings of Alesina et al. (1999), who reported that diversity was related to lower spending on public goods in the US. Upon a reanalysis of their data, she highlights that for different public goods, the relationship with ethnic fragmentation is

in certain instances positive, in others negative and in others still, insignificant. In more recent work, Gisselquist et al. (2014) and Gerring et al. (2015) further challenge the negative effects of diversity. Both argue that even if heterogeneity has an adverse impact on human development at national levels, the same is not necessarily the case at subnational ones.

The most commonly acknowledged shortcoming in this empirical literature is related to how ethnic fractionalization is measured. To begin with, ethnicity is a slippery concept, which makes fragmentation along its lines difficult to quantify. Authors writing in this vein point out that ethnic groups are often "...contingent, fuzzy and situational," rather than deeply-rooted, rigid and clearly delineated (Fearon 2003: 197)<sup>40</sup>. Kanbur et al. (2011) highlight a slightly different measurement challenge – they contend that the literature overwhelmingly relies on an ethnolinguistic fractionalization measure even though it is usually the tribal or caste identity that poses the more durable division. Another related concern is the endogeneity of fractionalization measures used by empiricists – a growing number of scholars emphasize that ethnicity is not as inarguably exogenous as assumed in econometric work (see Alesina and La Ferrara 2005; Green 2013).

### *Ethnic Heterogeneity in Pakistan*

How does this literature apply to the context of Pakistan? Countless scholars have studied Pakistan's ethnic heterogeneity, attributing to it in varying degrees, the country's weak governance institutions (Malik 1997), ethnic conflict and separatist movements (Phadnis and Ganguly 1989; Rashid and Shaheed 1993; Haleem 2003), and poor public provision (Easterly 2003; Shafique 2013).

Pakistan gained independence from British rule in 1947 and is a federal republic comprising of the four provinces of Punjab, Sindh, Balochistan and Khyber Pakhtunkhwa<sup>41</sup>. Although it was formed under the banner of Muslim unity, politics in the country has since its inception been characterized by ethnic strife. Most prominently, as a consequence of challenges over power sharing across ethnicities, Bangladesh seceded from Pakistan in 1971 (Rashid and Shaheed 1993). Meanwhile, within the former West Pakistan, the *Sindhi*, *Balochi* and *Pashtun* ethnic groups have continued to object to what they view as *Punjabi* domination in Pakistan's military and government bureaucracy (Talbot 1988; Alavi 2011). In Sindh, the Urdu-speaking populace that emigrated from India, known as the *Muhajirs*, has agitated for increased quotas in the civil service and importantly, as recognition as a distinct ethnic group (Siddiqi 2012). The *Sindhi* nationalist movement has counteracted by challenging the ascendancy of the Urdu language in the country, highlighting marginalization of the native Sindhi-speaking people in the major cities of Sindh, and noting a concomitant neglect of its

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<sup>40</sup> For a good account of the constructivist, instrumentalist and essentialist views of ethnicity, see Varshney (2009).

<sup>41</sup> Administratively, Pakistan also includes the capital territory of Islamabad and the Federally Administrated Tribal Area (FATA). The province of Khyber Pakhtunkhwa was formerly known as the North West Frontier Province (NWFP).

rural areas where the majority of this ethnic group resides (Amin 1988; Siddiqi 2012). Ethnic-based violence has been particularly explosive in Sindh's capital city Karachi, which since the mid-1980s has served as the hotbed of clashes between the *Muhajir*, *Sindhi* and *Pashtun*<sup>42</sup> ethnic groups. As testament to the nation's polarization, a number of ethno-nationalistic and separatist ideologies have been expressed at different points in time, most notably for instance, the *Baloch* or the *Sindhu Desh* movements which call for self-governance of Balochistan and Sindh, respectively.

This broader ethnolinguistic-based conflict in the country aside, in both rural Punjab and Sindh the kinship group - locally referred to variously as *biraderi*, *quom*, or sometimes *zaat* - poses yet another source of fragmentation. In fact I argue that as compared to the broader ethnic grouping based on language, the kinship group - which I henceforth also refer to as caste or *biraderi* - poses the more relevant dimension of polarization for studying the provision of rural education. The primary reason why this is the case is that over 60% of the country's population resides in rural areas, the villages of which tend to be relatively homogenous in terms of linguistic ethnicity but are comprised by numerous caste groups. And in daily life this *biraderi* system - and not one's ethnolinguistic group - serves as the key marker of one's identity (see also Posner 1980; Collier 2001 for arguments in favour of studying fractionalization at the level of the kinship group).

The salience of different dimensions of identity often changes over time due to evolving political environments (Horowitz 1985). Like in much of the rest of the world, ethnolinguistic boundaries have been repeatedly redefined throughout Pakistan's history (see Talbot 1988; Alavi 2011). The local kinship group, on the other hand, represents a marker of identity that has remained both prominent and unchanged because membership is not only based on patrilineal descent, but endogamy is a cultural norm. Moreover, the strength of this marker has also persisted over time, as that of such traditional markers does, due to the repetition of custom and ritual (see Kanbur et al. 2011). This persistence is evident from early work by anthropologists and sociologists alike who reported that rural society in post-partition Pakistan was stratified by this kinship system (see for e.g. Eglar 1960; Barth 1956; Rouse 1988). More contemporary literature concurs with regards to the importance of this dimension of identity - authors such as Lyon (2004), Martin (2009) and Gazdar and Mallah (2012) all demonstrate that the *biraderi* system is at least as pivotal to understanding the local social structure today as it was earlier<sup>43</sup>.

Besides the durable nature of the caste identity, another factor that makes polarization at the level of the village important is the fact that global drives for primary education have significantly improved

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<sup>42</sup> Karachi saw an influx of Pashtun refugees following the Soviet war in Afghanistan. It now houses the largest urban concentration of Pashtuns in the country.

<sup>43</sup> Refer also to a more detailed discussion on the evolution in the kinship group literature presented in Essay One.

village-level school access in rural Punjab and Sindh. From 1992 to 2011, to illustrate, the number of government primary schools increased from 86,000 to 137,000 across Pakistan (MoE 1993: MoE 2011), largely due to donor-funded federal mandates. In addition, private schools have also proliferated in recent years and rural Pakistan now has a competitive, active educational marketplace (Andrabi et al. 2008). As a consequence, although larger ethno-politics continue to play a role in national and provincial education policy formulation, collective activity for, for example, petitioning politicians, voicing concerns over quality to school staff or raising funds for school improvements now occurs largely at the local level. Importantly, this collective activity requires different castes, rather than different ethnicities, to work together to improve village-level provision.

Because of this, understanding if Pakistan's understudied caste system is fragmentary on the ground is paramount. And unfortunately, a variety of evidence strongly suggests that it is. Although a countless number of named kinship groups exist, the principal hierarchical stratification in Pakistan is between groups who have a traditional association with agriculture and thus have a high status, versus those that do not and thus have a lower one. Settlements in villages to date continue to be segmented along these caste lines, with similar castes living in close proximity to one another and high castes generally occupying the most advantageous locations in the village. Because marriage serves as the basis for social ties in the village and *biraderis* tend to be endogamous, the most frequent contact one has is also with one's own kinship group members. In addition, intermittent bans on party-based elections in Pakistan have also given way to increased politicking on the basis of the kinship network (Talbot 1988). In fact today *biraderi* networks, particularly in Punjab, serve as the basis for political mobilization, thus making Pakistani caste groups voting blocs<sup>44</sup> for same-caste politicians (Chaudhry and Vyborny 2013). Residential segregation, limited contact with other kinship groups and political competition thus all serve to make collective action across kinship groups challenging.

In spite of this, few studies have looked at the effect of tribal or caste fractionalization on service delivery in Pakistan. One notable exception is Khwaja (2009), who studies community-run projects in Northern Pakistan to argue that social heterogeneity based on clan, religion and political groups reduces the quality of collective project maintenance. Another exception more closely related to this paper is due to Jacoby and Mansuri (2011), who confirm the salience of caste dynamics. They demonstrate that low caste children in rural Pakistan are less likely to enrol if the nearest school is dominated by high caste children<sup>45</sup>. In this paper, I add to this limited literature by merging

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<sup>44</sup> Bloc voting is a common phenomenon in Pakistan, whereby local leaders determine the candidate for whom a vote is cast for an entire subgroup or in this instance all members of the same *biraderi*.

<sup>45</sup> In a recent PhD thesis, Shafique (2013) also examines how ethnic diversity affected provision in Pakistan.

conclusions from the broader ethnic fractionalization scholarship with a variety of evidence on the divisive nature of the *biraderi* in Pakistan to posit:

*Hypothesis 1:*

*Low caste heterogeneity is likely to be associated with higher educational attainment*

### **3.2.2 The Role of Economic Heterogeneity**

In contrast to the almost universal negative theoretical predictions on the role of ethnic fractionalization, the expectations related to heterogeneity on the basis of land, income or wealth are less clear cut. On one hand, in his seminal book, Olson (1965) contends that if one or a few wealthy, powerful individuals have a stronger interest in a public good, the probability of obtaining that good increases. This “Olson effect” occurs because such individuals have more to gain, which results in them taking on a disproportionate economic responsibility to ensure provision.

Others, however, posit that the opposite and more intuitive relationship may be true. This is because heterogeneity in wealth is likely to reduce cooperation if the benefits to poor members are too little or if the wealthy decide to opt out of the public system (see Baland and Platteau 1999; Banerjee et al. 2007). Jones (2004) offers yet another reason for an inverse relationship – he suggests that although interpersonal trust increases initially when wealthier individuals invest in the good, an inequality in benefits reduces trust later in the process, thereby limiting the success of cooperation.

Several political economy models outside of the mainstream collective action theory also shed light on how economic inequality may affect schooling. Rajan and Zingales (2006), for example, postulate a model in which there are three groups – oligopolists, the educated, and the uneducated. In their model, the uneducated always want more education, while the educated want less in order to limit competition. The deciding votes of the oligopolists are however cast for less education, because the oligopolists fear that schooling for the masses will eventually result in comprehensive economic reforms, which are likely to be unfavourable to the oligopolists’ interests. In Bourguignon and Verdier’s (2000) model, in contrast, the oligarchy opposes mass education because of the expectation that educated masses will demand more representative political power. Galor et al. (2009) propose a slightly different yet extremely useful theory still, in which landowners resist a rise in the level of education as it increases productivity in agriculture much less than it does in industrial production. Thus as long as the stake of these landowners in the industrial sector is insufficient, according to Galor et al., inequality in landownership will result in the landed elite using the political process to slow down human capital accumulation.

### *Empirical literature*

How do these mixed theoretical predictions play out in the empirical work? On one hand, scholars such as Engerman et al. (2002) and Easterly (2007) argue that economic inequality is related to lower levels of schooling. On the other, authors such as Wangel and Blomkvist (2013) have found evidence of the Olson effect, arguing that economic inequality can facilitate cooperation.

As the principal economic asset of the poor (see Lipton 2009; Frankema 2010), land has been well studied in this body of work. Yet the findings of this branch of literature are also mixed. In his study on canal maintenance in Mexico, for instance, Dayton-Johnson (2000) finds that land inequality is associated with worse upkeep. Similarly, Galor et al. (2009) test their theory of land concentration's adverse effects using expenditure data from the US to find that land inequality poses a hurdle for schooling. For India, Banerjee et al. (2005) contend that land relations from colonial times continue to affect public good provision in India today, as does Pandey (2010) – she shows that villages with a history of landlord control display lower teacher effort, poor student attendance and worse student performance. Pal and Ghosh (2007) agree on the negative consequences of land inequality – using data from 1960 to 1992 on Indian states they find that concentration of landholding is associated with reduced spending on education.

Nonetheless, there is also counter-evidence. By studying 48 irrigation communities in South India, Bardhan (2000) for example suggests that there may be a U-shaped relationship between land inequality and cooperation instead. At moderate levels of inequality in land ownership, he finds that cooperation is low, but at extremely high and low levels of inequality, cooperation increases. Naidu (2008) conversely finds the presence of an inverted U-shape. According to her study on collective forest management, moderate levels of wealth heterogeneity are associated with higher levels of cooperation but very low and very high wealth heterogeneity results in less cooperation. In contrast, Banerjee and Somanathan (2007) find that between 1971 and 1991, land inequality had a limited effect on the change in primary and high schools in Indian villages although its relationship with access to middle schools was negative. Foster and Rosenzweig (2004) take a different tack – they find that between 1971 and 1982, investments in schooling were greatest in Indian villages that had a high proportion of landed relative to landless households. Finally, Casey and Owens (2013) present one of the only papers to directly pit the economic and ethnic heterogeneity arguments against each other. Using an instrumental variable technique to address endogeneity concerns, they perform a cross-country analysis to find that although ethnic fractionalization has a negative effect on secondary school enrolment, the effect of economic inequality is insignificant and often positive.

### *Economic heterogeneity in Pakistan*

At the time of independence, there was an extensive feudal system in Pakistan, especially in Sindh. And even today, many rural areas in the nation continue to be described as “feudal” (Chaudhry and Vyborny 2013), with rural society being structured around land ownership, and the relationships between the feudal and his vassals. As a consequence, land is not just the principal productive asset in rural Pakistan, but is also the country’s main source of economic heterogeneity.

At a macro level, the country’s landed elites have essentially monopolized the government since 1947 - the majority of Pakistan’s parliamentarians have been from among their midst and even in the bureaucracy, the landed class has always had substantial representation (Malik 1997; Salim 2008; Javid 2011). During the country’s multiple periods of military rule, these landlords aligned themselves with military rulers in a classic exchange - the landlords and their rural voting blocs provided the unelected governments with legitimacy, while the dictators provided the landed gentry with preferential treatment. This group’s influence in polity is evident most prominently in the lack of land and agricultural tax reforms, which have repeatedly been proposed and yet, have never been entirely implemented. Such poor redistributive policies have resulted in wealth being highly concentrated within some 40 families, who Rehman (1997) argues have not only been the beneficiaries of government patronage, various subsidies, and numerous tax exemptions, but have also defaulted on billions of rupees of loans and government dues without repercussions. As a result, he persuasively concludes that these families, most of them landed elites, essentially “own Pakistan”.

In light of the way in which these elites have systematically marginalized large portions of the population, it is not surprising that in popular discourse on the country the power of the landlord has traditionally been both highlighted and criticized. Indeed one of explanations for Pakistan’s poor education outcomes commonly advocated by scholars, policy makers and residents alike is that the landed elite have perpetuated illiteracy in order to ensure that they can maintain their privileged economic and political status (see Husain 1999; Easterly 2003). In line with the models of Rajan and Zingales (2006) and Bourgignon and Verdier (2000) presented earlier, proponents of this theory argue that Pakistan’s landed elites oppose education because they fear that it will bring with it more competition, greater demand for political representation, and significant economic reform, all of which will be against the interests of the landed aristocracy.

To anecdotally illustrate the link between unequal land ownership and poor education outcomes, authors writing in this vein often present enrolment gaps between feudal-dominated Sindh and less feudal Punjab as a strong testament of the power of their argument. But does this evidence stand up to more rigorous scrutiny? Admittedly, in 2013 the primary net enrolment rate in rural Punjab did stand at 69 against 53 for rural Sindh, indicating a gap of 16 percentage points (PBS 2013). Yet,



where the broader argument seems to suggest a large concentration of income, the country's Gini coefficient actually stands at a reasonable 30, marginally lower than neighbouring Bangladesh and India, and significantly lower than Sri Lanka's 36 (WDI<sup>46</sup>). Similarly, the operated farmland Gini during 1990-2005 for Pakistan stood at 0.61, again pretty much in line with India's (Lipton 2009: 285).

Of course one could still contend that especially at the micro-level, the power of the landed classes extends beyond that reflected in these measures. There is plenty of anthropological work, for instance, that supports this affirmation by demonstrating that landlords in many villages continue to exercise excessive power over peasants. In fact, rural politics in the country is often described as conforming to typical patron-client models, in which peasants (clients) are tied vertically to landed elites (patrons) on whom they depend for employment, credit and insurance (Scott 1972). The economic dependence of the client on the patron necessarily implies that such power dynamics are skewed in favour of the patrons, who often use force to maintain their hold over villagers. In Pakistan, anecdotal evidence abounds of such coercive landlords having private jails where labourers are locked up all day and released only to labour in the fields, and of female labourers being frequently assaulted by landlords and their representatives (Salim 2008; Martin 2009). The situation is particularly acute for the six million in Pakistan who are officially classified as being in bonded labour, half of whom belong to religious minorities (Upadhyaya 2004). These labourers spend their lifetimes under abusive conditions to repay loans taken by themselves or by members of their family in what is frequently referred to as a modern form of slavery.

In spite of this, there are two key reasons why in this paper I think it important to re-examine the proposition that the nation's poor education outcomes today are primarily the result of exploitive local landlords. First, reliance of villagers on landlords in rural Pakistan has reduced considerably since the 1990s due to diversification in the economy and the growing urbanization of the new generation of landed elite (see Martin 2014). At a broader level, Shami (2012) sheds light on this issue by demonstrating that market connectivity has the potential to reduce the exploitative power of landlords over the poor in rural Punjab. Chaudhry and Vyborny (2013) take this argument further by confirming that multiple new avenues of assistance beyond the local landlord are increasingly available to Pakistani villagers, who now cite local government and provincial officials as well as politicians as patrons. Second, the feudal class itself is a non-cohesive group, characterized by a significant level of in-fighting and competition (Keefer et al. 2003). This is evident both at the national and the local level. Nationally, for instance, regional elites have continually espoused provincialism in order to prevent opposing elites from gaining political power; whereas locally,

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<sup>46</sup> Pakistan indicator is based on WDI 2008 data. Bangladesh, India and Sri Lanka are based on WDI 2010 data.

Hasnain (2008) argues that the local elections held in 2008 were as competitive as provincial and national ones. This of course was contrary to the expectation that powerful landlords would dominate on the basis of their economic power. In fact, competition between local landlords is especially prominent not just in villages where there is more than one big landowning family, but also in villages where in-fighting has resulted in fissures within single large landholding families. In such villages, it is likely that competing elites will provide more as opposed to less education in order to win village support. Taken together, these factors imply that the widely accepted effect of the landlord may need to be examined further.

A handful of empirical findings from Pakistan offer support for my contention that there isn't necessarily a one to one relationship between the presence of a large local landlord and social outcomes. Keefer et al. (2003), for example, use data from the late 1990s to show that land concentration is not significantly associated with the building of schools in Pakistani villages. Similarly on the basis of data from four villages, Gazdar (2002) shows that once caste divisions are controlled for, land inequality ceases to be a statistically significant factor in explaining primary school enrolment. More generally, in his study of community projects in Northern Pakistan, Khwaja (2009) finds that land inequality has a U-shaped relationship with project maintenance – according to his findings, both extremely low and extremely high levels of inequality can facilitate cooperation.

Taking the argument even further, several authors assert that the alleged negative effect of economic heterogeneity is likely to be mediated by a variety of factors. Writing in this vein, scholars thus far have highlighted the salience of benefit heterogeneity (Naidu 2008), market connectivity (Shami 2012), and access to open labour markets (Mohmand and Gazdar 2007) as some of the factors that can mediate the effect of economic heterogeneity in rural Pakistan. Theoretically speaking though, I argue that one further factor can easily be added to this list - the interplay of caste and land heterogeneity. The reason for expecting that this interaction may be just as important as some of the factors noted above is simple. Based on the advantages presented earlier, the ethnic homogeneity of residents in a landlord-dominated village should directly facilitate their ability to act collectively in favour of education in spite of the patron landlord's disapproval. In heterogeneous villages, on the other hand, we should expect the bargaining power to shift in favour of the landlord as villagers will conversely find it harder to coordinate their efforts to act collectively for education provision. Following from this, rather than expecting the presence of a large landlord to consistently be negative, I posit:

*Hypothesis 2:*

*The alleged adverse effect of living in a landlord-dominated village is likely to be mediated by the degree of caste fractionalization in that particular village*

### 3.2.3 The Role of Ethnic and Caste Dominance

A small but growing research contests the findings of the orthodox ethnic diversity literature discussed above by stressing that it may not be ethnic fractionalization *per se* that drives poor community outcomes but rather, factors such as the nature of interethnic relations and the extent of between-group disparities may also play a critical role. This argument is grounded in the understanding that taking just the number of distinct subgroups into account masks finer complexities that drive cooperation. An important concept that has gained attention as a result is that of ethnic dominance, which is alleged to occur when there is a difference in numerical preponderance, hierarchical ranking or economic and political status between ethnic groups (see Horowitz 1985; Kaufmann 2004). The core reason this concept is pivotal is that such differences may result in not just different preferences for, and distribution of, public goods among the subgroups, but also in the systematic exclusion and marginalization of less powerful subgroups by the more ethnically dominant ones (Doane 1997; Baldwin and Huber 2010; Alesina et al. 2012).

A similar, yet distinct concept relevant for this paper is that of a *dominant* caste. First proposed by Srinivas (1959) in his study of village dynamics in India, a dominant caste is defined as a caste group that has power in a particular village. This power – defined here as the chance of a “group of men to realize their own wills in communal action even against the resistance of others who are participating in the action” (Weber 1946: 180) - derives from a number of factors including numerical strength, economic and political status, land ownership, and modern education (Srinivas 1959; Dumont 1980). While not all dominant groups possess all these features together, when they do, it results in what is known as *decisive dominance* of a village or local community<sup>47</sup>. Importantly, like any other elite group, dominant castes in the literature are shown to use their dominant power to influence key village decisions, settle disputes among non-dominant castes, and gain advantaged access to village resources (see Jeffrey 2001). And although there is scarce literature on their specific role in provision of public goods, the nature of dominance implies that the resultant power imbalance between dominant and non-dominant castes, just like that between dominant and non-dominant ethnicities, may serve as a relevant factor for local collective activity.

#### *Empirical literature*

In exploring the causes of poor public policies and ethnic conflict, Collier (2001) contends that the commonly accepted negative effect of ethnic diversity can in fact be better explained by the strength of ethnic dominance, which he defines as a particular subgroup having a permanent numerical majority over others. Because ethnic diversity and ethnic dominance often occur in tandem, Collier

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<sup>47</sup> Note that the concept of dominant caste was originally used to refer to a caste that had numerical majority in a village. Later understandings of the term began to include factors such as power derived from education, landholdings, and economic and political status.

claims, the effect of the latter has been commonly mistaken for the effect of the former. Along a slightly different vein, Baldwin and Huber (2010) show that it is between-group differences in economic resources that has a negative relationship with public good provision, while overall ethnic fractionalization does not. In their latest contribution to the field, Alesina et al. (2012: 1) concur, postulating that "...what matters for development are economic differences between ethnic groups coexisting in the same country, rather than the degree of fractionalization."

Likewise, a handful of recent studies examine the phenomenon of dominant castes to argue in favour of the concept's importance in understanding collective activity. Waring (2011), for example, considers irrigation systems in India to find that caste dominance – measured as numerical strength – reduces cooperation. Using a public goods experiment that mimics traditional irrigation systems, Waring and Bell (2013) take this argument further – they conclude that caste dominance in terms of differences in social status has a greater negative effect on cooperation than does diversity. Also supportive of the significance of the notion is Anderson (2011), who demonstrates that income levels for low castes in India are considerably higher when they reside in a village where the majority of land is owned by low caste groups as opposed to high caste ones. Anitha (2000) offers a contrasting finding – based on his study of Karnataka, India, he demonstrates that villages comprising of one of two high castes tend to outperform villages comprising entirely of scheduled castes and tribes on education metrics, while villages with several different castes tend to perform somewhere in the middle. His results imply that it is not dominance per se but rather, the social status of castes that dictates performance. Munshi and Rosenzweig (2008), on the other hand, offer a scenario in which caste dominance can have a positive effect on public goods – they argue that the presence of a numerically dominant caste is associated with better public provision in a village. They attribute this to the dominant caste selecting political leaders from amongst themselves who are the most competent to represent their constituency.

Although these studies use slightly different empirical measures of caste dominance, the essence of the theoretical term dominant caste is related to power in a particular village<sup>48</sup>. Theoretically, this implies that the designation of caste dominance is not necessarily correlated with the traditional caste hierarchy of landowners at the top, farmers and artisans in the middle, and those performing menial tasks at the bottom. Instead, it is possible for low status castes to be dominant in particular villages. Moreover, it similarly indicates that the classification is not necessarily associated with skewed landownership either in the hands of one large landlord or that of a caste group – this is because theoretically, it is possible for castes with a numerical majority, modern education, or economic status derived from say industry, to be considered dominant in a village. Both these factors suggest

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<sup>48</sup> This reading is consistent with Srinivas' conceptualization of a dominant caste as a caste that "wields preponderant economic and political power" (1955: 18).

that although the notion is likely to be highly correlated with caste fractionalization and land heterogeneity, a dominant caste – when considered a caste that wields power in a specific village - is still a concept sufficiently dissimilar from both dimensions to merit further independent study.

### *Ethnic and Caste Dominance in Pakistan*

In line with the expansive literature on ethnic fractionalization in Pakistan, the scholarship that examines dominance of certain ethnic groups either explicitly or implicitly is substantial. In one strain of this body of work, scholars such as Shah (1997) and Malik (1997) shed light on the domination of the *Punjabi* ethnic group over others in matters of politics, foreign policy and military and civilian establishments, noting that this group has continually worked to augment its power over that of non-dominant ethnicities. In another strain, authors like Siddiqi (2012) document the rise and ultimate dominance of the *Muhajirs* in urban Sindh – a group that since the 1980s has achieved significant electoral success and economic power by using a mix of politics and militancy to mobilize masses on the basis of what many refer to as an “imagined” ethnicity.

At a micro-level, the paucity of literature that examines the role of caste dynamics in the provision of public goods in Pakistan necessarily implies that there is also scant evidence on the role played by dominant castes in such settings. The findings of Mohmand and Gazdar’s (2007) paper, however, are significant as well as revealing. Consistent with the scholarship on contemporary India, they find evidence that belonging to a village’s dominant caste can provide greater political and economic power even for disadvantaged members of that caste group. Moreover, they show that leaders of dominant caste groups often serve as arbiters in village conflicts, and in general command the respect of villagers in almost all local matters. In a more recent paper, Martin (2014) agrees on the significance of focusing on dominant castes in rural parts of the country – by studying dynamics in a Punjabi village, he demonstrates how the local dominant caste group has appropriated state resources in order to provide patronage to their own *biraderi* as well as to other landed elites who support them politically, while excluding other castes almost entirely.

While a number of scholars propose the ethnic dominance argument as an alternative to the ethnic fractionalization one, I argue there are reasons to suspect that the effects of one may be predicated on the other. To theoretically speculate on how a power imbalance between castes in diverse caste fractionalization settings may affect education provision, it is critical to consider whether the most powerful caste group will have the right incentives to exercise its dominance for the improvement of the village as a whole or not. In caste homogenous villages, the former is likely – because the dominant caste will in all probability also be the numerically preponderant caste in such cases, one would expect that their collective activity would be devoted to improving broader village level facilities as they will form the majority of its beneficiaries. At the same time, the decisive dominance

of this main caste group will mean that the ability of non-dominant castes to challenge their power will be negligible. Due to this, the dominant caste will derive limited benefits from restricting access for the handful of resident non-dominant castes and will thus choose not to be exclusionary. Consequently, in such scenarios, non-dominant castes will also benefit from the improvement in broader village-level educational facilities. Put simply then, a power imbalance in favour of the dominant caste in caste homogenous villages is likely to be beneficial for overall village outcomes.

Significantly, this is likely to be the case in caste homogenous villages that have egalitarian land ownership patterns, as well as those with substantial land heterogeneity. In fact, in the landlord-dominated village scenario in particular, a power imbalance in favour of the dominant caste (excluding the landlord himself of course who is likely to be a member of this caste) should lead to the presence of a group powerful enough to challenge a patron landlord's authority on core village issues, provided it is in their interest to do so. Does this by corollary imply that a lack of power imbalance in caste homogenous villages will be detrimental for educational outcomes then? In villages with egalitarian land ownership patterns, probably not - the wider benefits of caste homogeneity will likely still prevail. On the other hand, in caste homogeneous villages with high land heterogeneity, local politics will likely play out differently. In the most probable scenario, a lack of power imbalance in such a village will most often imply not equal power sharing across caste groups, but rather a general lack of power overall<sup>49</sup>. And this lack of power will limit the ability to mobilize against the large landlord, thereby reducing overall educational outcomes in the community.

In caste heterogeneous villages, in sharp contrast, one would expect that the dominant caste group will have limited incentives to exercise its power for the improvement of the village as a whole. In such villages, divergences in schooling preferences between the various caste groups, distaste for working with non-dominant castes, and partiality for only members of the dominant caste benefiting from public goods are likely to be more prominent than they are in more caste homogeneous villages. These factors will thus likely combine with skewed power dynamics to result in diversion of village resources for targeted caste patronage. In fact, the worse expectations for imbalances in power will likely play out in caste heterogeneous settings, with dominant groups exercising their power to not only seize a disproportionate share of village resources but also to deliberately exclude non-dominant groups from the benefits of any facility improvements. Why? Because, unlike in the previously described caste homogeneous scenario, here there are simply too many outsider groups

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<sup>49</sup> This is in light of historical settlement patterns in Pakistan where villages are structured around agricultural and supporting castes. In cases of relatively caste homogeneous villages with a large landlord, the chances are that all resident castes are those that rely almost entirely on the landlord economically. In more caste heterogeneous villages with a large landlord, chances on the other hand increase that there may be competing smaller landlords or caste groups with interests outside agriculture.

who can pose a threat to the privileged status of the dominant caste. Put differently then, a power imbalance in favour of dominant caste groups in caste fractionalized villages is likely to improve outcomes for dominant castes only while having detrimental effects on overall educational attainment.

Conversely, when the power imbalance in caste heterogeneous settings between groups is limited, there will be multiple castes jockeying for the prize of dominance. In villages with low land heterogeneity, this jockeying and competition across multiple caste groups is more likely to improve than to reduce educational attainment. This is because not only will no caste have sufficient power to seize a disproportionate share of village resources, but the equal power across the board will serve as a check on such transgressions. However, in villages with high land heterogeneity, ultimate outcomes will depend critically on how successful the multiple castes jockeying for power are in challenging the local landlord's authority. Leading from these numerous arguments, I theorize in particular that:

*Hypothesis 3:*

*In villages with low caste heterogeneity, power imbalances between caste groups are likely to work in favour of overall education outcomes*

*Hypothesis 4:*

*In villages with high caste heterogeneity, power imbalances between caste groups are likely to result in the dominant group seizing a disproportionate share of resources, thereby improving outcomes only for the dominant group*

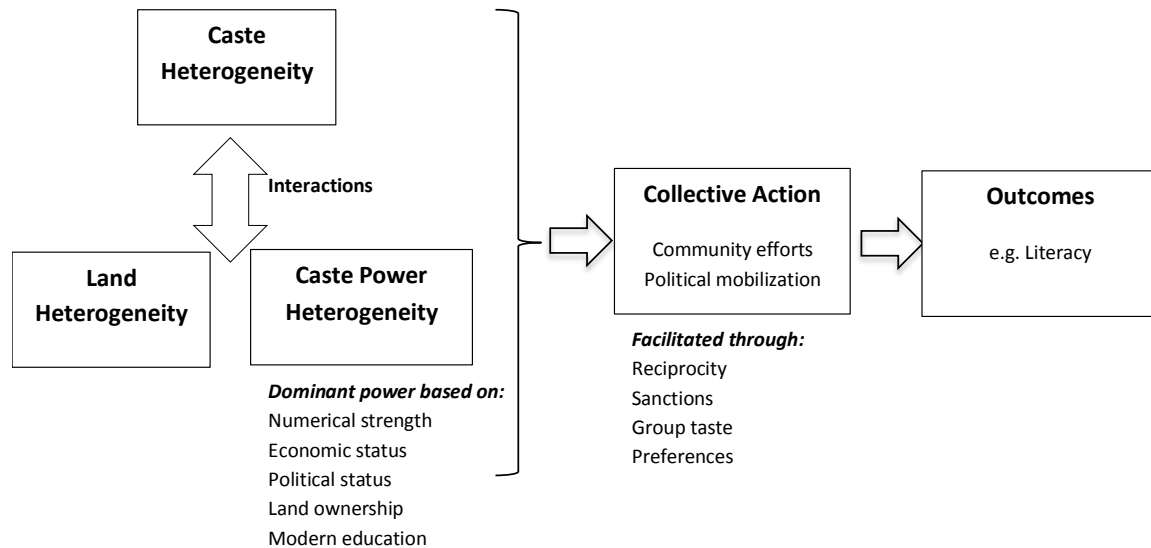
### **3.2.4 A Stylized Model of Education Provision**

How do my multiple hypotheses fit together? In Figure 3.1, I present a stylised model of collective action for education provision based on the above discussion.

In this framework, like many scholars before me, I focus on the commonly accepted structural variable of heterogeneity of participants as a determinant of collective action (see Ostrom 2009). However, I distinguish my stylized model from existing frameworks that consider this parameter in two ways. First, I unpack the heterogeneity variable into the three core components of caste heterogeneity, land heterogeneity and – critically - the power imbalance between caste groups, which I prefer to call caste power heterogeneity. Extant work, in contrast, not only largely neglects differences in power between caste groups as a source of heterogeneity but in the small related literature that does exist on ethnic dominance, it also proposes the dominance argument as an alternative to the fractionalization one. And second, while existing models overwhelmingly focus on

single sources of heterogeneity, in line with a growing literature (see for e.g. Waring 2011; Casey and Owen 2013), I specifically incorporate the possibility of each of my variables working independently as well as interacting with each other, thereby influencing collective activity for education together.

**Figure 3.1: Stylized Model of Education Provision**

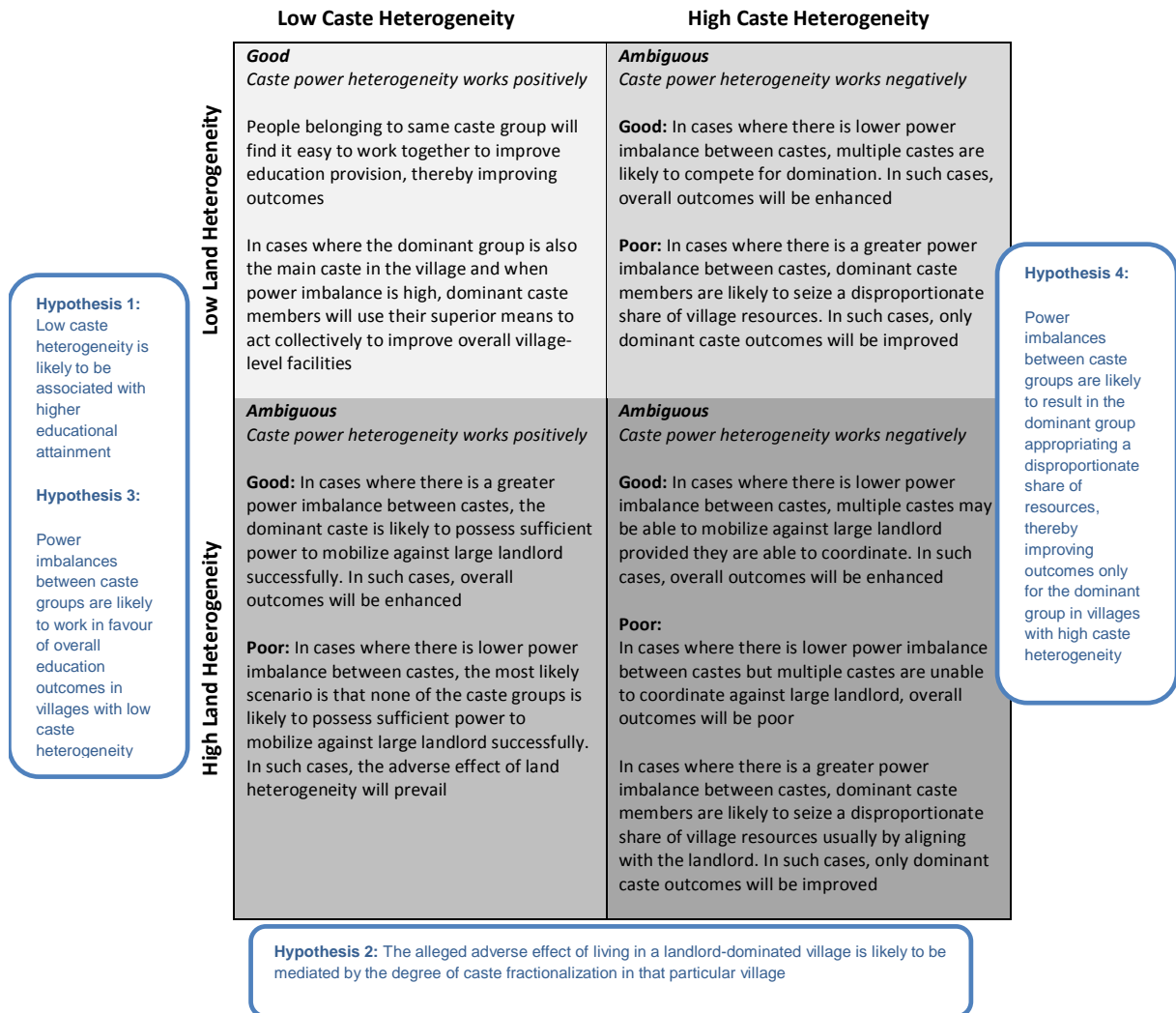


My stylized model, together with my four hypotheses, is useful for testing generalized relationships between the proposed parameters of interest. Yet the multiple interactions involved add a layer of difficulty in predicting education outcomes for individual communities. Figure 3.2 attempts to capture this complexity by detailing the likely education outcomes for communities based on their specific mix of core structural variables, while at the same time mapping how my hypotheses come together to explain final attainment.

For the sake of simplicity, the chart displays caste heterogeneity on one axis and land heterogeneity on the other, with each dimension having the option of being low or high. In general, it predicts that in villages with Low Caste Heterogeneity (left column), outcomes are likely to be positive in cases of Low Land Heterogeneity (top quadrant) but ambiguous when Land Heterogeneity is High (bottom quadrant). In both instances, a power imbalance between castes works in favour of overall outcomes, although it becomes more pivotal in landlord-dominated villages where the dominant caste can pose the strongest challenge to a landlord's authority. Conversely, in villages with High Caste Heterogeneity (second column), outcomes are always ambiguous and power imbalances between castes work against overall educational attainment. The ultimate outcomes across the matrix, however, depend critically on how each of the three dimensions play out in each scenario.



**Figure 3.2: Predicted Education Outcomes**



### 3.3 Empirical Strategy

The previous section developed a stylized model, four generalized hypotheses and a detailed matrix of predictions regarding heterogeneity and educational attainment. In this section, I explain how I test these multiple arguments. I begin by briefly describing the original dataset and rich case study information I collected for this paper. Next, I outline my mixed methods study design, and focus on establishing the exogeneity of caste composition and land ownership patterns as it forms the basis of my quantitative empirical strategy. Finally, because my analysis relies fundamentally on the comparability of my eight sites of study, I conclude this section by demonstrating the similarity of these communities on key variables.

### 3.3.1 Data

I collected the data for this study in 2012 from two districts in Pakistan, namely Faisalabad from the province of Punjab and Hyderabad from the province of Sindh. Both the selected districts are not only home to the second largest cities of their respective provinces, but also have large rural areas that belong to comparable agricultural zones. Moreover, the two districts have similar Human Development Indices, which stand at 0.68 and 0.67 for Faisalabad and Hyderabad, respectively, against 0.62 for Pakistan overall (Jamal and Khan 2007).

Due to the lack of recent sampling frames<sup>50</sup>, random sampling of communities within these districts was not possible. Instead, from each district's rural areas I purposively selected four average sized<sup>51</sup> villages to get variation in the key independent variables of caste fractionalization and land inequality<sup>52</sup>. Thus half the sample communities or villages have more than eight castes with at least ten households residing in that village, while the other half have less than four resident castes. In the analysis that follows, I denote the former as caste heterogeneous or fractionalized villages and the latter as homogenous ones. Similarly, half the sample villages are dominated by one big landlord who owns more than 75<sup>53</sup> acres of land, while the other half have land ownership patterns that are more equally distributed. I denote the former as landlord-dominated or land heterogeneous villages and the latter as peasant or land homogenous villages. Figure 3.3 introduces the eight villages, which are identified by numbers to preserve the anonymity of study participants, using a matrix of caste heterogeneity on the X axis and land heterogeneity on the Y axis.

**Figure 3.3: Villages by Heterogeneity Mix**  
Caste Heterogeneity

		Caste Heterogeneity	
		Low	High
Land Heterogeneity	Low	Village 3 Village 6	Village 1 Village 5
	High	Village 2 Village 8	Village 4 Village 7

Within each of the eight villages, I conducted a census of the entire settlement with the assistance of a local expert and then used a caste stratified random sampling method to select households for a comprehensive survey. The survey was implemented with the assistance of a team and used an instrument that I had designed specifically for this study. The final data collected from this survey comprises of demographic, socioeconomic, and educational attainment indicators solicited for approximately 2500 individuals from some 350 households. This household survey was

<sup>50</sup> The last census in Pakistan was conducted in 1998. The following census was originally scheduled for 2008 but has been repeatedly delayed primarily due to political and security reasons.

<sup>51</sup> In Pakistan, villages with between 200 and 400 households are considered average-sized.

<sup>52</sup> Case selection on the basis of variation in independent variables is commonly acknowledged to be useful for theory generation. See George and Bennett (2005).

<sup>53</sup> According to the Agricultural Census of Pakistan 2010, less than 2% of farms are greater than 50 acres. Thus my benchmark of 75 acres indicates a relatively large landlord for Pakistan.

supplemented by the collection of village-level indicators on infrastructure, facilities and agricultural conditions.

In addition to the survey, I conducted a total of over 65 semi-structured interviews with informants across the eight villages. In general, in each village I spoke to (1) representatives from the government school and parents of school-going age children (2) village notables such as traditional village heads, politicians, and large landowners and (3) notable members of key kinship groups found in the village. During these interviews, I focused on eliciting narratives on historical caste composition and land ownership patterns, as well as on understanding village dynamics, cooperation and collective activity. More details on the instruments used and data collection processes employed are available in Appendix A at the end of this thesis.

### **3.3.2 Estimation Strategy**

My stylized model, given its multiple interactions of three closely related dimensions of heterogeneity, is not easy to test. The resultant, ambitious approach to corroborating the validity of my arguments employs a mix of quantitative and qualitative techniques. In particular, I examine my first two hypotheses on the role of caste and land heterogeneity using primarily statistical analysis of household survey data. I then not only confirm these statistical findings using detailed qualitative data, but also test my final two hypotheses on the role of power imbalances between caste groups primarily by conducting paired, comparative community-level case studies. The former method is useful in providing statistical transparency, while the latter is beneficial for both illustrating the mechanisms through which the proposed relationships work, as well as in refining the theories on the role of caste power heterogeneity in the provision of education that I generated earlier in this essay.

#### *Quantitative Methods*

My purpose in using quantitative techniques is to investigate the presence of generalized relationships between education and caste and land heterogeneity posited in the literature, which were contextualized for Pakistan through my first two hypotheses. To that end, I employ a statistical specification similar to that commonly found in the reviewed heterogeneity scholarship. In words, my regression equation models an individual's educational attainment as a function of the caste fractionalization and land inequality of the village in which they reside.

More specifically, the main outcome in my specification is adult Literacy, which is a binary indicator that takes on the value of 1 if an individual aged 15 or above can read the newspaper in any language, and is 0 otherwise. My key independent variables are indicators of caste fractionalization and land inequality in the village where the individual is resident. I measure the former using the popular ethnic fractionalization index, which in this case measures the probability that two randomly

drawn people from a village belong to different caste groups<sup>54</sup>. The caste fractionalization index in my sample ranges from 0.22 to 0.55 for relatively less fractionalized villages, and 0.75 to 0.89 for more fractionalized ones. I measure the latter land inequality using a dummy variable that takes on the value of 1 if the individual resides in a landlord-dominated village, but is 0 otherwise. A number of authors suggest that the effect of either form of heterogeneity may be non-linear (e.g. Naidu 2008; Khwaja 2009). To check whether this might be the case, I introduce a squared term for the fractionalization index<sup>55</sup>.

I also include three interaction terms in the specification to explicitly test the interdependence of key variables. The first of these interaction terms is a product of my measures of caste diversity and land inequality as described above and thus explicitly addresses my second hypothesis. The next two interactions instead attempt to provide indicative evidence on the effect of caste power heterogeneity, which as I noted earlier is a dimension that I more thoroughly test through qualitative analysis. Because the novelty of this latter concept implies that it does not yet have an established quantitative measure, I employ a more well-known metric of caste dominance in its place. Thus, my second and third interaction terms comprise of a dummy indicator that takes on the value of 1 if an individual belongs to the caste that is considered dominant in the village interacted with caste heterogeneity and land inequality, respectively. Unlike large N studies which often assume that the numerically largest caste is also the dominant one, I classified dominance by taking into account not just the numerical preponderance of caste groups, but also their power in dictating village matters as determined through detailed qualitative work. As one would expect, however, in all but one village the dominant caste group classification coincides with the group possessing the most land collectively.

Formally, my statistical results are calculated using:

$$LIT_{ijk} = \alpha + \beta_1 FRAC_k + \beta_2 LL_k + \beta_3 FRACSQ_k + \beta_4 FRAC_k * LL_k + \beta_5 FRAC_k * DOM_{jk} + \beta_6 LL_k * DOM_{jk} + \beta_7 SES_{ijk} + \varepsilon_{ijk}$$

Where, LIT is a binary indicator of literacy for individual  $i$  from household  $j$  and village  $k$ . FRAC is a measure of caste fractionalization in the village where the individual resides, while FRACSQ is its square. LL is a dummy variable indicating whether the individual lives in a landlord-dominated village or not. FRAC\*LL, FRAC\*DOM and LL\*DOM are my interaction terms of caste

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<sup>54</sup> Mathematically, the ethnolinguistic fractionalization index is calculated using:

$$ELF = 1 - \sum_i (Caste_i)^2$$

This index is interpreted as the probability that two randomly selected individuals in a district belong to different factions and is measured on a scale of 0 (implying perfect homogeneity) to 1 (implying perfect heterogeneity).

<sup>55</sup> Note that because the land inequality measure is a dummy variable, introducing a squared term for this parameter is not possible. I do however consider the possibility of a U-shaped land inequality relationship in the robustness section.

fractionalization with the landlord status of the village; caste fractionalization with the dominant status of the household; and landlord status of village with the dominant status of the household, respectively. SES is a vector of individual level characteristics as well as an array of socioeconomic indicators for household  $j$ . In the analysis, I divide these controls into two sets, denoted by SES1 and SES2. The former contains controls such as age, gender, caste status<sup>56</sup> and land ownership all of which are plausibly exogenous to literacy. The latter, on the other hand, contains controls for income and assets other than land which have been shown in the literature to be determinants of literacy but are also themselves often the result of it.

### *Qualitative Methods*

My purpose in using qualitative analysis techniques is twofold; first to illustrate the mechanisms through which the generalized relationships established via statistical analysis work and second, and much more importantly, to investigate the role of caste power heterogeneity in driving collective activity surrounding education. To that end, I employ a technique that closely resembles the controlled comparison case study method. In this method, a small number of cases that are similar to each other in almost all respects but one are compared (see George and Bennett 2005).

Thus, rather than comparing caste power heterogeneity across all eight villages in my sample, I test my propositions on the matter by focusing independently on each of the four quadrants of the matrix presented in Figure 3.3 earlier. So for instance, to consider how caste power heterogeneity works in settings with low caste heterogeneity and high land heterogeneity, I specifically present paired comparisons of the collective action dynamics in Villages 2 and 8 from the bottom left quadrant of Figure 3.3; while to investigate caste power heterogeneity in the context of high caste heterogeneity and low land heterogeneity, I compare Villages 1 and 5 from the top right quadrant. All in all, through this approach I conduct four paired comparisons representing each of the quadrants, and then appraise their findings against the detailed predictions presented in the matrix given in Figure 3.2. Honing in on specific quadrants is meant to limit the chances of my outcomes being driven by alternative factors. That said, it is important to bear in mind that perfect resemblance between even the villages falling with each quadrant is hard to achieve due to the multiplicity of phenomenon that can influence an outcome. I try to address this potential challenge in the next two sections that establish the exogeneity of my core independent variables and the comparability of my study sites.

My reasons for choosing qualitative case analysis as the primary method of investigating the role of caste power heterogeneity are related to the technique's established advantages over statistical analysis in facilitating new theory generation and assessing complex causal relationships (see

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<sup>56</sup> Caste groups are classified as High or Low status. To see a more detailed discussion on challenges associated with this static conceptualization of caste, see Introduction and Essay Two of this thesis.

George and Bennett 2005; Goertz and Mahoney 2012). In this essay, both are beneficial given that caste power heterogeneity is as yet a novel concept, which according to my theoretical framework has rather complex, understudied interactions with other dimensions of heterogeneity. Admittedly, the method also has its shortcomings with respect to generalization and parsimony. Nonetheless, what I lose in these two aspects, I argue that I gain in terms of a more nuanced understanding of my propositions on one hand and the provision of a valuable anchor for my theory of power imbalances between dominant and non-dominant groups on the other.

#### *Exogeneity of key independent variables*

Endogeneity of variables that are used to measure various dimensions of heterogeneity is a key shortcoming in the quantitative empirical work in this arena (see Alesina and La Ferrara 2005; Casey and Owen 2013). Given that my theoretical framework envisions slightly different roles for each of the three closely related dimensions of heterogeneity it proposes, my ability to parse out these roles hinges on their exogeneity to educational outcomes today. As a consequence, in this section I spend some time to explain why endogeneity concerns should be limited in my analysis.

A variety of evidence suggests that caste composition and land settlement patterns have remained essentially unchanged at least since the independence of Pakistan in 1947, if not longer, and are thus exogenous to literacy levels today. Where caste composition is concerned, anthropological village studies demonstrate that the distribution of caste groups in the region dates back to the pre-independence era. Numerous scholars have documented how agricultural castes together with their supporting caste groups formed “village republics”, which were considered the basic unit of the pre-partition Indian agricultural economy (see Jodhka 1998). This composition was altered somewhat at the time of independence in 1947 when millions of migrants moved from India to Pakistan and vice versa, although it is important to note that a majority of the emigrants settled in urban and not in rural areas (Rashid and Shaheed 1993)<sup>57</sup>. The only other key compositional change witnessed since then has been an exodus of male family members to the Middle East as labourers, although in general the families of these individuals continue to reside in the same villages (Talbot 1988).

Importantly, neither of these changes has significantly altered caste composition in the rural areas I study. While migration data are not available at a micro-level for Pakistan, both my representative survey results as well as my qualitative fieldwork confirm that residential patterns in the villages under question have remained stable. Of the 353 households surveyed, for instance, only 7 had been resident in the village for less than ten years. Additionally, according to key informants, two out of

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<sup>57</sup> Punjab received almost 70% of the refugees and these migrants settled in several different areas across the province. Sindh on the other hand, received 20% of the migrants who settled predominantly in urban Karachi and Hyderabad (see Rashid and Shaheed 1993).

the eight villages had not had serious changes in resident castes since at least the time of independence; another two villages had stabilized on this front during British rule (1848 – 1947); while the remaining four claimed to have remained unchanged from a time before the arrival of the British in the mid-1800s. These informants confirmed that in only two of my eight sites was migration to the Middle East a notable phenomenon, although few families in either of these villages had left without leaving several members behind.

The same constancy is true for land settlements. Gazdar (2011) traces land ownership patterns in Pakistan back to the 1840s when the colonial state conferred private property rights in order to both facilitate revenue collection and create a class of loyal landowners. Banerjee et al. (2005) elaborate that the British used three distinct systems of revenue collection in pre-partition India – these systems then led to different distributions of ownership rights. Areas where a single family was responsible for revenue collection thus became landlord-dominated villages; whereas areas where individual farms were responsible ended up with more egalitarian ownership patterns, as did areas in which whole villages were jointly liable for collection. Which system was employed by the colonialists in different areas was determined by a myriad of factors including the timing of the conquest, precedents in the area, the presence of existing village structures, ideology of the individual decision-maker, canal development, as well as political expediency (see Banerjee et al. 2005; Nelson 2011; Gazdar 2011).

Given that land markets in rural Pakistan are rather thin, as they are in other developing countries, land inequality today continues to be primarily based on these historical patterns of distribution (Khwaja 2009). Admittedly, Pakistan did undergo two key land reforms in 1959 and in 1972 - however, through them redistribution of land was extremely limited<sup>58</sup> (Malik 1997). And significantly neither of these reforms had an impact on the areas of my study. In fact, the only routes to a change in land ownership that my key informants had noted since independence were either through the division of inheritance amongst sons, or because large landlords wanted to evade land ownership caps and had thus transferred the land “on paper” to other family members.

Using similar arguments, several authors have successfully employed this same identification strategy to pursue related avenues of research for both India (see for e.g. Banerjee and Somanathan 2007; Pandey 2010; Anderson 2011) and Pakistan (see for e.g. Khwaja 2009; Mohmand 2011; Shami 2012). Likewise, on the basis of this unchanged status of caste fractionalization and land inequality described above, I treat both as exogenous in the quantitative analysis that follows. In the

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<sup>58</sup> In the 1959 reform, 5% of cultivable land was surrendered to the government. In the 1972 reform, only 1% of cultivable land was distributed to 130,000 peasants (Malik 1997). By 2002, estimates indicate that a total of 288,000 beneficiaries had received land as part of the country’s land reforms (Lipton 2009).

context of my analysis, this exogeneity is likely to extend to the dominant caste indicator as well. Although I classified dominance on the basis of qualitatively determined power possessed by different caste groups, in all but one village the dominant caste classification coincides with the group possessing the most land collectively – a factor I have established to be exogenous based on the above discussion. In the one exceptional village where the two do not coincide, the dominant caste group possesses the second largest cumulative landholdings and derives most of its say in village matters due to the absence of the local large landlord who does not reside in the village permanently.

### **3.3.3 Descriptive Data**

Before moving on to the analysis, it is important I verify that my eight villages are comparable, particularly on the variables that tend to be determinants of education outcomes. One key factor that influences educational attainment based on the literature is access to schooling. In order to ensure that my villages had similar education supply conditions, I selected sites that had at least one government middle school within the main settlement. In each of my selected villages, middle schools had been established locally for almost 50 years with the oldest school dating back to 1882 and the youngest school having been founded in 1963. Another factor that is relevant for attainment is employment opportunities – thus, to standardize access to labour markets, I selected sites that were not more than 120 minutes away from a main town or city.

Table 3.1 provides descriptive data for the eight villages segregated first by caste heterogeneity and then by land inequality. The data reveal that most of the key indicators for villages with high and low caste heterogeneity are not statistically different from each other. The same is true when comparing the villages based on high and low land inequality. The villages have similar proportions of households that derive income from agriculture, that are electrified, and that have either semi-permanent or permanent house structures. The resident households also have similar household sizes, comparable number of rooms in their houses, and they spend on average a similar amount per month. The only statistically significant differences between the sets of villages are the proportion of landless and low caste households. More caste fractionalized and more economically unequal villages have a greater proportion of landless and low caste households. While I argued above that both factors are exogenous, I also control for low caste status and landlessness in the analysis that follows.

Besides these household level indicators, I also collected data on village facilities and conditions that allow me to further confirm comparability of the sites of study. The main crop in all villages, for instance, was wheat, although sugarcane and rice were also commonly grown. All villages had paved roads leading to their settlement, and public transport stops were available at a walking



distance of up to 1km from each village boundary. All eight villages had challenges associated with water quality and shortage, and they all expressed concerns over drainage and sanitation. There were, nonetheless, some differences in facilities as well. The four villages in Punjab, for instance, did not have gas connections for cooking, although in Sindh all the villages were connected. Two of the eight villages had private primary schools within their settlement<sup>59</sup>. Finally, according to key informants, the price of cultivated land per acre was marginally higher in the Faisalabad sites than in the Hyderabad ones. Yet, none of these differences seemed to be systematically correlated with my parameters of interest.

**Table 3.1: Descriptive Statistics of Villages**

	Caste Heterogeneity		
	High Village	Low Village	Difference
Proportion of households deriving income from agriculture	0.51	0.59	0.08
Proportion of electrified households	0.92	0.93	0.01
Proportion of households living in semi or permanent houses	0.52	0.58	0.06
Average household size	7.07	7.22	0.15
Average number of rooms in house	2.93	2.99	0.06
Average monthly household expenses in USD	116.21	128.21	12.00
Proportion of landless households	0.63	0.49	0.14***
Proportion of low caste households	0.63	0.25	0.38***
<b>Observations</b>	<b>4</b>	<b>4</b>	<b>-</b>
<i>Significance level of differences in means: * <math>p &lt; 0.1</math>; ** <math>p &lt; 0.05</math>; *** <math>p &lt; 0.01</math></i>			

	Land Inequality		
	High Village	Low Village	Difference
Proportion of households deriving income from agriculture	0.52	0.58	0.06
Proportion of electrified households	0.92	0.93	0.01
Proportion of households living in semi or permanent houses	0.50	0.59	0.09
Average household size	7.05	7.23	0.18
Average number of rooms in house	2.89	3.04	0.15
Average monthly household expenses in USD	125.02	119.01	6.01
Proportion of landless households	0.63	0.50	0.13***
Proportion of low caste households	0.49	0.4	0.09*
<b>Observations</b>	<b>4</b>	<b>4</b>	<b>-</b>
<i>Significance level of differences in means: * <math>p &lt; 0.1</math>; ** <math>p &lt; 0.05</math>; *** <math>p &lt; 0.01</math></i>			

<sup>59</sup> One private school was in a Punjabi village with high caste fractionalization and low land inequality. The other was in a Sindhi village with high caste fractionalization and high land inequality.

### 3.4 Quantitative Analysis

#### 3.4.1 Results

Table 3.2 presents my main quantitative findings. Column (1) contains the results of a parsimonious specification, which includes only the arguably exogenous factors of caste fractionalization, its square and a dummy indicator for whether an individual resides in a landlord dominated village. Columns (2) to (8) contain the results of different specifications that control for a variety of covariates as well as introduce my three interactions, following which Column (8) presents my full preferred specification. As the coefficients presented are the result of a probit regression, in each specification I am interested primarily in the direction and significance of the coefficient and not its magnitude.

The results of my baseline specification in Column (1) corroborate assertions in the broader literature that both fractionalization and land inequality in Pakistan have been associated with poor education outcomes. The findings show that caste fractionalization has a negative and significant relationship with literacy, while living in a village with unequal land ownership patterns also has a significant, adverse effect. Once the covariates and interactions are added, however, the effect of both caste and land heterogeneity becomes less clear cut.

Recall that according to my first hypothesis, I expect to see that caste fractionalization will have an inverse relationship with literacy. The statistical results presented in the eight specifications partially support this proposition. The sign of the fractionalization coefficient is negative in all specifications as I expected, although it is significant in only some. Moreover, the consistently positive sign on the squared fractionalization term indicates that the relationship between caste fractionalization and education may in fact be U-shaped. The squared term is statistically significant in not just the parsimonious specification, but also in all the specifications that incorporate my interactions including the preferred full specification given in Column (8).

A U-shaped relationship would be consistent with Naidu (2008), who argues that there is a similar shaped association between caste fractionalization and cooperation in India. What does such a shape imply in the context of my analysis? It suggests that literacy is high in villages that are highly homogenous in terms of caste, as well as in those that are highly heterogeneous, but that villages that have moderate levels of caste fractionalization have worse outcomes. The first part of this finding is not at all surprising - homogenous villages, as the theoretical framework presented earlier suggested, would find it easier to cooperate with one another, agree on the provision of goods, sanction one another in the event of failing to cooperate and thus would be more likely to have better outcomes.

The second part, however, is counterintuitive as it indicates that highly heterogeneous villages similarly have good outcomes. I explain such instances using the caste power heterogeneity argument in the qualitative analysis that follows in the next section.

The direction and significance of the landlord dummy, on the other hand, provides indicative support for my second hypothesis that the alleged adverse landlord effect may be predicated on caste fractionalization. The independent landlord dummy variable is negative and significant at the 1% level in all specifications that do not include an interaction with caste fractionalization. This implies that living in a landlord-dominated versus residing in a village with egalitarian land ownership patterns is indeed associated with lower educational attainment. Once I include an interaction term between living in a landlord village and the degree of caste fractionalization, however, the landlord dummy becomes insignificant and positive. Notably, in each specification that includes this interaction (i.e. Columns (4), (7) and (8)) the coefficient on the interaction term is negative and significant in line with my second hypothesis regarding the interdependence of the two parameters.

Because of the limited number of villages in my sample, it is not possible to precisely test for my third and fourth hypotheses regarding the imbalance in power between caste groups<sup>60</sup> quantitatively. I was nonetheless able to check the importance of caste power heterogeneity in different contexts by first interacting the dominant caste status of households with caste fractionalization, and second with the land heterogeneity dummy indicator. Consistent with my theorized proposition that the effect of an imbalance in power between castes depends on the level of caste fractionalization, I find that the  $FRAC * DOM$  coefficient is significant when included in Columns (5), (7) and (8). This coefficient is in fact positive in each of these Columns, suggesting that dominant caste group members have higher educational attainment than their non-dominant counterparts in caste fractionalized villages. This finding provides suggestive support for my third and fourth hypotheses regarding how caste power heterogeneity plays out in different caste fractionalization settings. Also consistent with my arguments is the lack of significance on the  $LL * DOM$  term in Columns (6), (7) and (8) implying that the effect of dominance is predicated not on the land ownership pattern of a village but rather, its caste heterogeneity.

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<sup>60</sup> Adding dummy indicators for the imbalance of power between castes in the basic specification results in collinearity issues. The naïve relationship between educational attainment and power imbalance with no controls is however positive.

**Table 3.2: Probit Regression: Literacy (ages 15 and above) as Dependent Variable**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Key Independent Variables</b>								
FRAC	-2.551 (0.827)***	-0.167 (1.003)	-0.486 (1.038)	-0.272 (1.032)	-2.380 (1.295)*	-0.495 (1.040)	-1.237 (1.205)	-2.112 (1.275)*
LL	-0.388 (0.065)***	-0.183 (0.077)**	-0.251 (0.080)***	0.274 (0.207)	-0.256 (0.080)***	-0.345 (0.104)***	0.452 (0.279)	0.293 (0.289)
FRACSQ	2.124 (0.745)***	0.667 (0.893)	0.985 (0.921)	1.283 (0.916)	2.122 (1.036)**	1.019 (0.922)	1.757 (0.980)*	2.394 (1.027)**
<b>Interactions</b>								
FRAC * LL				-0.874 (0.315)***			-0.981 (0.365)***	-0.893 (0.376)**
FRAC * DOM					1.083 (0.416)***		0.802 (0.387)**	1.062 (0.409)***
LL * DOM						0.204 (0.152)	-0.106 (0.175)	-0.030 (0.180)
<b>Selected Control Variables</b>								
LOW CASTE		-0.532 (0.095)***	-0.414 (0.098)***	-0.453 (0.100)***	-0.460 (0.100)***	-0.382 (0.102)***	-0.631 (0.108)***	-0.504 (0.112)***
LANDLESS		-0.289 (0.084)***	-0.126 (0.092)	-0.099 (0.093)	-0.132 (0.092)	-0.125 (0.092)	-0.268 (0.086)***	-0.105 (0.093)
DOM		-0.025 (0.102)	0.028 (0.104)	0.022 (0.106)	-0.691 (0.300)**	-0.041 (0.116)	-0.531 (0.279)*	-0.671 (0.296)**
FEMALE		-0.823 (0.074)***	-0.838 (0.075)***	-0.844 (0.075)***	-0.845 (0.075)***	-0.841 (0.075)***	-0.833 (0.074)***	-0.851 (0.075)***
<b>Controls (See details below)</b>								
SES1	N	Y	Y	Y	Y	Y	Y	Y
SES2	N	N	Y	Y	Y	Y	N	Y
Pseudo R2	0.02	0.28	0.30	0.30	0.30	0.30	0.29	0.30
N	1,832	1,784	1,780	1,780	1,780	1,780	1,784	1,780

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

Robust standard errors in parentheses.

SES1 includes Caste Dominance Indicator, Low Caste Indicator, Landless Indicator, Gender, Age, Household Head Education, and No. of children in Household

SES2 includes Income proxy, Asset index, and Relative wealth

FRAC = caste fractionalization. LL = landlord dummy. FRACSQ = caste fractionalization squared. DOM = indicator of belonging to dominant caste. SES = socioeconomic status

### 3.4.2 Robustness Checks

These results are based on a limited sample size; yet the exogeneity of my key independent variables lends credibility to my conclusions. In this section, I consider some of the other possible challenges associated with my analysis.

One possible concern is omitted variables. There is a sizeable empirical literature that examines the determinants of schooling in developing countries. Authors writing in this vein often point to socioeconomic factors such as family income (e.g. Zhao and Glewwe 2010; Grimm 2011) and parental education (e.g. Song et al. 2006), as well as demographic factors such as gender and number of siblings (Hanushek 2006) as key factors that determine whether or not a child will enrol in school. If these determinants of schooling are related to my key independent variables of caste fractionalization and land inequality, then my analysis could suffer from omitted variable bias. To address this very challenge, however, in the previous analysis I controlled for both the demographic and the socioeconomic factors that are commonly found in the literature.

Other scholars working in this arena have highlighted the importance of broader economic conditions such as job opportunities (e.g. Buchman and Brakewood 2000), cultural attitudes (e.g. Huisman and Smits 2009), and the nature of educational facilities such as access or distance (e.g. Handa 2002). The latter is standardized in all my sample villages through the selection criteria, which ensures that all villages have a middle school within their own boundaries; while village level differences in the former two are probably minimal because as I demonstrated earlier, all eight villages belong to two comparable districts. To further check if my results may be due to differences in the two districts with respect to for instance economic conditions, I introduced district fixed effects in my basic specification. This did not change the direction of relationships in my findings, although the reduced sample size did yield fewer significant results. To check if *biraderi*-wise differences in cultural attitudes towards education (which likely exist<sup>61</sup>) have an influence on my conclusions, I introduced *biraderi* fixed effects instead of using just a low caste dummy control variable. Again, although some variables lost significance, this did not alter the direction of my hypothesized relationships.

I also explored the possibility of two alternative claims made in the heterogeneity literature regarding the nature of relationship between my parameters of interest. First, I explored whether the relationship between land inequality and outcomes may be U-shaped as suggested by authors such as Bardhan (2000) and Khwaja (2009). To do this, I replaced my landlord dummy variable with a Gini coefficient calculated on the basis of land inequality in each village, and also included its squared term in the regression. I found no evidence of a statistically significant U-shaped relationship between

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<sup>61</sup> See also the second essay of this thesis.

educational attainment and land inequality. Second, based on Alesina et al. (2012), I considered whether the adverse effect I find of caste fractionalization could be driven entirely by economic differences between the different caste groups. Following these authors, I thus introduced a Gini coefficient that measured differences in the average land owned by each *biraderi* in place of my fractionalization measure. In contrast Alesina et al. who argue that economic differences between ethnic groups are related to lower public provision, I found a positive relationship between economic differences between caste groups and literacy instead.

As a final check, I clustered my errors at the household level to correct for any serial correlation. This did not change the sign or significance of any of my findings. For the sake of brevity, none of the above alternative specifications are shown in the paper.

### 3.5 Qualitative Analysis

How do the average village level outcomes compare to the specific predictions I made in Section 3.2? Figure 3.4 displays all eight of my villages segregated by caste, land and caste power heterogeneity together with a literacy classification. This classification is “good” if the average adult literacy in the considered village is above my sample average of 65%, and is “poor” otherwise.

Overall, educational outcomes by village appear to be largely consistent with the predictions I made earlier. At first glance the results show some, albeit not conclusive, support for my first hypothesis that low caste fractionalization would be associated with higher attainment. In three of the four villages in the left column, outcomes are “good”. The only exception appears to be Village 8, whose outcomes are better explained by caste power heterogeneity and the degree of caste fractionalization as I discuss later in this section. Conversely, although it is obvious that residing in landlord dominated village is not necessarily associated with “poor” outcomes, it is harder to see the importance of the interaction of land and caste heterogeneity given that half of the bottom row is positive while the other half is negative. Yet the contrasting dynamics of Village 2, where a homogenous caste group was able to mobilize to reduce the adverse landlord effect, and Village 7 where a heterogeneous village had difficulty in doing so are certainly illustrative of the proposition that the effect of land heterogeneity may be predicated on caste fractionalization. The most interesting aspect of Figure 3.4 is perhaps how the different outcomes within the quadrants are associated with the degree of power imbalances between castes as predicted in my third and fourth hypotheses.

In the following section, I use rich paired comparisons within each of these four quadrants to examine the mechanisms behind heterogeneity that drive outcomes and - crucially – to trace how caste power

heterogeneity in these different contexts has resulted in differing levels of collective activity surrounding education in the sample villages.

**Figure 3.4: Educational Outcomes by Village**

		Low Caste Heterogeneity	High Caste Heterogeneity
Land Heterogeneity	Low	<p><b>Good</b></p> <p>Village 3: Good outcomes. Dominant caste has power and has displayed extensive collective action surrounding private schooling</p> <p>Village 6: Good outcomes. Dominant caste has power and has displayed extensive collective action surrounding public schooling</p>	<p>Village 1: Good outcomes. Balanced power between dominant and non-dominant castes has resulted in all castes competing equally</p> <p>Village 5: Poor outcomes. Dominant caste has power and has appropriated village resources, improving outcomes of the dominant group only</p>
	High	<p>Village 2: Good outcomes. Dominant caste has power and has successfully mobilized against landlord</p> <p>Village 8: Poor outcomes. Dominant caste excluding landlord has limited power. Different castes have tried to mobilize but with limited success</p>	<p>Village 4: Good outcomes. Balanced power among castes, which have worked collectively to challenge landlord</p> <p>Village 7: Poor outcomes. Dominant caste includes competing landowning family and has power but is not interested in mobilizing against large landlord</p>

### 3.5.1 Comparing Villages with Low Caste Heterogeneity and Low Land Heterogeneity

I first examine in detail the villages falling in the top left quadrant of my matrix and having low caste and low land heterogeneity. Unsurprisingly, as Figure 3.4 above illustrates, both Villages 3 and 6 had good educational outcomes. In each case, the main homogenous caste coincided with the dominant caste. And consistent with expectations, not only did caste homogeneity facilitate collective activity as predicted in hypothesis 1, but the power imbalance between dominant and non-dominant castes also worked in favour of overall village outcomes as proposed in hypothesis 3. The collective activity in both cases led to marked improvements in broader village-level educational facilities as dictated in my framework, although it did take notably different routes to do so in the two villages.

Village 6 presented a classic case that highlighted many of the mechanisms proposed in the scholarship through which ethnic or caste homogeneity can enhance collective activity. The village itself was a relatively homogenous settlement with a fractionalization index of 0.24<sup>62</sup> and egalitarian landholding patterns in Sindh. Its residents comprised primarily of a single high status *biraderi*, which was also considered the village's dominant caste as they possessed significant political power and the majority of landholdings in the settlement. Two other *biraderis* also resided in the village but each one was relatively weak in terms of economic and political power, which resulted in considerable caste power heterogeneity between the dominant and non-dominant groups.

<sup>62</sup> Recall that the fractionalization index measures that the probability that two randomly selected persons in a village will belong to different castes.

The dominant caste of Village 6 attached a unanimous preference for greater schooling. As a consequence of this broad-based agreement on the priority of education, the members of this *biraderi* had made concerted efforts to improve schooling in two ways. First, prominent members of the community had used their political connections to attract state funding and support for the local government school, which was where the majority of the children from this caste group studied. One member of this caste for instance was particularly active in local politics and had held an elected mayoral position in the previous local government. Even after completing his term, this member continued to regularly invite the region's parliamentary representatives to village events. In fact, at the time of his interview, he claimed to be busy facilitating the exchange of votes of three villages in the area including his own for the parliamentarian's patronage in school projects. Because any improvements to the local school benefited their coethnics directly, group self-interest had resulted in this ex-mayor along with other important *biraderi* members politicking successfully to get the village school selected for key federal and provincial pilot programmes such as initiatives for stipends for disadvantaged female students and for school council support and training.

Second, as testament to their prioritization of education, the multiple members of the dominant caste themselves rallied around supporting the local school. In the previous year alone, the *biraderi* had raised some PKR 60,000 (approximately USD 600) to build an extra room in the school, and to make repairs on the existing infrastructure. It was in fact common practice to make announcements regarding such community initiatives following Friday prayers in the mosque, which were generally attended by a majority of the male heads of households. In matters of urgency, announcements were also made at social functions such as weddings and at the breaking of the fast in the month of Ramadan. The close, frequent interaction of members ensured that such collective activity was easier to organize than it likely is in cases of higher caste fractionalization and almost always caste served as the basis of their mobilization. Moreover, in rallying around the school, prominent members of the kinship group helped set the group norms for their coethnics by demonstrating their own support for education – two businessmen had for example just donated old computers so that students in the school could be taught computer skills, while a retired Professor had started a university scholarship for deserving students in the community.

Caste homogeneity was likewise beneficial in monitoring and sanctioning teacher behaviour. The school head teacher, as well as 85% of the teaching staff, belonged to the dominant *biraderi*. An incident related to me during one of my interviews was telling of how this caste used its contact with each other to encourage the right behaviour in teachers. At a social event where many of the households of the village were present, a coethnic teacher who was often tardy to classes arrived late. Three parents began to tease this teacher about how his habitual tardiness at school had now extended to tardiness at social events as well. The teacher became so embarrassed at being mocked in front of



the community that he began to arrive early to all his classes. Because of the familiarity of the households with each other, it was also common for village residents to question teachers if they were found outside the school during school hours – this was a phenomenon I witnessed first-hand when teachers assisted my team in sampling for the household survey. In addition, to address absenteeism and a lack of timeliness in the teaching staff, community members had agreed to implement a ten rupee fine starting from the next school term. Funds collected through these fines were going to be used to buy new school uniforms for disadvantaged children.

The second village from the same quadrant, Village 3, was located in Punjab and had egalitarian landholding patterns, but a higher caste fractionalization index than Village 6 of 0.54. The dominant caste in the village had significant economic and political power, and also comprised some 68% of households. The remaining three castes in the village had some landholdings, but were considerably weaker politically than the dominant group. Unlike in Village 6 where the majority of the beneficiaries to improvements in the village-level infrastructure were coethnics of the dominant caste, here there were relatively more beneficiaries from other castes. As a result, although Village 3 had similarly good educational outcomes, its collective activity took a rather different course.

Almost two decades ago, this dominant caste had begun exiting the government schooling system in favour of a private institution run by a coethnic retired government teacher just outside their village. Dominant caste members claimed that they had initially switched to the private institution because they trusted their coethnic who owned the school and preferred that their children mix primarily with other coethnics. Like the residents of Village 6, inhabitants of Village 3 had initially raised funds for this private school as a community, sanctioned its absent teachers, and used their connections to obtain privileged access to facilities for this school. This collective activity, according to a local government official, had helped the school grow from a small primary institution that catered almost exclusively to one *biraderi* into a renowned establishment now offering undergraduate degrees in many subjects and serving the educational needs of several *biraderis* in the neighbouring vicinities. Informants suggested that the dominant caste of Village 3 still controlled the school through significant presence on the school council, continued to donate to it heavily, and sponsored scholarships for disadvantaged members of their caste. Yet, they also found it in their self-interest to allow non-dominant *biraderis* to enrol and share the costs for quality schooling.

In both Village cases, non-dominant *biraderis* benefited from improvements made to village-level schooling facilities. In Village 6, non-dominant *biraderis* sent their children along with the children of dominant caste members to the public school while in Village 3, non-dominant *biraderi* children similarly attended the private institution. In each case, caste power heterogeneity was significant enough for dominant groups to exercise their power for the benefit of the broader community without

having to worry about the possibility that non-dominant caste groups would be able to compete with them successfully for economic resources, jobs or symbolic status. However, in the case of Village 3, the dominant caste's exit from the local government school did mean that gaps in literacy for dominant and non-dominant *biraderis* in the village were considerably higher than those in Village 6 as less advantaged members of non-dominant castes were largely excluded from the private school.

### 3.5.2 Comparing Villages with High Caste Heterogeneity and Low Land Heterogeneity

At what point does caste fractionalization turn caste power heterogeneity into being detrimental for overall village outcomes? Comparing Villages 1 and 5 from the top right quadrant of my matrix offers data to help address this question, and consider the validity of my fourth hypothesis that in villages with relatively higher caste fractionalization, caste power heterogeneity results in improvements that solely benefit dominant castes. As summarized in Figure 3.4, outcomes differ in this quadrant – with “poor” outcomes in Village 5 and “good” ones in Village 1. Importantly, in line with my framework, these outcomes correlate inversely with the imbalance in power between castes in both villages.

Village 5 was a caste fractionalized village with an index of 0.75 and egalitarian landholding patterns in Sindh. Interestingly, the dominant caste in this village was a group considered as having a low caste status as per the traditional hierarchy<sup>63</sup>. Yet, they dominated the village not only in terms of numbers (40% of village households), economic status and political power, but also with respect to modern education and symbolic religious status. The village had some eight different castes, two of which were considered as potentially having the power to compete head on with the dominant group. The first of these was the second largest caste numerically in the village. This group had some economic power and owned land, albeit overall their holdings were considerably lower than those held by the dominant *biraderi*. The second was the only high status caste group in this village as per the traditional hierarchy. This caste, known as the Syeds due to their claim of being descendants of Prophet Muhammad, owned quite a bit of land. However, they comprised only 4% of the village and according to key informants, had historically stayed out of village matters almost completely.

The head of the dominant caste held an ascendant position in the eyes of villagers as not only had he performed the pilgrimage to Mecca,<sup>64</sup> but he was also a member of the provincial civil service. His prominence reflected in my survey findings - almost 90% of respondents named him as the key village notable and patron. Based on this head's position, and the overall power skew in favour of other dominant caste members, the dominant group in Village 5 held considerable sway in local

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<sup>63</sup> This was a point brought up by almost all informants in the village, indicating limited shuffling in caste ranking in spite of this dominant caste group acquiring significant economic and political power over time. See also discussion on ethnicization of caste in Introduction of thesis.

<sup>64</sup> Pilgrimage to Mecca or the Haj is one of the tenets of Islam. In rural Pakistan those who have performed the Haj are given the honorary title Haji and command respect of those who have not performed the pilgrimage.

issues. Disputes across and within kinship groups were for instance settled by senior members of the dominant caste, with petitions being routed through the heads of the other various castes. Moreover, individual residents often appealed directly to members of the dominant caste to address village problems and personal challenges.

Consistent with my predictions, there was considerable evidence that this dominant caste group leveraged the caste power heterogeneity in Village 5 to misappropriate village resources. In interviews with non-dominant caste groups, for instance, I was told that prominent members of the dominant caste had seized land that had been designated for a basic health unit by the government. On its site, they had instead built a community house, which was being used by dominant group coethnics for political and social meetings. Such resource grabs were evident in the case of education provision as well. In the poorly maintained local government school, according to residents, prominent members of the dominant caste had “bought” teaching positions for a comfortable monthly pay. However, because these individuals also held other day jobs to supplement their income, they were generally absent. Most non-dominant caste members thus attributed low enrolment in the village to the government school’s poor quality and prevalent teacher absenteeism. Even if their children graduated, they claimed, there were limited job opportunities for non-dominant caste members, which further dissuaded their participation.

Unlike the children of non-dominant castes who enrolled in the government school, the dominant caste’s offspring attended a well-maintained religious school in the village. Although the school was non-profit and technically children of all castes could enrol, in essence the religious school catered to the dominant caste only. The school was sponsored by the head of the dominant caste, teachers in the school were from this same caste, and the school followed a conservative interpretation of religion as practiced by the dominant group. The school taught primary school age students how to read and memorize the Koran, as well as basic literacy and numeracy skills in Urdu and Sindhi. Rumours in the village prevailed that textbooks and facilities meant for the government school had been redirected to this school at the dominant caste’s behest. Once dominant caste children reached middle school age, they generally attended a better equipped government school in the neighbouring village using exclusive transport arranged by the dominant caste group. Upon completion of this schooling, informants claimed, the caste patron would help them get jobs in government offices or in the households of government officials.

Consistent with my predictions, each of these actions helped improve educational outcomes for dominant caste members only, while overall outcomes suffered in the village. The head of the second largest group in Village 5 speculated over the dominant caste’s motives, stating that they “..are interested only in their own material gain. They worry that our *biraderi* or the Syeds might challenge

their control so they use these illegal means to stop us (referring to rumours over funding of the religious school and the land seizure of the basic health unit).” According to him, it was hard for all the different castes in the village to collectively mobilize against the dominant kinship group even in the face of such illegal actions primarily due to a rather sophisticated system of patronage instituted in the village by the dominant caste head – a system that allowed the dominant caste to perpetuate the pattern of economic, political and social dominance over other groups in the village<sup>65</sup>.

The good educational outcomes of Village 1 from the same quadrant offer an interesting contrast to the above and demonstrate an alternative way in which power dynamics between caste groups can work. Village 1, a similarly ethnically heterogeneous village (index of 0.82) with egalitarian landowning patterns from Punjab, had at least 11 resident caste groups. The village did have what could be considered a dominant caste – this was a high status group that owned relatively more land than the other castes and to which some 30% of village households belonged. Two other high status caste groups also resided in the village, comprised 20% and 15% of the village, respectively, and owned land as well. Significantly, decision-making authority in the village was not solely vested with the dominant caste. Instead, the local dynamics were such that most *biraderis* were fairly independent of each other and made decisions regarding their own neighbourhoods and facilities without deferring to anyone else in the village.

The balance in power across dominant and non-dominant castes had allowed most *biraderis* to institute at least one teacher from their kinship group into the teaching staff of the government school. This teaching staff member appeared to be charged with representing and protecting the interests of that particular kinship group in schooling matters. The manner of fund raising for the school is telling in this regard – each major caste teacher in general petitioned their own communities for funds and then became accountable to their *biraderi* to ensure that the money raised was not expropriated for the exclusive benefit of other castes. Moreover, in line with my expectations, with all castes jockeying for improving their own status vis-à-vis other castes, education appeared to be widely desirable in Village 1. Most villagers argued that gaining more education was important in order to successfully compete with others for a host of skilled labour jobs that were available in markets located close to the village. This meant that it was in the interest of villagers across the board to act collectively regardless of caste heterogeneity to improve education facilities.

Besides this, there was also evidence that the two numerically largest groups in the village were trying to compete for the prize of dominance. The two groups supported different political candidates. To gain votes from the villagers for their preferred candidate, teachers claimed that if one group’s head

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<sup>65</sup> See also Essay Four which describes this patronage system in more detail.

made a donation to the school, then a similar donation from the other head was likely to come soon as well. Indeed, according to many villagers, this political competition between the two numerically strongest *biraderis* had resulted in exceptional monetary and personal involvement in the local school from both sides – involvement that many believed might not have been present otherwise.

Ultimately, because no single caste group in Village 1 was powerful enough to suppress the other groups, the competition for dominance not only resulted in improving schooling facilities, but also in each group turning to more education as a way of competing successfully.

### **3.5.3 Comparing Villages with Low Caste Heterogeneity and High Land Heterogeneity**

Adding heterogeneity in land ownership patterns to the mix further complicates the dynamics influencing local collective activity. Yet, the summary results shown for Villages 2 and 8 from the left bottom quadrant of my matrix in Figure 3.4 again corroborate my third hypothesis that caste power heterogeneity works in favour of educational outcomes in villages with lower caste fractionalization. In particular, in Village 2, a power imbalance in favour of a dominant caste that was able to successfully challenge an exploitative landlord was accompanied by “good” outcomes; while in Village 8, the presence of a weak dominant caste that was unsuccessful in standing up to the local landlord was accompanied by “poor” educational outcomes. These results are consistent with my framework, and confirm that my third hypothesis holds regardless of land heterogeneity.

The first of the two villages in this quadrant, Village 2, was a landlord-dominated, homogenous settlement in Punjab with a caste fractionalization index of 0.22. A majority of the village, including the big landlord, belonged to the same high status dominant caste. The landlord in fact hailed from the traditional *lambardar*<sup>66</sup> family and thus was technically the village head. He was also an active politician who had previously held a parliamentary position, as had his father before him. In the past, almost all villagers had suffered at the hands of this landlord’s family – residents narrated numerous anecdotes of the use of excessive force by the patron family against peasants. Villagers challenging the family, for instance, reported they had suffered from unexplained loss of livestock or damage to their property. It was also common knowledge that the landlord’s family had long ago usurped the land allocated by the government for a school in the village because that land was fertile. While this landlord family had allocated some of their own infertile land in its stead, until recently the school grounds had regularly been used for sorting, husking and packaging the landlord’s agricultural produce rather than teaching and learning.

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<sup>66</sup> A *lambardar* (or sometimes *numberdar*) is a hereditary village head, who was charged with the collection of village revenues during the British Raj.

According to my informants, this coercive power dynamic had begun to change about a decade or so ago. Although the three other caste groups residing in the village had limited economic and political power, the homogeneity of the dominant caste group combined with growing political power in their midst (exclusive of the landlord) had allowed them to mobilize. A couple of highly educated members from the dominant caste had risen in the education ministry hierarchy and had started to use their influence to enhance education facilities in the village. One member was now the head teacher in the local school, while the other was an official in the district education office. The head teacher, who himself had hulled rice for the landlord in the school as a child, had stopped this practice by encouraging coethnic parents to make complaints to the ombudsman in the previous local government. He had also volunteered his school to serve as a pilot site for a new professionalization programme, in which young teachers were hired entirely on merit and were posted to selected schools for training. This had allowed him to build a teaching staff that was, for the first time in the school's history, independent of the economic and political influence of the oppressive landlord.

Meanwhile, the district education member had donated heavily to the school himself. Additionally, he had also encouraged an elder from the dominant caste to contest the previous parliamentary elections. Although the landlord had still retained his seat in that election, this was largely expected to change in the elections that were meant to follow a couple of months after my fieldwork. This kinship group, using caste as the basis of organization, had politically aligned itself with a group in a neighbouring village to form a voting bloc that supported an alternative candidate. This alternative candidate had in fact garnered so much local support that the main political party which reigned in Punjab had dropped Village 2's landlord from their ticket. The landlord was therefore planning to compete in the forthcoming elections as an Independent. In his interview, he lamented about the erosion of his power in the village by directly blaming members of his caste for "destroying community spirit by thinking that they were his equals when they were not".

The residents of Village 8 in Sindh, on the other hand, saw limited success in challenging the authority of their local large landlord. In comparison to Village 2, Village 8 not only had a higher caste fractionalization index of 0.55 but also had a dominant caste that excluding the landlord was rather weak economically and politically. As a consequence, the dominant caste members relied extensively on the patronage of their coethnic large landlord who controlled over 125 acres of cultivable land in the settlement. This patronage was critical not just in areas such as government jobs and business opportunities, but also in providing irrigation water for agriculture. In fact in his interview, the landlord of this village stated that because his lands provided premium access to the canal irrigation system, he was able to block its usage as a form of sanction for villagers who were not complying with what he believed was "the good of the village".

While this traditional landowning dominant caste comprised some 40% of the village's households, the rest of the village was made up of a handful of low caste *biraderis* with similarly limited economic or political power. And likewise, non-dominant caste members relied on this powerful landlord economically and admitted to being afraid of mobilizing against him due to the potential risk of economic sanctions in terms of agricultural employment and tenancy agreements. As a consequence of this balance of weak power across the caste groups, no single group possessed the ability to challenge the traditionally skewed patron-client relationship in Village 8. This was of course in sharp contrast to Village 2 discussed above where the dominant caste was able to mobilize against the wishes of the village patron due to caste power heterogeneity.

The local government school in Village 8 appeared to be suffering as a result and upon a visit, it was obvious to me that facilities were poorly maintained. Two factors appeared to drive this poor maintenance. First, the school was used mostly by low caste *biraderis*, as well as a few disadvantaged members of the dominant caste; while the offspring of the wealthy dominant caste members studied abroad or in the metropolitan city of Karachi. Thus, in contrast to the predictions made as part of the Olson effect, the powerful in this village felt no need to take on a disproportionate burden for maintaining the local school. Second, there was some evidence suggesting that the landlord was keen on restricting collective activity surrounding improvements to schooling. Teachers, for instance, noted that tables and chairs donated for the school had on two occasions disappeared on the alleged orders of the landlord. More recently, a resident landowning *biraderi* had made efforts to petition the government to upgrade the village school to high school status. However, rumour among the villagers was that the large landlord had used his political connections to stop this upgrade to maintain his stranglehold on villagers. One informant elaborated on the commonly accepted motivation of the landlord to do so by stating, "If he (referring to the big landlord in the village) allows the masses to be educated, then who will work on his fields? Who will bow down and ask him for his assistance?"

Does the above case of Village 8 imply though that caste homogeneity by itself cannot help in mobilizing against powerful landlords as per the predictions made in my first and second hypotheses? In my view the outcomes of Village 8 - the only ethnically homogenous village in my sample with poor outcomes - instead highlight two other considerations. First, besides being homogenous, castes need to possess a certain level of power to organize against a powerful landlord, a feature that was notably absent in Village 8. Hypothetically speaking, had the dominant caste possessed sufficient power and motivation to mobilize, such collective activity may have been able to reduce at least some of the coercive power of the landlord. Yet, the balanced power across castes, or rather lack of power

across the groups, served to limit such a challenge<sup>67</sup>. Second, having said that, the degree of caste fractionalization is also an important factor – Village 8 is classified as a relatively less fractionalized village in my sample, but an index of 0.55 is possibly still heterogeneous enough to limit collective activity of the magnitude required to take on a powerful local actor.

In short, the findings from this quadrant illustrate that a powerful dominant caste can pose a challenge to the authority of a landlord in caste homogenous settings. On the other hand, balanced power across castes is less likely to result in a successful challenge and is thus more likely to be associated with weak educational outcomes overall.

### **3.5.4 Comparing Villages with High Caste Heterogeneity and High Land Heterogeneity**

Examination of the villages in the final quadrant of the matrix in Figure 3.4 further corroborates my fourth hypothesis that caste power heterogeneity works negatively in villages with greater caste fractionalization. Consistent with my predictions, in Village 4, balanced power across different caste groups appeared to be associated with good educational outcomes in spite of the presence of a much disliked large landlord. In Village 7 in contrast, power imbalance in favour of the dominant caste was associated with poor outcomes. Unlike in other villages, the absentee large landlord in this village did not belong to the dominant caste group but had still co-opted the dominant *biraderi* by sharing the spoils of patronage – as a consequence, members of the dominant caste group were more concerned about clamouring for a disproportionate share of village resources than in mobilizing against him.

Let's examine dynamics in Village 4 first, a landlord-dominated village with a caste fractionalization index of 0.84 in Punjab. The landlord in this village admitted to possessing in excess of 75 acres of land, was one of the two hereditary village heads and belonged to the dominant caste in the village, which comprised of just below 30% of the village population. Two factors in this village in particular however diminished the power of both the landlord and the dominant caste, creating a situation of more or less balanced power across different caste groups. First, interviews suggested that solidarity within the dominant caste group was lacking. Members appeared to be very conscious of the fact that they hailed from different sub-castes, which was the more relevant level of polarization in this village. Second, two other castes had garnered substantial power in Village 4. The first was a similarly high status *biraderi* with 18% of the households in the village, significant landholdings as a community and the associated high economic status. In fact, the second of the two hereditary *lambardars* in this village also belonged to this particular caste group and subsequently controlled a significant local voting bloc. The other caste with power in the village, on the other hand, was surprisingly a low status

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<sup>67</sup> Empirically it would be interesting to consider if outcomes would have been the same if instead of equally weak, balanced power the situation had been one where all caste groups possessed some power. Of course as I noted earlier, such scenarios are unlikely to be common in Pakistan.



*biraderi* which had gained clout recently due to two educated and relatively wealthy political entrepreneurs with a reputation for facilitating village collective activity.

Village 4 was the most physically segregated village in my sample – high caste individuals lived on one side of the village, which was separated by a wide street from the other side where the traditional low caste individuals resided. And many of the problems commonly associated with high caste and high land heterogeneity were evident during my fieldwork. For one, the heads of several low caste groups confirmed that the landlord had historically discouraged community collective action surrounding education. In fact, they claimed that the landlord was in the habit of using derogatory allegations against low caste groups to dissuade villagers from undertaking across caste collaboration. For another, the head teachers of both the girls and boys local schools in this village were members of landlord's family, although their own children attended a private school in the next village. Village consensus was that the political appointment of elite head teachers by the powerful landlord who had themselves exited the public system was detrimental to the quality of the local schools and led to high rates of teacher absenteeism and poor teaching practices.

In spite of this, the relative balance in power across caste groups had also led to notable instances of collective action in the village. In particular, two political entrepreneurs in Village 4 had taken the initiative to facilitate collective activity. Both low caste individuals belonged to a fairly well-off family that relied on remittances from relatives working in the Middle East and thus was not dependent on the large landlord for their livelihood<sup>68</sup>. Against the wishes of the large landlord, both had run for and successfully won seats in the local government council elections in 2005. They had then used this political clout to gain access to additional infrastructure for the local schools. They had also used this opportunity to form a government sponsored local committee consisting of most of the low caste *biraderi* heads with the express aim of improving the lighting provision, street paving and drainage systems on the low caste side of the village. Although the government mandate of this committee had long run out, the group had remained active. Most recently, for instance, villagers noted that the group had helped repair a school wall that had collapsed following heavy rains, and had collected donations to buy school uniforms for disadvantaged children. While the large landlord continued to discourage this kind of activity, the second *lambardar* and member of the second largest caste group in the village had found it expedient to encourage it instead to curry votes for his voting bloc in the upcoming elections. This second *lambardar* had therefore himself made significant recent efforts to improve the local school's facilities.

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<sup>68</sup> This was a point brought up by almost all informants in the village, indicating limited shuffling in caste ranking in spite of this family acquiring significant economic and political power over time. See also discussion on ethnicization of caste in Introduction of thesis.

Very different power dynamics were evident in Village 7, a likewise fractionalized settlement with an index of 0.89 and a landlord with a total landholding of 75 acres who lived outside the village. In spite of the landlord's absence, the village was so diverse that many of the 12 resident *biraderis* claimed it was too difficult to organize to improve the local school. Unlike in other villages, the absentee local large landlord did not belong to the dominant caste group but had co-opted the dominant *biraderi* by sharing the spoils of patronage – as a consequence, members of the dominant caste group were more concerned about resource grabs than in mobilizing against him.

Almost all economic and political power in Village 7 was skewed in favour of the powerful landlord and the co-opted dominant caste both of whom had a history of maintaining a cordial, if slightly distant, mutually beneficial relationship. In spite of his physical absence, the landlord continued to have a say in many village matters, including the appointment of teachers in the local school. This say, informants claimed, arose not just because of his economic status, but also because he had a history of using physical force to coerce villagers to follow his wishes. The dominant caste, which possessed significant landholdings as a community, played an even more active and critical role in deciding village affairs, most of which were mediated through a politician from their *biraderi*. This politician, a former mayor, in fact acted as the local patron to whom members of other *biraderis* brought their requests and concerns. In conjunction with the large landlord, this politician controlled the local voting bloc and thus dictated who villagers voted for.

Over time, many of the low caste *biraderis* who had originally been heavily dependent on the landlord had become less so. There were several instances of members from these groups taking on manual labour jobs in neighbouring areas as well as undertaking some entrepreneurial efforts in the prosperous local market. Yet, when questioned about why there was such limited collective activity in the village, most residents replied that they were unwilling to risk challenging the status quo. This was true even in instances when it was common knowledge that the dominant caste had misappropriated village assets. As one local NGO worker with extensive experience in this village observed, “The villagers all live in their silos. There is little interaction across *biraderis* so there is little opportunity for collective activity. Whenever we have tried to implement something here based on the community working together, it has not worked well. Each *biraderi* knows the two masters to go to if they need something so they just do not bother.”

In both villages of this quadrant the local landlord appeared to actively discourage collective activity, and the heterogeneity of residents made efforts of this nature even more difficult. However, in Village 4 balanced power across castes allowed them to challenge the landlord's authority. Admittedly though, outcomes in this village appeared to also be facilitated by agency on the part of a few political entrepreneurs and the competing interests of the second largest group in this village. The same was

not true in Village 8, where the powerful dominant caste aligned itself with the landlord so that they could focus on maintaining their privileged status instead. As a consequence, outcomes improved only for dominant caste members, while overall community educational performance suffered.

## **3.6 Conclusion**

By critically reviewing the literature on heterogeneity and public good provision, in this essay I developed a stylized model, four interrelated hypotheses and detailed predictions of how three different dimensions of heterogeneity - namely caste heterogeneity, land heterogeneity and caste power heterogeneity - affect educational attainment in rural Pakistan. I tested this framework quantitatively using a unique dataset that I collected for 2500 individuals, as well as qualitatively using rich paired comparisons of a total of eight communities. In this concluding section, I first summarize my findings and then consider their implications.

### **3.6.1 Summary of Findings**

This paper presents several quantitative and qualitative findings. Table 3.3 runs through the most critical of these, setting them up against my four hypotheses to help recapitulate how well the arguments I posed in my model stand up to hard empirical evidence. On balance, this table shows that my findings are supportive of my predictions on the provision of education in rural Pakistan.

To sum, I find moderate support for my first hypothesis that low caste fractionalization is positively associated with literacy. My quantitative analysis corroborates the direction of this relationship, although it also indicates that the overall association between the two parameters may in fact be U-shaped. This U-shape implies that there is higher literacy at extreme levels of caste homogeneity and heterogeneity, while an inverse relationship is statistically evident only in scenarios with moderate levels of caste fractionalization<sup>69</sup>. My qualitative analysis corroborates that extreme levels of homogeneity are indeed related to “good” village outcomes - in three out of the four community-level case studies I present, low levels of caste fractionalization are accompanied by above average village literacy levels (i.e. Villages 3, 6 and 2). In the fourth village where this relationship does not hold (i.e. Village 8), not only is caste fractionalization at a marginally higher level than its comparative village, but I also show that caste power heterogeneity is better at explaining outcomes.

I similarly find overall moderate support for my second hypothesis that the effect of land heterogeneity may be predicated on caste fractionalization. My quantitative findings show that the

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<sup>69</sup> Admittedly the relationship between extreme levels of caste heterogeneity and higher literacy is less well established in the literature than are other elements of this finding; but my other preoccupations in this essay unfortunately do not allow me to delve too deeply into this particular aspect of the finding.

interaction term between the two arguably exogenous variables is negative and significant, and also that the land heterogeneity variable ceases to be significant once this interaction term is introduced. This is an important finding as it poses a departure from the existing scholarship which proposes economic heterogeneity as an independent determinant of collective action, particularly so in the work on Pakistan in which feudal landlords are often charged with the responsibility of driving poor educational outcomes. My qualitative findings on this front offer the illustrative cases of Villages 2 and 7, demonstrating how caste homogeneity facilitated acting against the local landlord in the former instance, and how caste heterogeneity hindered acting against the local landlord in the latter. This same relationship does not hold in the other two landlord-dominated villages (i.e. Villages 4 and 8) though, which I argue are again better explained by taking caste power heterogeneity into account. Nonetheless, in contrast to existing literature, both my quantitative and qualitative evidence certainly indicates that there is not a one-to-one adverse relationship between land heterogeneity and education.

Some of the strongest evidence I present in this paper is on my third and fourth hypotheses surrounding the effect of caste power heterogeneity. My quantitative findings provide indicative support on the matter – they show that belonging to a dominant caste group is associated with better educational outcomes if the individual resides in villages with high caste fractionalization in particular. My paired comparisons build on this finding. My analysis of Villages 3, 6 and 2 demonstrates support for my third hypothesis that caste power heterogeneity works in favour of overall educational outcomes in instances of low caste heterogeneity. The first two of these cases illustrate how caste homogenous communities with egalitarian land ownership patterns improved village-level educational facilities. The last case of Village 2 in contrast shows how a powerful dominant caste group was able to challenge the authority of an exploitative landlord to facilitate local collective activity for schooling. At the same time, my paired comparisons of Villages 1 and 5 and of Villages 4 and 7 confirm my fourth hypothesis that caste power heterogeneity works to improve only dominant caste outcomes in the context of high caste heterogeneity. In Villages 5 and 7 in particular, I show that in order to maintain their dominance, powerful dominant caste groups used their advantaged positions to seize disproportionate shares of village resources to the sole benefit their own *biraderi*, while overall community outcomes suffered.

**Table 3.3: Summary of Findings**

Hypothesis	Quantitative Results	Qualitative Results
1. Low caste heterogeneity is likely to be associated with higher educational attainment	<p><b>Moderate support</b></p> <ul style="list-style-type: none"> <li>■ Caste fractionalization coefficient is negative and significant at the 1% level in the specification containing only plausibly exogenous variables given in Column (1) and at the 10% level in the full specification in Column (8), although it is not significant in all the presented models</li> </ul>	<p><b>Moderate support</b></p> <ul style="list-style-type: none"> <li>■ Three out of the four villages in my sample with relatively low caste fractionalization have “good” outcomes (i.e. Villages 3, 6, and 2)</li> <li>■ The remaining Village 8’s outcome is better explained by the caste power heterogeneity dynamic as well as the fact that it has a marginally higher</li> </ul>

Hypothesis	Quantitative Results	Qualitative Results
	<ul style="list-style-type: none"> <li>▪ Caste fractionalization squared term is positive and significant in most models including the full specification in Column (8) where it is significant at the 5% level. This suggests a U-shaped relationship between caste fractionalization and literacy</li> </ul>	<p>fractionalization index (at 0.55 while that of its' pair is 0.22)</p> <ul style="list-style-type: none"> <li>▪ Village 6 case study illustrates the mechanisms of group preferences, norms and reciprocity and ease of sanctions through which a homogenous village can work together to enhance literacy</li> </ul>
2. The alleged adverse effect of living in a landlord-dominated village is likely to be mediated by the degree of caste fractionalization in that particular village	<p><b>Strong support</b></p> <ul style="list-style-type: none"> <li>▪ Landlord dummy indicator is negative and highly significant in all specifications until interaction between caste fractionalization and landlord dummy is introduced, after which it ceases to be statistically significant</li> <li>▪ Interaction term between caste fractionalization and landlord dummy is negative and significant in all specifications including the full specification in Column (8), where it is significant at the 5% level</li> </ul>	<p><b>Moderate support</b></p> <ul style="list-style-type: none"> <li>▪ Village 2 case study depicts how a homogenous caste group can mobilize to reduce the adverse landlord effect</li> <li>▪ Village 7 case study depicts how a heterogeneous village has difficulty in reducing the adverse landlord effect even when the landlord is absent</li> <li>▪ Cases of Villages 4 and 8 are better explained by the caste power heterogeneity dynamic</li> </ul>
3. In villages with low caste heterogeneity, power imbalances between caste groups are likely to work in favour of overall education outcomes	<p><b>Unable to test directly</b> <b>Moderate indirect support</b></p> <ul style="list-style-type: none"> <li>▪ Interaction term between caste fractionalization and dominant caste status is positive and highly significant in all specifications including the full specification in Column (8), where it is significant at the 1% level</li> </ul>	<p><b>Strong support</b></p> <ul style="list-style-type: none"> <li>▪ Paired comparison of Villages 3 and 6 shows how villages with low caste heterogeneity, low land heterogeneity and high caste power heterogeneity can have "good" outcomes</li> <li>▪ Paired comparison of Villages 2 and 8 shows how outcomes in villages with low caste heterogeneity and high land heterogeneity are influenced by caste power heterogeneity. In Village 2, high caste power heterogeneity works in favour of outcomes. In Village 8, balanced power works against outcomes</li> </ul>
4. In villages with high caste heterogeneity, power imbalances between caste groups are likely to result in the dominant group appropriating a disproportionate share of resources, thereby improving outcomes for the dominant group only	<p><b>Unable to test directly</b> <b>Strong indirect support</b></p> <ul style="list-style-type: none"> <li>▪ Interaction term between caste fractionalization and dominant caste status is positive and highly significant in all specifications including the full specification in Column (8), where it is significant at the 1% level</li> </ul>	<p><b>Strong support</b></p> <ul style="list-style-type: none"> <li>▪ Paired comparison of Villages 1 and 5 shows how outcomes in villages with high caste heterogeneity and low land heterogeneity are influenced by caste power heterogeneity. In Village 1, low caste power heterogeneity works in favour of outcomes. In Village 5, high caste power heterogeneity power works against village educational outcomes</li> <li>▪ Paired comparison of Villages 4 and 7 shows how outcomes in villages with high caste heterogeneity and high land heterogeneity are influenced by caste power heterogeneity. In Village 4, low caste power heterogeneity works in favour of outcomes. In Village 7, high caste power heterogeneity power works against village educational outcomes</li> </ul>

A key contribution of this essay is the detailed micro-level evidence it provides on the nature of collective activity surrounding education provision in rural Pakistan. In almost all of the villages studied, collective activity was based primarily at the caste group level and involved a variety of efforts to support schooling. In line with the collective action for public goods literature, this involved a mix of political mobilization as well as community-based efforts at funding school initiatives or using group norms and sanctions to facilitate actions in the interest of the relevant group. In Table 3.4, I summarize some of the most salient instances of collective action I witnessed by Village.

**Table 3.4: Select Instances of Local Collective Activity**

Village	Type of Collective Activity Seen at Caste Group Level
2	<ul style="list-style-type: none"> <li>• Political mobilization behind alternative candidate</li> </ul>
3	<ul style="list-style-type: none"> <li>• Community fundraising for private school</li> <li>• Community funding of scholarships for own caste</li> </ul>
4	<ul style="list-style-type: none"> <li>• Community efforts for improving/repairing infrastructure including school walls</li> </ul>
5	<ul style="list-style-type: none"> <li>• Community funded school transportation</li> </ul>
6	<ul style="list-style-type: none"> <li>• Political mobilization to attract school funding and projects</li> <li>• Community fundraising for public school</li> <li>• Community monitoring and sanctioning of teacher behaviour</li> </ul>

### 3.6.2 Policy Implications and Future Work

Two findings of this essay are central. First, consistent with my principal argument, caste heterogeneity, land heterogeneity and caste power heterogeneity all appear to be elements that drive educational outcomes in rural Pakistan. This is evident in my quantitative analysis as well as in my qualitative analysis. In fact, in each of the rich village cases that I present, none of the three dimensions of heterogeneity posited in my theoretical framework can alone completely explain outcomes. Rather, the inclusion and interaction of all three elements greatly improves my ability to account for the level of collective activity surrounding education. This finding, albeit unique to the context of Pakistan, has important broader implications for the literature - it highlights the importance of unpacking the variable ‘heterogeneity of participants’ in order to better understand the likelihood of collective action for public good provision.

Second, in my results, caste fractionalization appears to play a focal, mediating role for the other two dimensions of heterogeneity. As a key self-interested actor in local provision of education, the motivation dominant castes have to either improve broader community-level facilities or to enhance facilities targeted only towards their coethnics appears to crucially depend on the degree of caste heterogeneity in a village. Moreover, the local landlord’s ability to restrict collective activity surrounding education also appears to be predicated on the caste heterogeneity of residents in his village. This finding implies that simply considering the direct adverse effects of caste fractionalization in providing a public good may not be enough to fully understand the political economy of local provision. On the contrary, what may be required is also a consideration of how caste fractionalization can contribute towards creating local power dynamics in which elite groups

such as dominant castes or landlords can take advantage of collective action failures to further augment or reduce education provision based on their self-interests.

For Pakistan and other similar developing countries, both findings have policy implications. Besides emphasizing the importance of engaging with all three proposed factors of heterogeneity in order to improve education provision, they also underline the significance of addressing the negative effects of caste fractionalization in the first place. To that end, an array of policy options is available to countries looking to facilitate communication and cooperation across subgroups. One solution, for instance, is to create incentives for more contact and cooperation between different subgroups. Grounded in contact theory, this solution proposes that more interaction can result in easing tensions between various ethnicities or caste groups (see Horowitz 1985; Casey and Owens 2013). Another policy option is to tackle the inability to sanction those outside of one's own subgroup by developing transparent institutions that can monitor and sanction non-cooperative behaviour (see Habyarimara et al. 2009). Such institutions facilitate the dispersion of information to community members, thus making it easier to set social norms and reduce transgression.

Other policy solutions can tackle the challenges of unequal power and resources among subgroups more directly. One option for example is to provide different ethnic groups, or in this instance different caste groups, with representation in decentralized local governments through quotas. This particular option would be particularly useful in limiting the ability of players such as large landlords and dominant castes to take advantage of their advantaged positions to solely dictate matters in areas such as local schooling. A final and sometimes undervalued option for governments is to simply implement top-down interventions that address the public good challenge head on (Banerjee et al. 2007). In most countries, expansion of public schooling was not the result of local collective action, but rather of centralized mandates for increasing access specifically for marginalized groups. Even in Pakistan for that matter, village primary schools have been built and improved mostly through wider federal initiatives that have largely circumvented at least some key collective action failures at the local level. This implies that similar top-down interventions may have the ability to further address local imbalances in power, particular in instances where certain subgroups are excluded.

Of course, there is a lot more work to be done in this area. Instead of viewing my results as a generalized prediction of how the factors of caste fractionalization, land inequality and caste power heterogeneity interact, I consider them as an illustration of how local dynamics can play out in a particular context. Thus, to enhance the generalizability of my findings, a larger sample of Pakistani villages must be studied to confirm whether my conclusions can hold in other settings. Perhaps the most critical understanding this type of larger scale replication would provide is on how different degrees of each of my three dimensions of heterogeneity influence outcomes. Closely related to this is

the need to further study the conditions under which dominant castes become both willing and able to exercise their power to attain more or better schooling. In my own sample, for example, the dominant caste status in general coincides with numerical majority, cumulative landholdings, as well as with the caste of the local, large big landlord. Yet it is possible that dynamics play out differently when a dominant caste is for instance not the demographic majority in a relatively homogenous village or when the village's large landlord does not belong to the dominant caste.

Where the landlord effect is concerned, on the other hand, an important avenue for further research is exploring alternative structural factors that have the ability to alter the ascendancy of large landlords in village micro-politics. My analysis already shows that the presence of a large landlord is not necessarily a sentence for poor education provision – this finding opens up a myriad of ethnicity-related policy options other than land reforms, which to date have been a commonly advocated yet notoriously difficult policy option to implement. As the Pakistani economy diversifies, its villages become more connected, and media exposure intensifies, it is likely that these changes will further alter the power of the landlord vis-à-vis peasants. Thus, further exploring potential mitigants for the alleged adverse landlord effect can significantly add to the number of policy options available to Pakistan and similar developing nations for reducing illiteracy.

Finally, by design this essay focused on the structural factor of heterogeneity, thereby disregarding other elements that tend to influence collective action. However, besides heterogeneity, collective action also depends on what Ostrom (2009: 201) refers to as “...an inner core of individual-level variables – reputation, trust and reciprocity...”, all of which I largely overlooked in this paper for the sake of simplicity. Likewise, in the dominant caste literature itself, a number of authors highlight that economic, political or even numerical strength is not enough on its own to explain how dominant castes behave. Rather, factors such as individual agency and personality, as well as conflicts of power even within dominant castes can play a pivotal role in determining whether or not these castes mobilize as a group (see Oommen 1970; Mendelsohn 1993). Because a thorough understanding of the political economy of education provision in Pakistan would be incomplete without reference to these factors, I explore some of them in greater detail in companion papers to this essay.



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## ESSAY FOUR

# Can Social Capital Enhance Educational Outcomes? Empirical Evidence from Rural Pakistan

### Abstract

A growing body of research suggests that social capital can influence outcomes in areas such as government effectiveness, household income and community harmony. I contribute to this literature by presenting an original empirical analysis of the role of social capital in enhancing educational outcomes in Pakistan. By analysing quantitative and qualitative data I collected from across eight rural communities, I demonstrate the presence of moderate levels of *bonding* capital within kinship groups, but relatively low levels of *bridging* capital across kinship networks and between people of different religions. I then correlate multiple proxy measures of the *structural* and *cognitive* dimensions of social capital - such as associational activity, informal sociability and trust - with educational outcomes to show that there are weak, often mixed, associations between the two. I supplement this analysis with a micro-level comparative case study of two communities displaying high levels of social capital yet significantly divergent educational outcomes to explore the factors that contribute to this weak relationship. My case study findings highlight the importance of understanding the downside of social capital, and of recognizing that rather than being driven by social capital alone, collective action is often embedded in a wider system of village politics and patronage. Importantly, my results imply that policies that focus solely on social capital in the hope that it will facilitate collective action may have limited benefits.

Key words: social capital, networks, trust, bonding and bridging social capital, education, Pakistan

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## 4.1 Introduction

In recent decades there has been a virtual explosion of studies on social capital. Supporters of the concept contend that differences in performance in multiple arenas such as government effectiveness (e.g. Putnam et al. 1993) and household income (e.g. Narayan and Pritchett 1999) can be accounted for substantially by the norms and networks found in communities. This school of thought places collective action at the centre of most economic and political problems, and contends that social capital's ability to facilitate this collective action makes it a key determinant of performance (Ostrom and Ahn 2009). Critics take a different stance, with some scholars arguing that performance is better explained by incentives for and against collective action created by broader structures and institutions (see Woolcock and Narayan 2000), and others still suggesting that social capital offers an important yet only partial explanation for differences in performance (e.g. Krishna 2002).

I contribute to this debate by presenting an original empirical analysis of the relationship between social capital and educational outcomes. Much of the existing literature that examines the association between these two parameters interprets social capital along Coleman (1988; 1990) as a set of interpersonal ties individuals can utilize to compensate for wider inequalities in educational outcomes (see Dika and Singh 2002 for a good review). In contrast to these contributions, I follow the contemporary interpretation of social capital popularized by Putnam (1995: 67) and define it here as “features of social organization, such as networks, norms and trust that facilitate coordination and cooperation for mutual benefit” in a particular community. Using this conceptualization of the notion, I analyse unique data that I collected from rural Pakistan to address two related questions: (1) What is the level of social capital displayed by these communities? And (2) What role, if any, does social capital play in facilitating collective action surrounding educational outcomes such as enrolment?

I address the former query by relying on survey responses from over 350 rural households as well as qualitative data from interviews with over 65 elite informants. My analysis indicates that the most commonly used metric of the notion “membership in voluntary associations” is an inadequate measure in this context as much of the associational activity in rural Pakistan occurs informally within kinship groups. I thus arrive at what to my knowledge are some of the first proxy indicators of social capital in Pakistan by using several other widely accepted *structural* and *cognitive* indicators of the notion such as informal sociability, group solidarity and trust. I find that *bonding* social capital within kinship groups (henceforth referred to also as *biraderi* or caste) is at moderate levels in my sample, while *bridging* social capital across kinship networks, and between persons of different religions is at relatively lower levels. At the same time, my analysis also indicates two other key factors on this

front: a general trend of social capital erosion over time, and the presence of asymmetries in the possession of social capital mirroring pre-existing societal hierarchies.

To examine whether social capital plays a role in facilitating collective action surrounding education, I first correlate many of the proxy measures of social capital that I derived with educational outcomes, and then undertake a comparative case study of two communities displaying high social capital levels. Interestingly, my quantitative results indicate that there is a weak, often mixed, relationship between social capital - as measured using network, informal sociability and trust metrics - and educational outcomes. While I view my statistical findings as suggestive rather than deterministic due to concerns surrounding endogeneity, the findings of my comparative case studies are likewise consistent with this result. They corroborate the premise that social capital by itself is neither a necessary nor a sufficient condition for improving education. On one hand, in my first sample community, I find the expected theoretical relationship holds – high social capital is accompanied by extensive collective action surrounding education, and therefore greater enrolment. On the other, in my second sample community, I show that high social capital is accompanied by poor outcomes instead.

What factors contribute to these different educational outcomes despite similar levels of social capital in both communities? I argue that this divergence is driven partially by phenomena critics commonly associate with the downside of social capital. Greater collective action within the most politically powerful caste within the second community appears to have improved educational outcomes for its own members, while at the same time excluding other groups in the village from the collective activity's benefits. Moreover, within this second community, hierarchical relationships between and within castes have both influenced who benefits in the village and who does not. Overall, my case studies thus highlight the importance of understanding the downside of social capital, and of recognizing that rather than being driven by social capital alone, collective action for education provision is often embedded in a wider system of village politics and patronage

This paper proceeds as follows: Section 4.2 summarizes the relevant literature in order to set the context for this study; Section 4.3 introduces my data and focuses on measuring social capital in my eight sample communities; Section 4.4 analyses the relationship between social capital and education outcomes using both quantitative and qualitative techniques; Section 4.5 concludes.

## **4.2 Literature Review**

There is a sizeable literature on social capital, which often presents the term with dramatically different definitions. I begin this section by providing a brief introduction to the distinct



conceptualizations of the notion by the key theorists Bourdieu, Coleman and Putnam. I highlight that in spite of these varied conceptualizations, there is now a growing consensus in the contemporary literature on using Putnam's interpretation of the term as "norms and networks that facilitate collective action". Next, I turn to the empirical literature that examines the role played by social capital in the provision of education in particular. While the research in this strand overwhelmingly relies on Coleman's conceptualization of the term, the handful of contributions in the contemporary Putnam tradition, which is where I locate my own work, are optimistic of social capital's potential. I conclude this literature review by summarizing key critiques levelled at the social capital scholarship. The multiple theoretical and methodological challenges associated with this research have been competently discussed in several contributions (see Woolcock 1998; Fine 1999; Portes and Landolt 2000; Schuller et al. 2000; Field 2003) and I include them here primarily to set the context for my own analysis, focusing in particular on issues related to measurement and social capital's downside.

#### **4.2.1 Conceptual Overview**

The study of the nature, extent and value of human relationships has a long tradition in the social sciences. Although ideas related to participation in groups and solidarity can be found in the classical works of Marx, Weber and Durkheim in some form or another, three theorists are generally credited with contributing to the contemporary use of the term social capital.

The first of these influential theorists was the French sociologist, Pierre Bourdieu, who saw social capital as the resources that accrued to individuals or groups due to a network of mutual acquaintance (Bourdieu 1986). The concept appeared in a number of his studies, with his later scholarship highlighting that together with economic and cultural capital, the degree of social capital an individual possessed not only determined their social standing, but could also allow them to gain direct access to economic resources. Bourdieu was primarily concerned with how elites used their social capital to replicate privilege by deliberately working on their connections so that these connections could be mobilized in the future (Schuller et al. 2000; Field 2003).

Although Bourdieu explored the role of social capital in explaining education inequities in some of his work, it is James Coleman, the second of the key theorists, whose focus on this topic gave social capital prominence in the education arena. To Coleman (1988; 1990), an American sociologist, the term social capital denoted a set of resources with two key components – first, an aspect of social structure, and second, the facilitation of certain actions within that structure. Applying this broad conceptualization of the term to a number of empirical studies, Coleman demonstrated that poor academic achievement among students from disadvantaged backgrounds in the US could be compensated for with social capital. Coleman thus saw social capital largely as a way for marginalized populations to mitigate their disadvantages. Moreover, his reading of the notion elevated

the importance of both within family relations as well as community ties, which he believed influenced the cognitive and social development of children.

Much of the contemporary use of the term social capital, however, has been popularized by the political scientist Robert Putnam in his seminal works *Making Democracy Work* and *Bowling Alone*. In the first of these two contributions, Putnam and his colleagues (1993) compare regional governments in North and South Italy to argue that civic community explains a substantial part of the disparities in performance. In the second, Putnam (1995; 2000) uses the example of bowling associations in the United States to illustrate how league bowling had in the past served to bring together strangers on a regular basis thus fostering trust in the community. In more recent years, however, he highlights that this has changed, thereby signalling a decline in social capital. Importantly, Putnam's (1995: 67) operationalization of the concept of social capital differs from that of Bourdieu and Coleman in a distinct way – whereas the latter two scholars saw social capital as an asset possessed at the level of the individual or family, Putnam stretches the concept to one that captures an attribute of society, defining it as “features of social organization, such as networks, norms and trust that facilitate coordination and cooperation for mutual benefit”. Because of this, compositionally Putnam places a greater emphasis on membership in civic and social associations – this kind of membership, he posits, fosters norms of reciprocity, facilitates information flows and provides templates for future collaboration.

A significant scholarship has explored the definitional contradictions between these key theorists in some detail, with authors in particular criticizing the conceptual stretching of the term social capital from something that originally applied to individuals to one that began to characterize societies<sup>70</sup> (see Portes 1998; Field 2003). Yet, in recent years, newer contributions to the field have helped address this fundamental definitional challenge in two distinct ways. First, scholars now increasingly acknowledge that Bourdieu, Coleman and Putnam all approached social capital from markedly different perspectives, which then led to its multiple applications. Indeed Portes (2000) characterizes the individual versus society interpretations of social capital as two distinct meanings of the term. And second, based on a solid empirical foundation, there is now a growing consensus that social capital should be defined as “the norms and networks that facilitate collective action” (Woolcock 2001: 9)<sup>71</sup>. For the sake of conceptual clarity, wherever relevant, I refer to this particular conceptualization as

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<sup>70</sup> The theoretical shortcomings of the concept have in fact received many other damaging and often valid challenges ranging from the appropriateness of the term “capital” and the unoriginality of the social capital concept more generally, to the vagueness of Coleman's definition and the entangling of the sources and consequences of social capital in many applications. For more on this, see Portes and Landolt (2000).

<sup>71</sup> That is not to say that the Bourdieu and Coleman interpretations have been discarded. A substantial literature continues to use these frameworks for social capital analysis, but the Putnam-esque tradition does get a lot more attention particularly in the development industry. See Bebbington et al. (2007) for a good commentary on why.

being in the Putnam tradition and therefore differentiate it from research which uses the social capital frameworks propagated by either Bourdieu or Coleman more specifically.

Various commonly accepted distinctions within the term social capital have served to further clarify its nature. One important categorization used by social capital empiricists, for instance, breaks the concept down to the two core dimensions of (1) *structural* and (2) *cognitive* factors (see Uphoff 2001). *Structural* factors include variables such as formal and informal social networks, sociability and group solidarity, while *cognitive* factors include variables such as trust and norms. In addition to these core dimensions, scholars increasingly differentiate between various forms of social capital. One of the key distinctions made in this vein is between *bonding* and *bridging* capital<sup>72</sup> (Woolcock 2001). *Bonding* capital refers to horizontal relationships between similar people, and thus is said to reinforce exclusive identities. *Bridging* capital, in contrast, refers to horizontal relationships between heterogeneous actors which tend to cross ethnic, class or gender lines and therefore is considered an inclusive form of social capital. Yet another critical classification is commonly used by scholars working specifically on the *cognitive* dimension of trust, which is defined here as “when a community shares a set of moral values in such a way as to create expectations of regular and honest behaviour” (Fukuyama 1995: 153). This classification distinguishes between *generalized* and *particularized* trust. The former category indicates the degree of trust placed in strangers, whereas the latter category of *particularized* trust refers to trust placed in those one knows personally (Bjornskov 2007).

#### **4.2.2 Social Capital and Community Outcomes**

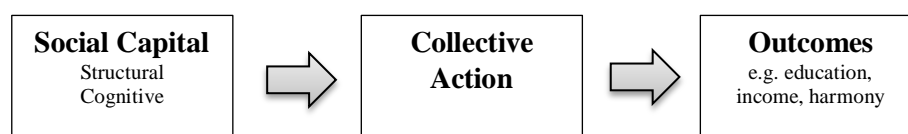
A significant literature debates social capital's role in areas such as economic development and success (e.g. Fukuyama 1995; Knack and Keefer 1997), government effectiveness (e.g. Putnam 1993), household welfare (Narayan and Pritchett 1999; Grootaert 2001), community harmony (Krishna 2002) and corruption (Uslaner 2009). In this broader scholarship, supporters of the concept such as Putnam and Fukuyama contend that differences in performance in multiple arenas can be accounted for substantially by social capital. This school of thought places collective action of communities at the centre of most economic and political problems, and contends that social capital's ability to facilitate this collective action makes it a key determinant of community outcomes and performance, as depicted in Figure 4.1 below (see Ostrom and Ahn 2009). Critics of course take a different stance, with some scholars arguing that performance is better explained by incentives for and against collective action created by wider structures and institutions (see Woolcock and Narayan

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<sup>72</sup> Bonding and bridging social capital are often compared to Granovetter's (1973) distinction of strong and weak ties, with the former referring to people one knows well and the latter referring to links with those one does not.

2000), and others still suggesting that social capital offers an important yet partial explanation for differences in performance (e.g. Krishna 2002)<sup>73</sup>.

**Figure 4.1: Social Capital Thesis**



Source: Adapted from Krishna (2002)

Is there evidence that social capital can enhance educational outcomes? In the field of education, applications of Coleman’s conceptualization of the term have received the most attention by far. Most noteworthy in this strain of the scholarship is Coleman’s (1988) own work showing that poor students in Catholic schools in the United States are less likely to drop out as compared to those in non-faith schools. This, Coleman claims, is not due to religion per se, but rather the consequence of higher social capital as evidenced by higher expectations of teachers, and the sense of community commonly found supporting faith-based schools. Following this landmark study, a series of contributions in the same vein examine the fate of minority children in developed countries to arrive at similar conclusions: proxy indicators for social capital along Coleman - such as family structures (e.g. number of siblings, single parent households), parent-child interaction, family expectations and stability, and communication between parents, teachers and community leaders – are associated with better educational outcomes such as higher achievement and lower drop-out rates (see Dika and Singh 2002; Vryonides 2007 for reviews of this literature). Unlike work done in the Putnam tradition, authors in this strain of the scholarship contend that these results are achieved through a variety of mechanisms often outside of the realm of community collective action – mechanisms such as future access to employment through parental networks, additional emotional support within families, as well as community supervision of children, all of which serve to compensate for wider inequalities in education outcomes.

Fewer papers examine the role of social capital in enhancing educational outcomes through greater collective action in the contemporary Putnam tradition. The limited contributions that do exist, nonetheless, are overwhelmingly optimistic of social capital’s potential in the area. In *Bowling Alone*, for example, Putnam (2000) himself demonstrates that social capital – measured using a composite indicator of associational activity, trust, engagement in public affairs, community voluntarism and informal sociability - is associated with lower drop-out rates and higher achievement scores in the US. Cross-country regressions such as Bjornskov (2009) and Papagapitos and Riley (2009) leverage

<sup>73</sup> Note that in this paper, I follow Krishna (2002) and Woolcock and Narayan (2000) who differentiate between the social capital proponents and members between of the institutional perspective. There is other scholarship, however, that sees institutions as a form of social capital (see Ostrom and Ahn 2009).

the wide availability of attitudinal studies such as the World Values Survey (WVS) to corroborate Putnam's contention - they report the presence of positive relationships between the social capital indicator of trust and different measures of schooling. Several country-specific papers written in this vein also agree. In his study on the effects of trust on average years of schooling, Dincer (2011) contends the two are indeed positively correlated in the United States, whilst Yamamura (2011) argues that generalized trust is significantly related to lower truancy rates in Japan. Cueto et al. (2005) take a slightly different tack - they analyse the case of Peru to find that although measures of *structural* capital such as networks are not related to educational outcomes, indicators of *cognitive* social capital are positively correlated with children being in the correct grade for their age.

#### 4.2.3 Issues in the Literature

Can the above results of social capital's potential in enhancing community outcomes be taken at face value? A series of work has highlighted a myriad of problems in the broader theoretical and empirical literature in this field. Besides emphasizing the issues over definitional confusion discussed earlier, social capital's harshest critics also highlight its over-versatility problem, noting that the term is often "all things to all people". A just as serious challenge questions the inferences drawn from a lot of the existing scholarship, and particularly the conclusions presented in Putnam's work. These scholars cite difficulties related to (a) circularity (is social capital a characteristic of a cooperative society or a means of achieving it?), (b) the assumption of path-dependence (is social capital entirely determined by historical processes with no role for human agency or politics?), and (c) a lack of consideration of alternative explanations for the observed consequences (Tarrow 1996; Putzel 1997).

In this paper, I am less concerned with the above preoccupations and focus in particular on two further areas of debate in the scholarship - measurement challenges and the dark side of social capital, both of which help set the context for my own analysis. There are, as should be expected, intrinsic difficulties in measuring and estimating the consequences of a complex phenomenon such as social capital. Because of this, even in the empirical literature written solely in the Putnam tradition, several different proxy indicators have been deployed to operationalize the term. These range from indicators related to the core social capital dimensions of *structural* and *cognitive* factors discussed earlier, to ancillary proxy indicators such as newspaper readership, civil liberties, crime prevalence, social heterogeneity, political engagement, charitable giving, community empowerment, and communication, among others<sup>74</sup>. A key accusation detractors level at this literature as a result is that of "post-hoc theorizing," whereby factors with even tenuous associations with the notion of social capital are used to argue in favour of its potential (see Schuller et al. 2000). That said, using even membership in formal networks, which is by and large the most commonly accepted measure of

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<sup>74</sup> Note that in spite of his parsimonious definition of social capital as networks, norms and trust, even Putnam has widely leveraged these alternatives proxy indicators to quantify social capital.

social capital, is not without its challenges. In his survey of 69 villages in India, Krishna (2002) highlights the main issue here: inapplicability of this measure derived from Western contexts to developing countries<sup>75</sup>. He demonstrates that only one in fifteen rural residents in India is a voluntary member of a formal association, highlighting that in such settings, informal networks based primarily on kinship serve as a better measure for the kind of community activity originally envisaged by Putnam for fostering norms of reciprocity. In their analysis of social capital in Bangladesh, Pargal et al. (1999) concur – they demonstrate that membership in formal associations is not associated with greater trust, sharing or reciprocity, arguing that more casual associational activity are more important in the local context of the country.

Critics note a number of other issues related to measuring social capital as well. For one, they highlight the reductive nature of network measures that are often employed, arguing that they tend to ignore the prevalence of asymmetrically distributed participation (Serra 2011). For another, several point to the challenges associated with answering questions on trust such as interpreting its meaning and the willingness of respondents to answer honestly, with authors such as Barr (1999), Knack (2001), Glaeser et al. (2000), Uslaner (2012) and Johnson and Mislin (2012) all debating whether answers to attitudinal survey questions on trust can even be trusted. Sadly, these measurement challenges do not stop there. Sceptics furthermore emphasize that the issues I outlined above are frequently compounded by modelling issues related to endogeneity and attribution, both of which cast doubts on many of the conclusions drawn in this research (see Durlauf 2002; Mouw 2006; Baron et al. 2000).

Yet another concern raised by critics is what they consider an undue focus on the positive consequences of social capital at the expense of neglecting its negative effects (Portes and Landolt 2000). These negative effects, widely referred to as the “dark side” or the “downside” of social capital, may arise either directly or indirectly. Gambetta’s (1993) well-known study, for instance, highlights a direct negative consequence for victims of the closely knit, high social capital community of the Mafia; while both Fukuyama (1995) and Graeff (2009) present self-interested lobbyists, corrupt individuals, drug networks and hate groups as strong examples of social capital being used for perverse means. Other authors such as Field (2003) emphasize an indirect negative consequence - the necessary exclusion of outsiders from the benefits enjoyed by members of a community both perpetuates and enhances inequality, particularly so because it is often the already privileged who enjoy this high social capital. On the flip side, in such cases, high engagement in disadvantaged groups yields little as participants have few resources to draw upon. Portes (1998) adds to this list the

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<sup>75</sup> This does appear to vary depending on the developing country though. In Egypt for instance, according to the WVS in 2012, less than 1% of Egyptian respondents were members of a religious organization, while just above 1% belonged to a political party. On the other hand, other developing countries as diverse as Burkina Faso, Indonesia and Bolivia do report substantially higher participation in formal voluntary associations (see Grootaert 2001).

undue control over members of such communities, which may create demands for conformity, restrict participation in the wider community, and limit business success due to unreasonable claims by kinsmen. These further downsides of social ties lead Portes (1998: 18) to conclude that “Sociability cuts both ways”.

### 4.3 Measuring Social Capital

The first line of inquiry in this paper is concerned with understanding the level of social capital in rural Pakistan. Because the previous section highlighted several issues associated with measuring this complex phenomenon, in this section I adjust my approach to its examination in three distinct ways. First, in order to address concerns of post-hoc theorizing, I restrict myself to using proxy indicators that are related solely to social capital’s core dimensions of *structural* and *cognitive* factors i.e. networks, informal sociability, group solidarity and trust. Second, to enhance applicability of my analysis to the local context, I use qualitative data to substantiate the validity of the multiple proxy indicators I employ. Finally, to ensure that my admittedly reductive measures do not mask deeper social asymmetries, I supplement my analysis wherever possible with a consideration of how these measures may differ based on social status.

To that end, I begin this section on measuring social capital in rural Pakistan by explaining how I gathered the data for my study. Next, I spend some time assessing the level of *structural* and *cognitive* social capital in the sample to provide what to my knowledge are some of the first estimates of the notion of social capital from the country. In doing so, I demonstrate the presence of moderate levels of *bonding* social capital within kinship groups but relatively lower levels of *bridging* capital across kinship groups and between persons of different religions. I also present evidence that indicates a general trend of social capital erosion over time, as well as suggests the presence of asymmetries in the possession of social capital which mirror pre-existing societal hierarchies.

#### 4.3.1 Data

The paper draws on field research I carried out in eight communities or villages of rural Pakistan, half of which were located in the district of Faisalabad, whereas the other half were located in Hyderabad district. The villages selected differed in terms of land ownership and caste composition patterns<sup>76</sup>, but otherwise were similar in that each village (1) was of average size (250 - 400 households) (2) belonged to a comparable agricultural zone (3) had at least one government middle school in the main settlement, and (4) was not more than 120 minutes from a main town or city.

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<sup>76</sup> Both land ownership and caste composition patterns are plausibly exogenous to education outcomes as they are determined by historical patterns, which have remained essentially unchanged. For a more detailed discussion on this matter, see Essay Three of this PhD thesis. See also Khwaja 2009; Gazdar 2011; Nelson 2011.

Fieldwork in these communities entailed the implementation of a comprehensive household survey with the assistance of a team. In total I solicited information about approximately 2500 individuals from some 350 households, which were selected using stratified random sampling based on kinship group in each of the eight villages. In total, there are approximately 30 distinct kinship groups in my sample. I designed the survey instrument specifically for this study, and through it elicited data not just on key demographic, socioeconomic and educational attainment indicators, but also on common social capital measures found in the literature. Thus, to understand the extent of household participation in groups, my instrument asked respondents about membership in voluntary associations. To consider trust and solidarity, on the other hand, households were questioned about how much trust they placed in for instance other villagers or in members of their kinship group. I developed the content for both arenas by adapting questions from the World Values Survey questionnaire for the local context, and also by using insights on measuring social capital offered in Jones and Woolcock (2009).

In addition to the survey, I conducted a total of approximately 65 semi-structured interviews with key informants across the eight communities. In general, in each village I spoke to (1) representatives from the government school and parents of school-going age children (2) village notables such as traditional village heads, politicians, and large landowners and (3) notable members of key kinship groups found in the village. During these interviews, I focused in particular on understanding the extent of cooperation, trust and conflict in each community. Like the survey, the interview guide was developed specifically for this study and was administered in either Urdu or in the relevant regional language. More details on the instruments used and data collection processes employed are available in Appendix A at the end of this thesis.

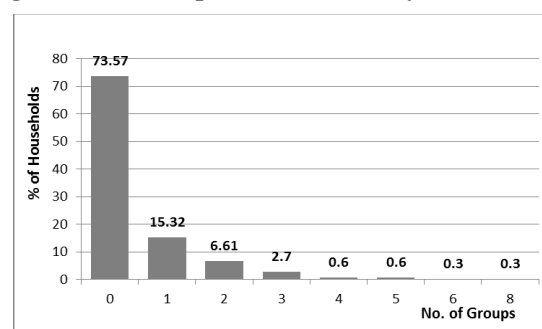
#### **4.3.2 Structural Social Capital: Networks, Informal Sociability and Group Solidarity Indicators**

Empirical work on social capital in the Putnam tradition often operationalizes its structural dimension by looking at membership in voluntary organizations. In line with this, each respondent in my survey was asked about the household's participation in such associations. Membership questions took the form *"I am going to read out the names of some types of voluntary organizations. Pls tell me if you are currently, or have previously been part of such a type of organization."* Answer options included (1) *Currently part of* (2) *Used to be a part of* and (3) *Have never been part of*. For the sake of simplicity in presentation, answers in the first and second categories have been combined to indicate participation, while the final category remains unchanged and indicates a lack of current or past participation.



The results show that participation is remarkably low, with households in my sample on average belonging to just 0.5 voluntary associations. As Figure 4.2 shows, approximately 74% of the households surveyed have never participated in a formal group or association, 15% have participated in at least one group, while only 11% of households have had membership in two or more groups. Interestingly, not only is the overall participation in such formal networks low, but it also tends to be skewed in favour of privileged groups. Just over 65% of the households that had membership in two or more groups in the sample, for instance, were found to own land, while some 73% were found to belong to the most powerful kinship group in the village. Moreover, basic statistical analysis confirmed (results omitted) that wealth as measured by owning physical assets such as televisions, refrigerators, mobile phones and motor vehicles was significantly associated with the number of groups a household belonged to.

**Figure 4.2: Participation in Voluntary Associations**



To help understand what kind of voluntary groups are common in rural Pakistan, Table 4.1 takes a closer look at the data and exhibits membership of respondent households by type of group. Of the associations specifically asked about in the survey, religious organizations have the most participation, although at 14% of households this is still rather limited. Participation in Panchayats,

**Table 4.1: Participation by Type of Association**

Group	% of households who are members	N
1. Mosque committee	14%	348
2. Political party	11%	345
3. Labour union	2%	350
4. Credit group	1%	350
5. Panchayat	12%	348
6. Village neighbourhood committee	2%	351
7. School management council	2%	351
8. Other	2%	345

which can be either permanent or temporary local groups assembled for the specific purpose of solving a community dispute, stands second at 12%; and participation in political parties is only 11%<sup>77</sup>.

In rural areas, elites often discourage the formation of formal associations by non-elite participants (see Mosse 2006). As a result, in many developing countries the existence of such formal associations is commonly the result of interventions by the state or third sector. However, even local bodies that were instituted by outside intervention did not have active membership in my sample. In Faisalabad, for example, all four villages were recipients of a rural support programme by the provincial government that encouraged the formation of credit groups. Yet as Table 4.1 above demonstrates only

<sup>77</sup> Note that overall my findings on group membership are in line with those found by the Pakistan World Values Survey conducted in 2012 (henceforth PWVS), which shows participation in religious organizations at 15.5% and political party participation at 7.9%. The small disparities most likely reflect differences in sampling - my village sampling methodology focused on villages in the two more developed districts of Pakistan, while PWVS surveyed approximately 1,200 households which were representative across all districts in the country.

about 1% of respondent households had participated, with the number rising to just 2% if only Faisalabad villages were considered.

Similarly, local associations that were legally instituted due to regulations implemented in a significant government decentralization reform in 2001 such as the Village Neighbourhood Committee (VNC) and the School Management Council (SMC) saw limited participation. In fact, only 8% and

**Table 4.2: Awareness Level of Association**

Group	% of households who were aware of	N
1. School management council	15%	328
2. Community citizen board	5%	346
3. Village neighbourhood committee	8%	338
4. Musalihat Anjuman	16%	333

15% of the households surveyed were even aware of the two associations, respectively, prior to the survey. The other two local bodies of the Community Citizen Board and the Musalihat Anjuman, which had also formed an integral part of the decentralization reform<sup>78</sup>, likewise had low awareness levels at 5% and 16%, respectively, as seen in Table 4.2. Importantly, again awareness levels were higher among more privileged groups as compared to disadvantaged groups<sup>79</sup>.

But does this lack of participation in voluntary associations imply that rural Pakistan is poorly stocked with social capital? Not at all. As I noted earlier in the literature review, scholars such as Krishna (2002) and Pargal et al. (1999) have argued that formal associations are not the most common vehicle of associational activity in the South Asian context. On the contrary, like in many other developing countries, traditional tribal links and kinship networks usually provide the most common social structure within which mutual support networks operate. Consistent with this, in rural Pakistan much of the collective activity witnessed historically has arisen from kinship networks working together (see for e.g. Rouse 1988). As a consequence in order to understand social capital in rural Pakistan, a more thorough consideration of relationships within the local kinship group, also referred to as caste or *biraderi* in this paper, is required.

Certainly the fact that members of the same caste in all eight communities I surveyed tended to live in the same vicinity or neighbourhoods helps demonstrate community focus on this particular social structure. Two statistics related to informal sociability and group solidarity lend further credibility to the proposition that *bonding* social capital or capital within the kinship group is likely to be at moderate levels in my sample. First, almost 55% of respondents reported visiting other members of their *biraderi* on at least a daily basis, thus confirming regular interaction within the kinship group structure. In addition, approximately 79% answered they were “close” to their *biraderi* members.

<sup>78</sup> Note that the 2001 reform was suspended some 18 months prior to my fieldwork, although awareness levels in such a short time are unlikely to have been seriously affected as a result. The SMC directives though not only preceded the 2001 reform, but also remained in effect afterwards.

<sup>79</sup> Note that these low awareness levels are consistent with the findings of Cheema (2007) and Fennell and Malik (2012) on awareness levels for VNCs and SMCs, respectively.

Qualitative research in almost all villages corroborated the salience of this network, with informants indicating that most villagers turned to their kinship group in times of need for both monetary and emotional support. Interviewees also affirmed that the network served as a primary source for information sharing, and that fairly strict norms of reciprocity were practiced among kinsmen. These statistics and qualitative findings are telling as they reflect the very fabric of social capital Putnam envisions in his own work – one that brings together individuals regularly, facilitates information flows and fosters trust, all of which are posited to then bring about collective action for community welfare.

Multiple other metrics from my research confirm the strength of this *bonding* social capital at the *biraderi* level, as well as reveal the importance of this social structure. To further understand the claim of closeness to one's *biraderi*, for instance, households were asked to what extent they felt a sense of community within their kinship group. Over 60% of respondents stated they felt a *great* sense of community, 32% stated they felt *some* sense of community, and only 7% claimed they did not feel a sense of community. In contrast, the corresponding figures for sense of community within their village of residence were 49%, 34% and 17% respectively. Ties within the kinship group, moreover, were not just limited to members within the village – 79% of the households surveyed confirmed that they maintained ties with members of their own *biraderi* in other villages. The strong preference for the kinship network was likewise evident from survey responses on endogamy. Not only had 88% of respondents married within their own *biraderi*, but almost 41% of respondents claimed they would be actively opposed to a close relative marrying someone from outside their kinship group. Additionally, over 70% of respondents acknowledged the presence of a hereditary or nominated *biraderi* head who resided in the same village, thereby confirming some sense of continued reverence to traditional kinship ties.

In contrast to the above evidence indicating the presence of a moderate level of *bonding* social capital, I found only limited evidence of *bridging* social capital or in this instance social capital across kinship groups. Although thousands of named kinship groups exist in the country, most authors divide rural society into the categories of *zamindars* or the traditional landowners and the *kammis* or the traditional village craftsmen, servants and peasants (Eglar 1960). Historically, particularly in the period before partition from India, agricultural activity had required these multiple *zamindar* and *kammi* castes to work together in order to sustain the village economy (see Dumont 1980). As a result, all the villages in my sample had historically established informal norms that guided not just how different kinship groups cooperated with each other, but also how they resolved disputes that arose. Both these interactions in general involved communication and compromise negotiated through village notables such as village heads or *biraderi* heads who were charged with representing the views of their constituents. In addition, members of the *dominant* caste in the villages, defined as the caste

that had the greatest numerical strength, economic status, land ownership or modern education in a specific village (see Srinivas 1959), traditionally also played critical roles in these instances of cooperation and dispute resolution. That said, although these historical norms still held sway in some instances, informants in four of the villages in my sample stated that these traditional inter-biraderi links had broken down over the past two decades. These statements were supported somewhat by survey answers as well, as only 46% of respondents believed that residents of different *biraderis* in their village got along well with each other.

In fact, elite informants indicated that not only had *bridging* capital eroded over time, but that the same was true of *bonding* social capital as well. The following quote from the village head or *lambardar* of a village in Faisalabad epitomizes the kinds of claims made about the direction of social capital in many of the sample villages.

“When my grandfather was *lambardar*, all disputes within our *biraderi*, and even those of other smaller *biraderis* were settled by him. There was a strong sense of community, and for the sake of this community people respected his verdict. In my father’s generation, things started changing. Times were hard and people started fighting more and more over land and women. Soon, there was a lot of in-fighting in the *biraderi* and even close family members decided they did not have to listen to my father anymore. As the economy modernized further, the traditional respect for the *biraderi* head and that sense of community started disappearing. My father passed away last year, and although I am the new *lambardar* I live in the city most of the time and do not get involved. If people have disputes, they now go to the police station instead. Traditional means of compromising are almost all gone.”

What factors have driven this level of erosion in both *bonding* and *bridging* social capital in recent times in the sample villages? One likely reason is that as compared to before, rural residents are less economically dependent on each other as many of them no longer rely solely on the traditional system of agriculture for their livelihood. Fewer instances of working together with not just members of other *biraderis*, but also with members of one’s own kinship group has resulted in loosening of the bonds and bridges that traditionally fostered trust. Another reason probably is related to a general weakening of village rituals and traditions due to modernization. As many anthropological accounts of rural Pakistan have shown (see for e.g. Eglar 1960; Rouse 1988), these rituals in the past played a critical role in cementing social relations both within and across kinship networks. Related to this is the fact that modernization has additionally opened up options for, for instance, securing loans, settling disputes and gaining patronage outside of the *biraderi*. With the stabilizing force of *biraderi* and village heads unsettled, the multiple relationships that inculcated norms of reciprocity and encouraged harmony are, as the quote above illustrates, increasingly a thing of the past.

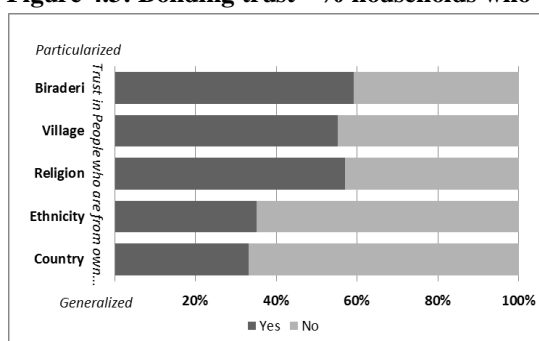
That said, in spite of the erosion in recent years, there is sufficient evidence confirming that at least moderate levels of *bonding* social capital still persist. While these relationships are not evident in the “membership in voluntary associations” measure, informal sociability and group solidarity metrics do demonstrate the strength of social capital within *biraderis*. In contrast, evidence on *bridging* social capital is rather thin. In fact, the qualitative evidence overwhelmingly indicates that although social capital across kinship networks may have been stronger in the past, it has eroded at a more rapid pace than has *bonding* social capital.

### 4.3.3 Cognitive Social Capital: Trust Indicators

As noted earlier, the increased availability of attitudinal studies such as the World Values Survey (WVS) has resulted in several empiricists measuring social capital by not just looking at *structural* factors, but by also considering questions related to trust, a widely accepted component of the *cognitive* dimension of social capital. Following this trend in the literature, the trust questions in my survey took the form “In general, how much would you say you can trust \_\_\_\_\_?” Answer options included (1) *Trust completely* (2) *Trust somewhat* (3) *Do not trust very much* (4) *Do not trust at all*. For simplicity in presentation, the former two and latter two categories have been combined to yield two instead of four categories of trusting behaviour.

On average, respondents displayed moderate levels of trust in other individuals similar to themselves, which corroborates the moderate level of *bonding* social capital assessed using the *structural* measures above. Figure 4.3 presents the trust respondents placed in individuals, ranging from *generalized* trust such as that in Pakistanis more broadly to more *particularized* trust such as that in members of their own kinship group or *biraderi*. Overall, only 33% of households surveyed thought Pakistanis could be trusted<sup>80</sup>. Unsurprisingly, in line with the literature (see Glaeser et al. 2000; Serra 2011), levels of *particularized* trust were higher with respondents professing greater trust in their own village (55%) and their own *biraderi* (59%).

Figure 4.3: Bonding trust - % households who trust...

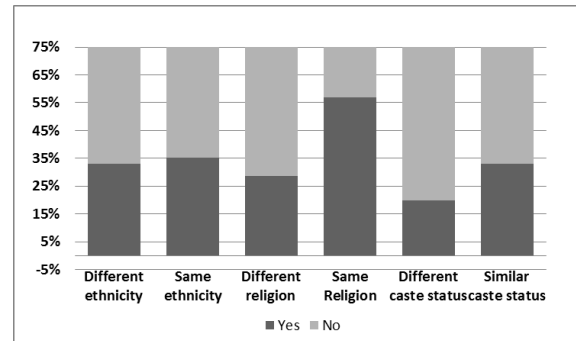


Results from the trust responses show that the tendency among respondents to trust those dissimilar to themselves is relatively lower. Figure 4.4 compares responses of trust placed in those belonging to the same ethnicity, same religion and same caste status as compared to that placed in those belonging to

<sup>80</sup> The PWVS asks trust questions in a slightly different manner, and for slightly different groups of people. Overall, however, according to the PWVS some 22.2% of respondents believe “people” can be trusted, which is expectedly lower than my finding of 33% of respondents who believe “Pakistanis” can be trusted.

different ethnicities, religions and caste statuses. Belonging to the same versus different ethnicity does not dramatically alter the level of trust but the disparities between *bonding* and *bridging* social capital based on religion and caste status are striking. Over 57% of respondents trust those belonging to a similar religion, against only 29% for those of a different religion. In fact, some 25% of those surveyed readily admitted they would refuse to work on a community project if members of a different religion were included. Likewise, 33% of households stated that they trusted individuals belonging to a similar caste status, with ranking based on classical texts on caste status as well as additional ethnographic work in the same villages<sup>81</sup>. Conversely, only 20% of respondents indicated that they thought members of castes with a different caste status could be trusted. Although the survey did not specifically ask about trust in other *biraderis* as a whole, comparing both these metrics to the 59% of people who thought members of their own kinship network could be trusted supports the proposition that *bridging* capital is indeed much lower than *bonding* capital in the sample.

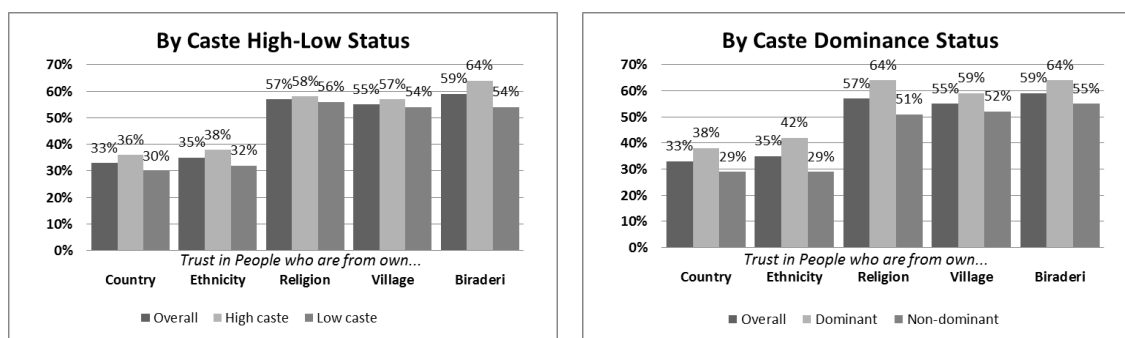
**Figure 4.4: Bridging trust - % households who trust...**



Is there evidence to suggest that social capital as measured by trusting behaviour, like the voluntary associations measure above, reflects societal hierarchies? To consider this proposition, I assessed responses to trust questions based on caste status. In particular, I first divided responses by high and low caste status as shown in the left chart of Figure 4.5. The chart confirms that individuals belonging to high caste groups in general display higher levels of trust than those belonging to low caste groups. These differences become starker when the responses are divided by dominant and non-dominant caste status, as shown in the right chart of Figure 4.5. Recall that a *dominant* caste has greater numerical strength, land ownership, economic status, or modern education as compared to other castes in a particular village. Importantly, in terms of local dynamics and therefore in substantive terms, the dominant caste status supersedes that of the traditional high and low caste status. Thus, in a particular village, it is possible that individuals belonging to a traditional low caste have greater power in a village than members of a traditional high caste group, and that this privileged status shapes their outlook on life. In general, I find that trust as a proxy for social capital is indeed skewed in line with pre-existing societal hierarchies. As Figure 4.5 reveals, the more privileged dominant caste groups display trusting behaviour at least 7 percentage points higher than non-dominant groups.

<sup>81</sup> High caste status individuals tend to be traditional landowners, while low caste status individuals tend to belong to groups that were traditionally landless. For a more detailed discussion on high and low castes, see the first two essays in this thesis.

**Figure 4.5: Trust Responses by Caste Status**



In sum, the trust measures of social capital corroborate the findings from the network measures. Overall, I find that *bonding* social capital is at somewhat moderate levels in my sample, as opposed to *bridging* social capital which is considerably lower.

## 4.4 Social Capital and Educational Outcomes

The second line of inquiry in this paper is concerned with understanding the relationship between social capital and educational outcomes. The previous section established, on the basis of several proxy indicators, that social capital is likely to be at moderate levels in my sample of rural communities. To address whether this moderate level of the phenomenon has facilitated collective action surrounding education, in this section I present empirical analysis using mixed methods. I begin by first describing the estimation strategy of my quantitative analysis in particular. Next, I present the results of this analysis to show that there are weak, often mixed, associations between my two parameters of interest. I corroborate these findings with in-depth case analysis of the two communities displaying the highest social capital in my sample to explain how high social capital in some instances can result in overall lower community welfare.

### 4.4.1 Quantitative Analysis

#### *Empirical Strategy*

I use two dependent variables in my quantitative analysis. The first education variable I consider is Enrolment, which is a binary indicator of whether school-going age children in the sample were enrolled in school at the time of the survey. The second variable is Ever Attended, which is a binary variable that reflects whether any household member aged 6 or above has ever attended school.

To measure social capital I rely on four proxy variables selected from the analysis in the previous section, each of which I measure at the kinship group level as this is the level at which collective activity is most likely to occur. For networks in particular, I consider the average of number of group memberships held by households in each kinship group. In addition, I also consider the more context-

specific proxy indicator of daily interaction, which measures the proportion of households in each kinship group that visit members of their own *biraderi* daily. For my measures of trust, I use the two measures of *particularized* trust in members of own (1) *biraderi* and (2) village, again measured at the kinship group level. My four measures are only weakly correlated with each other, which is why I include them separately in my analysis instead of using an index as is common in the empirical work.

Unless otherwise stated, results in this paper are estimated using a nonlinear probit regression model with the following specification:

$$EDUC_{ijkv} = \alpha + \beta_1 SOCCAP_k + \beta_2 INDV_{ijkv} + \beta_3 SES_{jkv} + \beta_4 VILLAGE_v + \varepsilon_{ijkv} \quad (1)$$

Where, EDUC is a binary indicator of being currently enrolled in school or of ever attending school, for individual *i* from household *j*, kinship group *k* in village *v*. SOCCAP is one of the four measures of social capital mentioned above. INDV is a vector of individual level characteristics such as caste status<sup>82</sup>, gender and age, SES is a vector of socioeconomic indicators for household *j* such as assets, income, landowning status and number of children in the household while VILLAGE captures differences in caste and land ownership heterogeneity in the villages.

### Quantitative Results

Before running these regressions, I performed preliminary analysis by correlating my two dependent variables with my four proxy indicators measured at the kinship group level. The results generated are reported in Table 4.3. I find that group membership measure is significantly associated with the parameter Ever Attended. Other than this measure however, surprisingly, the rest of the indicators of social capital are not significantly associated with either of my dependent variables.

**Table 4.3: Correlation between Social Capital and Education Indicators**

		Indicator	Enrolment Ages 6 to 17	Ever Attended Ages 6 & above
<b>Network Measures</b>				
1.	No. of group memberships	<i>Corr</i>	0.0624	0.0471*
		<i>N</i>	650	2286
2.	Daily visits to biraderi	<i>Corr</i>	-0.0734	0.0163
		<i>N</i>	650	2286
<b>Trust Measures</b>				
3.	Trust in biraderi	<i>Corr</i>	-0.0319	-0.0124
		<i>N</i>	650	2286
4.	Trust in village	<i>Corr</i>	0.0084	0.0360
		<i>N</i>	650	2286

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

<sup>82</sup> Caste groups are classified as High or Low status. To see a more detailed discussion on challenges associated with this static conceptualization of caste, see Introduction and Essay Two of this thesis.



To consider whether this lack of association continues to hold even after conditioning on a variety of individual, household and village level covariates, I ran regressions based on the specification outlined earlier. Table 4.4 reports these results. Columns (1) through (4) introduce the four measures of social capital individually, while column (5) includes all four together.

**Table 4.4: Probit Regression: Currently Enrolled (Ages 6 to 17) as Dependent Variable**

	(1)	(2)	(3)	(4)	(5)
<b>Network Measures</b>					
# of group memberships	0.002 (0.207)				-0.051 (0.246)
Daily visits to biraderi		-0.228 (0.425)			-0.214 (0.447)
<b>Trust Measures</b>					
Trust in biraderi			-0.505 (0.299)*		-0.607 (0.452)
Trust in village				-0.270 (0.285)	0.155 (0.465)
Pseudo R2	0.14	0.14	0.15	0.15	0.15
N	634	634	634	634	634

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ; Robust standard errors in parentheses.

All regressions include Individual and SES controls for belonging to a low caste, belonging to the village dominant caste, gender, age, education of household head, land ownership status of household, number of school-age children in household, proxy of household income, a household asset index, and an indicator of wealth relative to other households in the village. All regressions also include village controls for a measure of caste fractionalization in the village an individual resides, and a dummy indicator of whether an individual resides in a landlord-dominated village.

Contrary to the optimistic findings in much of the social capital and education literature, my findings show little support for the proposition that social capital is significantly correlated with enrolment of school-going age children. After adding in my controls, I find that only the Trust in Biraderi indicator is significantly associated with enrolment in column (3) at the 10% level, although counterintuitively the coefficient on this variable is negative, and its significance disappears when all four measures of social capital are included together in the final column<sup>83</sup>.

I replicated these regressions for all individuals aged six and above in my sample in Table 4.5. After conditioning on my covariates, the analysis indicates that two of the four proxy indicators of social capital are significantly associated with the dependent variable Ever Attended. The proportion of individuals in a particular kinship group who visit their kinsmen daily is positively correlated with attending school at the 1% level both when the metric is included individually and also when all measures of social capital are included. In contrast, the other significant proxy measure of social capital, Trust in Biraderi, has a negative correlation with Ever Attended – this association is significant at the 5% level. This latter finding is not only contrary to the theoretical predictions made in the social capital literature, but also stands in direct contrast to the results of Yamamura (2011) who reports that trust in particular is a key determinant of long-term truancy in Japan.

<sup>83</sup> In an alternative specification, I clustered errors at the biraderi level and this specification yielded similar findings.

**Table 4.5: Probit Regression Ever Attended School (Ages 6 and Above) as Dependent Variable**

	(1)	(2)	(3)	(4)	(5)
<b>Network Measures</b>					
# of group memberships	0.042 (0.096)				0.023 (0.110)
Daily visits to biraderi		0.812 (0.253)***			0.857 (0.259)***
<b>Trust Measures</b>					
Trust in biraderi			-0.560 (0.185)***		-0.634 (0.258)**
Trust in village				-0.198 (0.165)	0.033 (0.262)
Pseudo R2	0.29	0.29	0.29	0.29	0.29
N	2,223	2,223	2,223	2,223	2,223

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ; Robust standard errors in parentheses.

All regressions include Individual and SES controls for belonging to a low caste, belonging to the village dominant caste, gender, age, education of household head, land ownership status of household, number of school-age children in household, proxy of household income, a household asset index, and an indicator of wealth relative to other households in the village. All regressions also include village controls for a measure of caste fractionalization in the village an individual resides, and a dummy indicator of whether an individual resides in a landlord-dominated village.

What could be driving these mixed results? Social capital theoretically works by increasing the levels of collective activity within the communities that possess a higher stock of it. To check whether this was the case in my sample villages, I correlated my measures of social capital to responses indicating whether the household believed collective action surrounding education was possible and also whether the household had participated in collective action for the village's welfare in any area in the past. I found weak associations between my measures of social capital and collective action (results omitted), suggesting that social capital in my sample did not noticeably drive collective activity.

#### *Robustness Checks*

I view the above statistical findings as suggestive rather than deterministic due to challenges associated with endogeneity – omitted variable bias and reverse causality in particular - found in much of the quantitative analysis on social capital. Although the presence of omitted variable bias in my analysis cannot be ruled out completely, my inclusion of a diverse set of controls based on the education and social capital literature implies that this bias is likely to be limited in my models. Conversely, tackling the possibility of reverse causality poses a larger challenge. While I assume causality runs from social capital to education outcomes, this may not necessarily be the case as several authors have shown that education itself is a significant determinant of social capital (see Delhey and Newton 2003; Huang et al. 2009). In the absence of a valid instrument, readers are thus advised to exercise as much caution in interpreting the correlations presented in this paper as causal as they do for other similar contributions in the field.

Besides the above challenge, one of the other most commonly cited problems in empirical research of this kind, as mentioned earlier, is related to how social capital is measured. But, there are two reasons why I would argue it is highly unlikely that my mixed results are due to my social capital indicators being unsuitable. First of all, recall that I selected some of the most direct metrics of social capital based on growing consensus in the established literature (see for e.g. Serra 2011; Schuller et al. 2000; Svendsen and Svendsen 2009). Second, unlike a lot of the cross-country research on social capital which assumes that social capital manifests itself in exactly the same indicators across the world, I instead also customized measures based on findings from my qualitative research. Consequently, my indicators related to closeness and trust in one's own kinship group, as shown in the previous section, reflect the qualitative reality of rural Pakistan's social organization by incorporating the social network that is commonly the vehicle of collective action at this level. The fact that my measures are consistent with those used by authors such as Pargal et al. (1999), Krishna (2002) and Adhikari and Goldey (2010) who have found social capital to be a significant determinant of collective waste management, economic development and the sustainability of community groups, respectively, in the largely similar rural contexts of Bangladesh, India and Nepal adds further credence to the conclusions that I draw.

There are nonetheless some scholars who contend that *generalized* trust is a better measure of social capital than is *particularized* trust – to check this proposition, I added Trust in Pakistanis to my list of social capital metrics. In addition, there is a growing consensus in some circles that *bridging* capital is more important than *bonding* social capital for collective activity – to check this particular proposition, I added Trust in People of a Different Religion to the list of independent variables. The use of these alternative metrics did not alter my findings (results omitted). Another suitability problem could arise as a consequence of the level I am measuring social capital at - most other empirical work measures the notion at either the level of the household, village, or country not at the level of the kinship group. Running my regressions again by using social capital measures aggregated at the level of the household and at the level of the village, however, did not change my conclusions, although of course the latter did reduce variation in social capital metrics from being across 30 kinship groups to being across just eight villages or communities.

That said, even if my selected indicators are appropriate for capturing social capital in this context, the quality of data may raise two additional concerns that need to be addressed here. The first and more obvious one is related to the fact that all of the social capital measures were self-reported by respondents, who could have deliberately manipulated their responses<sup>84</sup>. Yet this is a challenge in almost all empirical work of this kind, and therefore affects my findings to the degree it affects all

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<sup>84</sup> Recall though that my statistics are broadly consistent with those reported in PWVS 2012.

scholarship based on self-reported survey answers<sup>85</sup>. The second data quality concern is related to the interpretation of my survey questions. Questions about social capital often assume that not only do respondents interpret key terms in the correct manner, but that they are also capable of identifying and measuring what is being asked about (Serra 2011; Welter and Alex 2012).

In this regard, I am less concerned about the interpretation of the membership and daily interaction questions as they were relatively straightforward, but the trust questions certainly merit some additional discussion. My survey was designed in English and then translated into the local language by an Urdu writer, who had previous experience in translating questionnaires from English to Urdu. The translator chose the phrase “*bharosa karna*” for trust in. According to the dictionary, the phrase “*bharosa karna*” translates to: to trust in, have confidence in or to believe in. The word was chosen over other Urdu alternatives due to its common usage in spoken Urdu (commonly known as *salees* Urdu), and hence our belief that respondents would be less likely to require further definitions of the term. To ensure the phrase was adequate for its purpose, I pre-tested the survey instrument with a small set of respondents, and followed this pre-testing with a focus group to discuss any semantic issues that presented themselves. Participants offered the Urdu synonyms of “*aitbaar*”, “*yaqeen*” and “*aitmaad*” for “*bharosa*”, which all roughly translate to believing in or having confidence in the reliability of a person or thing. These synonyms were in line with the intention of the survey as well as with commonly used definitions of the term in the scholarship (see Lyon et al. 2012). Besides the pre-testing, I used the same term in the multiple face to face semi-structured interviews that I personally conducted. As someone who comes from a similar culture as the key informants, I was able to confirm from our conversations that their conceptualization of “*bharosa*” was similar to the meaning I had expected it to convey. Though it is not possible in any empirical work of this sort to completely rule out the possibility that some respondents had dramatically different personal interpretations of “*bharosa karna*”, I found the tendency for respondents was to interpret it in an adequate fashion.

Regardless of the above, one could still argue my sample size is too small or that my data is in some other way lacking, which is then affecting my conclusions. Thus, as a final method of validation, I ran regressions similar to the specification above using data from the Pakistan World Values Survey, which was collected in the 2012 wave. The dataset contains nationally representative attitudinal information for 1200 households and has been used extensively in cross-country work on social capital. Although the exact variables from my specification are not available in this dataset, I regressed two measures of education – Literacy and Completion of Secondary Education – first on the number of voluntary groups a household has membership in and second on whether the respondent

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<sup>85</sup> See also the Appendix to this thesis, which details the measures taken to ensure quality of data collected.

believes people can be trusted in general. These specifications controlled for gender, age, size of household, ethnicity of household and income bracket (omitted for the sake of brevity). The results from this exercise were consistent with the findings I presented above – the included measures of social capital were not significantly associated with educational outcomes.

#### 4.4.2 Qualitative Analysis

To corroborate these mixed statistical results further, I selected the two villages displaying the highest levels of social capital in my sample, as measured using an average of the four proxy indicators given earlier, for an in-depth comparative case study. My two case study villages – denoted Village A and B<sup>86</sup> - are both based in the Hyderabad, a district originally founded in 1768 on the site of a small fishing village. Today, Hyderabad comprises of the second largest city in Sindh in addition to a fertile rural area, commonly referred to as Hyderabad rural. Cultivation in Hyderabad rural is dependent on canal irrigation from the Indus River, which flows alongside the district.

A single lane road branches off from the highway to the northeast of Hyderabad city to lead us to Village A, the first site of my in-depth case analysis. Village A was a settlement of approximately 325 households whose residents traced its history back to the early 1900s when the area was dominated primarily by wealthy, educated upper caste Hindus. During independence from the British Raj in 1947, the majority of these upper caste Hindus migrated to India leaving behind two main kinship groups: (1) a high caste Shiite Muslim group, which comprised over 80% of the village's residents as the dominant caste, henceforth denoted *Dominant-A*, and (2) a low caste Hindu group descended from the untouchables or *Dalits*, which constituted about 12% of the village population, henceforth denoted as *Caste-A1*. *Dominant-A*, as expected, owned the majority of land in Village A, which was more or less equally distributed among its members.

Some 10km away located just off the site of a railway station we find Village B, a relatively smaller settlement at just over 250 households. Respondents claimed the village likewise dates back to at least the early 1900s, when the British Raj decided to develop cross-country railroad links to connect seaports in the South to Northern parts of the country. Unlike Village A, at least eight different kinship groups resided in Village B. Most of these groups were traditionally considered as belonging to the low caste status, although the members of many had long possessed cultivatable land in this particular village. The caste with the most political power in Village A was a low caste Sunni Muslim kinship group. This caste comprised approximately 40% of the households and is henceforth denoted as *Dominant-B*. The second and third largest groups in Village B in terms of population were also low caste status Muslims descended from traditional fisherman and from household servants of

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<sup>86</sup> Note that Village A corresponds to Village 6, and Village B corresponds to Village 5 as categorized in the rest of the PhD essays and in the Appendix.

landowners, denoted as *Caste-B1* and *Caste-B2* respectively. Interestingly, the village had a handful of households who belonged to a high status caste that claims to be descendants of the Prophet Muhammad - however, according to informants these households stayed out of village life and politics almost completely.

**Table 4.6: Comparative Statistics of Villages**

	Village A	Village B	Overall Sample
<b>N</b>			
Estimated # of households in village	325	250	2525
Number of households surveyed	46	45	353
<b>Descriptive Statistics</b>			
% Deriving income from agriculture	59%	56%	55%
% of electrified households	96%	91%	93%
Average household size	6.7	7.2	7.1
Average number of rooms in house	2.4	2.6	3.0
<b>Network Measures</b>			
Average # of Groups	0.7	0.7	0.5
% who visit biraderi daily	41%	76%	55%
<b>Trust Measures</b>			
Trust in village	76%	75%	55%
Trust in biraderi	89%	62%	59%
<b>Education Outcomes</b>			
Enrolment (6 to 17)	72%	51%	62%
<i>Dominant</i>	72%	67%	70%
<i>Non-dominant</i>	75%	38%	56%
Ever attended (6 and above)	76%	57%	68%
<i>Dominant</i>	75%	77%	76%
<i>Non-dominant</i>	79%	43%	60%

### *High Social Capital in the Two Communities*

Even before examining the results of the household survey, it was obvious that social capital was high in Village A. Informants spoke highly of each other, declared they blindly trusted their community members, and narrated multiple instances when they had cooperated to solve a variety of village problems. As expected, results from the survey corroborated this view. As shown in Table 4.6, approximately 89% of respondent households claimed to have high levels of trust for their fellow kinsmen and 76% stated they trusted inhabitants of their village – these figures are well above the sample averages of 59% and 55% for own *biraderi* members and fellow villagers, respectively. Although the proportion of households that visited their *biraderi* daily was unexpectedly low at 41%, over 90% responded that they were close to their kinsmen against a sample average of 79%.

Many scholars argue *bridging* capital established through wider civic engagement is more likely than narrower *bonding* capital within one's primary network to foster trust and facilitate collective action (see Granovetter 1973; Narayan 1999). Was there evidence of bridging capital in Village A? While

the broader sample average for trusting those from a different religion is 29%, in Village A the average stood at approximately 50%. In line with Putnam, regular interaction between the Muslim and Hindu groups in this village had fostered trust and built distinct norms of reciprocity, particularly with respect to social contact and gift-giving. A retired university professor from *Dominant-A* explained his kinship group's interaction with the Hindu *Caste-AI* as follows:

“We mix freely here – we celebrate *Diwali* with them, they observe *Muharram* and celebrate *Eid* with us. We go to each others' weddings. In fact, the community elders might miss a function of someone from our own caste, but never a single function of *Caste-AI*'s weddings.”

Slightly later in the interview, he contemplated on why this was, arguing at one point:

“Part of it is that we know what it is like to be discriminated against. Before independence, we Muslims were subservient to wealthy Hindus (referring to circumstances in Village A in particular). And even today, as Shias we continue to be treated as different.” He added at another point: “We realize that the government is not doing much for us so we have to work together ourselves as a village unit to get what we want. As a result, this camaraderie across our *biraderis* has increased over time. Our great grandparents may not have willingly sat on the same *charpoy* (a woven bed or bench) as a *Caste-AI* member, but we now do it all the time because we know better.”

Camaraderie was less obvious on initial interaction with informants from Village B. Nevertheless, during my interviews I learned that each of the multiple kinship groups in the village were closely knit and a number of collective initiatives had been undertaken, particularly by the dominant caste group. In addition, as reported in Table 4.6, Village B displayed similarly high levels of *bonding* social capital when measured using the responses from the representative household survey. Some 62% respondents stated they trusted members of their own *biraderi*, with 75% displaying trust in fellow villagers – both metrics are lower than Village A but much higher than the overall sample average. Moreover, in contrast to Village A's lower levels of interaction, overall 76% reported visiting members of their kinship group on at least a daily basis.

There was some evidence that Village B possessed moderate levels of *bridging* capital as well, albeit it manifested rather differently here than it did in Village A. Instead of cross-cutting links maintained through frequent social interaction and norms of reciprocity, different kinship groups interacted with each other almost exclusively through their *biraderi* heads in a manner consistent with long-held historical traditions. In addition, the village displayed a strong hierarchy with dominant caste members at the top, and non-dominant members at varying lower levels based on their traditional

position in the village economy<sup>87</sup>. To explain how this hierarchy worked, the *biraderi* head of *Dominant-B* stated:

“All the *biraderis* in the village have a head, even *Caste-B1* and *Caste-B2*. If there is a problem between our members and theirs, then their head will come to me and I will help resolve the issue.”

#### *Divergent Schooling Outcomes Across the Communities*

In spite of the presence of high social capital as measured using my proxy indicators, schooling outcomes were markedly different in quantitative as well as qualitative terms in the two villages. Quantitatively, enrolment indicators were substantially higher in Village A as compared to Village B, standing at 72% for the former and 51% for the latter against a sample average of 62%. Similar disparity was evident in the Ever Attended figure as well as shown in Table 4.6. The results, when these statistics are examined separately for dominant and non-dominant castes in both villages, are even more revealing. In Village A, enrolment numbers for both groups were almost at par, while in Village B about a 30 percentage point difference existed in both enrolment and ever attended statistics between the dominant and non-dominant castes.

The qualitative differences between the government schools in the two villages were just as severe. Village A had one of the best maintained school premises I saw across my sample, whereas Village B had easily the worse overall. Village A's school stood on a large piece of land in the centre of the village. Its multiple classrooms were housed in a permanent structure, each room was furnished with desks and chairs, classroom walls were decorated with student artwork and posters, and each student appeared to have individual access to textbooks. When I visited, about a dozen members of school staff were present, either teaching or working on school premises. The school also had working toilet facilities, filtered drinking water for staff and students, and a small playground on the grounds.

Housed in a semi-permanent structure, the government school in Village B in contrast was cramped, lacking in basic infrastructure such as desks and drinking water and badly in need of repair. Due to the precarious condition of the roof of two classrooms, classes were being conducted outside in the school yard. Teachers were reported to be commonly absent, which meant if students for their classes attended they were asked to join whichever class had a teacher present. Moreover, in spite of recent province-wide drives to provide free textbooks to all government schools, in Village B on average I observed five children crowded around a single book.

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<sup>87</sup> Note that this hierarchy did not alter the caste status ranking position of the dominant caste in this particular village, which according to traditional standards was not a landowning caste and thus continued to be considered a low status caste group in spite of its dominance in the village. See also discussion on ethnicization of caste in Introduction of thesis.



### *Collective Action and the Downside of Social Capital*

Can the education outcomes of these villages be explained substantively by social capital alone? Ostensibly both villages had high levels of social capital as measured using commonly accepted proxy indicators. Theory suggests that this high social capital should lead to collective action surrounding education, which in turn should improve educational outcomes similarly in both villages.

In Village A, high social capital corresponded with greater collective action in line with theoretical predictions. Caste *Dominant-A* supported the local government school as a community by not only raising funds to build extra rooms and make repairs, but also by ensuring teacher absenteeism was kept low. High levels of trust and informal sociability in the *biraderi* facilitated this collective activity, while group norms and sanctions served to ensure that all members cooperated for mutual benefit. Collection of funds for the school and other cooperative initiatives for example were announced during informal gatherings in order to leverage the group's strong social ties. Meanwhile, prominent members of this kinship group donated heavily to the school, thereby setting social norms for other members to follow. Moreover, because almost 85% of the teaching staff in the local school belonged to the same predominant *biraderi*, parents frequently questioned and sanctioned these teachers at these same gatherings if they were reported to be shirking their teaching responsibilities.

The other kinship groups in Village A benefited from the collective action of *Dominant-A* directly through improvements in the school. In addition, the moderate levels of *bridging* capital also meant that concerns raised by non-dominant caste parents to school management were addressed productively. A telling example was how the head teacher had recently handled complaints of discrimination in grading against *Caste-AI*. To illustrate, this head teacher called in a young *Caste-AI* boy from Class six to his office and asked him to narrate his experience in the previous month to me. The boy told me he had recently taken second place in a Mathematics test, but felt that he deserved the first. His parents thus approached the head teacher directly to intervene. Upon investigating, the head teacher noted both the first and second place students had gotten just one question wrong but since both had shown their calculations correctly, they should have received the exact same marks. The next day, the head teacher claimed, he had called a meeting of all teachers and had personally revised these marks, giving the *Caste-AI* boy a joint first.

High social capital played out rather differently from the theoretical predictions in Village B, where due to the local political dynamics of the village several phenomena commonly associated with the dark side of social capital manifested themselves. One of the most prominent of these was the role of social capital in enhancing disparity across the various groups, or between the dominant caste and the non-dominant castes in particular. Unlike Village A where dominant and non-dominant caste children attended the same government school, in Village B *Dominant-B's* offspring instead attended a

religious school. Interestingly, this religious school was not only where the collective activity of the dominant caste was focused, but rumours also prevailed that government funds earmarked for the village's public school were surreptitiously being diverted to this religious school. As compared to the government school, this school was certainly well maintained. The building was permanent, rooms were equipped with carpets and ceiling fans, children appeared to have access to textbooks, and at least five teachers were present and teaching when I visited. Because this religious school only extended to grade five, informants reported that *Dominant-B* had collectively arranged for transport to take older children from their caste to a well-equipped school in a neighbouring village. High social capital and the corresponding high collective action for schooling by the dominant caste had thus entrenched exclusion and increased inequality rather than fostering cooperation in the community.

Interestingly, based on my proxy indicators, social capital was substantially higher among *Caste-B1* and *Caste-B2* than it was in *Dominant-B*. Why then were they unable to convert their mutual trust and sociability into tangible improvements for schooling in the same way the dominant caste had? Because within their own kinship networks, these groups had relatively fewer financial and political resources to tap in order to compensate for their marginalization by the dominant caste. Moreover in interviews, members of these caste groups also highlighted the hierarchical nature of village politics between themselves and the dominant caste. In line with the literature (see Srinivas 1959), this hierarchical relationship had resulted in a longstanding pattern of economic, political and social subservience of non-dominant castes to the powerful *Dominant-B*. And due to this subservience, these caste groups either continued to send their children to the poorly equipped village government school or kept them from away from schooling altogether<sup>88</sup>.

Besides this hierarchical dynamic between dominant and non-dominant castes in Village B, there was also evidence that collective action even within the dominant caste was not necessarily the sole consequence of trust fostered through contact and horizontal cooperation as the proponents of social capital would have predicted. Rather, it appeared that the hierarchical relationship within the dominant caste was even more important than the hierarchical relationship across castes. The key patron in the village was the traditional head of *Dominant-B*, who held an ascendant position because he was a politically well-connected member of the civil service. This head's prominence reflected in several results of my survey – for instance, 90% of respondents named him as the key village notable. In addition, approximately 89% of those answering agreed they would place confidence in this village notable in the event of an emergency, family need or for public good provision as opposed to only 55% stating they trusted the government to support them in similar instances. That they would do so was not surprising – according to residents, this patron had extensively facilitated collective activity

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<sup>88</sup> See also the detailed discussion on dominant caste politics in this Village in Essay Three of this thesis, where Village B is denoted as Village 5.

for improving facilities in Village B through either leveraging his personal connections, providing financing through his own resources or playing a leadership role in the collective effort himself.

But not all actions of this patron were motivated out of altruistic concern for the community. On the contrary, in hushed tones two informants highlighted that these actions were founded in an elaborate system of patronage in the village, which was controlled by this *biraderi* head. This patron, due to his elite status, had captured many of the village's resources and was in the habit of trading targeted favours either for monetary benefits, for votes for his preferred politician or for access to other resources that could be traded. With respect to education, such targeted favours often included allowing non-dominant children to attend the religious school, or helping individuals land jobs in government offices or in the households of government officials after completion of schooling, all for the right exchange of resources. Several parents confirmed the prevalence of this phenomenon in which rent-seeking in *Dominant-B*, and particularly by the caste's head, had reduced welfare for children of not only non-dominant castes, but also for children of dominant caste members who had fallen out of favour.

Admittedly, in both villages, a myriad of other factors appeared to have also contributed to the divergent outcomes. On the face of it, in line with a large scholarship, the degree of caste fractionalization in the two villages, for instance, corresponded inversely with educational outcomes whereby the less fractionalization Village A performed better than the more fractionalized Village B<sup>89</sup>. In addition, outside intervention from a notable NGO in Village A had served to support the community in working collectively for improving the quality of the school, while Village B had not benefited from such an intervention. The role of individual agency in facilitating this collective action was prominent in both villages as well. In Village A, community leaders - including a retired university professor, an ex-mayor and the school head teacher - had all mobilised their personal resources altruistically for the benefit of their community. These leaders excelled in not only organizing cooperative efforts for the Village, but also in tapping their personal political connections to get their local school selected for key federal and provincial pilot programmes. In Village B, collective action relied primarily on the agency of *Dominant-B's biraderi* head. This leader, in contrast to community leaders in Village A, leveraged his connections more for personal gain, and less for the village's collective benefit.

In sum, the findings of my community-level case studies are consistent with my broader statistical results –I again find mixed evidence in support of the many optimistic predictions made in the social capital literature. My cases contrast two villages with high social capital as measured using commonly

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<sup>89</sup> See also Essay Three of this thesis.

accepted proxy indicators, yet with markedly differing educational outcomes to show that social capital by itself is probably neither a necessary nor sufficient condition for improving collection action surrounding education. On one hand, in Village A, I find that the expected theoretical relationship holds – high social capital is accompanied by extensive collective action surrounding education, and greater enrolment figures. This positive outcome, nonetheless, is likely also facilitated by other factors such as the degree of caste homogeneity, outside intervention and human agency present in Village A. In Village B, on the other hand, I show that high social capital is accompanied by poor education outcomes driven partially by the downside of social capital. Greater collective action within the dominant caste of the village has certainly improved outcomes for this particular caste, but has at the same time excluded other groups in the village from the benefits of this collective activity. Moreover, collective action in Village B appears to be embedded in a wider system of village politics and patronage– politics through which the hierarchical relationships between dominant and non-dominant castes, as well as vertical relations within the dominant caste have both influenced who benefits in the village and who does not.

## 4.5 Conclusion

This paper contributes to the empirical literature on the role of social capital in enhancing educational outcomes, as well as extends the more specific scholarship that highlights the inadequacy of the concept in explaining collective action across different contexts. Through analysis of original quantitative and qualitative data from rural Pakistan, I use multiple proxy indicators to demonstrate the presence of moderate levels of *bonding* capital within kinship groups together with relatively low levels of *bridging* capital across kinship networks and between people of different religions. Yet, I find little evidence to support the proposition that social capital plays a significant role in the improvement of educational outcomes such as enrolment. While the lack of correlation between these two parameters in my statistical analysis is admittedly suggestive rather than deterministic, my case studies of two communities further support the proposition that social capital by itself may not be a sufficient or necessary condition to alter local collective activity.

My results have important implications, both with respect to research and policy. Where the academic scholarship is concerned, my findings highlight the challenges associated with relying on measures of social capital that do not account for either the downside of the notion or for the wider political dynamics in local communities. Even measures of social capital that arguably proxy for its essential dimensions, are context-specific, and take local asymmetries into account are shown to be inadequate in explaining collective activity for education provision in my case studies. My analysis instead suggests that hierarchical relationships both across and within kinship groups, combined with factors

such as human agency and outside intervention are much better in explaining whether and what kind of collective action will occur. Due to this finding, the overreliance of the literature on quantitative analysis of the relationship between social capital – measured using a variety of similarly reductive indicators - and an array of community outcomes should be concerning. A more productive line of inquiry for this type of research going forward perhaps would be to move away from the quantitative testing of whether the umbrella term social capital leads to collaboration, towards the consideration of which particular forms of social relations are more likely to foster collective activity and under what conditions. This of course is an aspect I consider in detail in a companion paper to this essay<sup>90</sup>.

The key implication of my results for policy is that interventions that focus solely on social capital in the hope that it will facilitate the right kind of collective action may have limited benefits. In recent years, the international development debate has increasingly placed the local community at the centre of progress, which has resulted in the implementation of various initiatives that aim to facilitate local collective activity. One commonly advocated policy solution in this vein is the institution of local participatory associations. This was for instance the case in the 2001 decentralization reform in Pakistan as well, which on paper implemented a variety of such associations in the hope that they would mobilize the community and enhance accountability of the government. However, as my attempt to measure this type of civic activity in rural Pakistan illustrated, these kinds of policies often prove unsuccessful. Such bodies not only tend to remain underutilized in many developing nations because they are not a familiar vehicle for local cooperation, but often also end up replicating existing hierarchies if implemented. An alternative policy solution recommends co-opting existing mechanisms of collective activity already present in developing countries. While a much better alternative than the former option, again this policy solution is unlikely to foster broader development of the community unless the projects implemented take a more holistic view of social capital – a view that steps away from static conceptualizations and instead attempts to capture the micro-level dynamics that are often vital to understanding how local collective activity is facilitated or hindered.

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<sup>90</sup> See Essay Three of this thesis.

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## Appendix A: Research Methods

### Outline

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## **A.1 Introduction**

The purpose of this Appendix is to describe fieldwork carried out to address the multiple research questions explored in this PhD essay collection. Fieldwork, as already mentioned in the essays, was conducted in eight villages in rural Pakistan during 2012, and involved a combination of approximately 350 household surveys and over 65 semi-structured elite informant interviews. Given that details on the specific data analysis techniques used have already been explained in the relevant essays of this collection, this Appendix focuses primarily on providing additional details on the processes of instrument design, sampling, data collection and validation.

This annexure is structured as follows. Section A.2 outlines the mixed methods design of the study; Section A.3 explains the construction and validation of the two key instruments used to gather data; Section A.4 describes the sampling strategy employed to select both the sites of study and the actual participants included in the research; Section A.5 discusses implementation; Section A.6 summarizes how data was prepared for analysis, focusing in particular on how statistical information was collated into a database and validated; Section A.7 highlights the four main challenges faced during fieldwork; and Section A.8 provides a break-up and mapping of the *biraderis* found in the full dataset. Appendix B supplements this annexure and contains all the instruments used during the course of fieldwork.

## **A.2 Study Design**

Many researchers view the quantitative and qualitative traditions as distinct, inherently different and often contradictory. In contrast, I take a slightly different stance in this PhD thesis. In line with a growing consensus (see George and Bennett 2005; Morgan 2007; Goertz and Mahoney 2012), I see the two approaches of quantitative and qualitative research as complementary. Both research traditions not only have the same overarching goal of making valid causal inferences, but the use of them together can be greatly beneficial for two specific reasons.

First, different research methods are often suited to answering different types of questions. Scholars argue, for instance, that the quantitative approach may be particularly appropriate in addressing queries related to the effects of causes, as well as for testing hypotheses generated from existing theories (Gerring 2004; Mahoney and Goertz 2006). At the same time, other authors contend that the qualitative approach often works better when exploring “How” and “Why” questions, and thus for examining the causes of effects (Punch 1998). George and Bennett (2005) further note the key advantages of qualitative case analysis over statistical methods as the ability to facilitate (a) new theory development (b) explanation of complex causal relations and (c) study of causal mechanisms. In this PhD, the combination of both approaches thus enables me to answer a greater variety of interrelated questions surrounding education, kinship groups, village dynamics, and collective action

than I could have addressed using a single method alone. Put differently, the use of mixed methods allows me to leverage the strength of each methodological tradition to provide a more comprehensive picture of the core research questions I attempt to answer.

Second, the use of mixed methods permits critical methodological triangulation (see Tarrow 1995; Lieberman 2005; Hussein 2009). By mixing large N cross-case analysis characteristic of quantitative analysis with small N within case analysis typical in qualitative work, in this PhD I am able to provide the benefits of statistical transparency and generalization on one hand, and rich and nuanced understanding of my propositions on the other. This added layer of analysis provides a level of credibility to findings, the importance of which should not be underestimated. The field of international development is messy, relationships between different variables are complicated and data - whether quantitative or qualitative - are seldom perfect. In such a scenario, the ability to arrive at similar conclusions using distinct, yet just as valuable, methods provides significantly greater support for my findings. By definition, furthermore, this methodological triangulation pushes researchers to begin their examination by considering existing work available in not just one but both traditions. This exploration of existing knowledge regardless of methodological design, in my view, adds further propositional depth to the hypotheses I generate and test in this piece of mixed methods research.

Each of my empirical essays poses different questions surrounding my key research interests. As a consequence, in each essay I utilise quantitative and qualitative techniques in a slightly different manner. Table A.1 summarizes my essays by displaying the explicit and implicit questions they seek to address together with the distinct approaches used to address them. More details on these elements are of course available in the essays themselves, while details on data collection processes are provided later in this Appendix.

**Table A.1: Summary of Research Questions and Methods by Paper**

Essay	Empirical Questions Addressed	Methods Used	Description
<b>Paper 1</b> <b>Does Pakistan have a Caste System? A Critical Examination of the Nature of Pakistani Kinship Groups</b>	Is the kinship group system of Pakistan closer to a system of caste or class?	Theoretical	Critical review of literature Systematic comparison of characteristics of caste system according to “book-view” and “field-view” with characteristics of Pakistan’s <i>biraderi</i> system
<b>Paper 2</b> <b>A Neglected Dimension of Stratification: The Influence of Caste on Education in Rural Pakistan</b>	What role, if any, does an individual’s caste play in determining educational outcomes?	Quantitative	Multivariate regression to quantify extent of disadvantage using: $EDUC_{ijk} = \alpha + \beta_1 LOWCASTE_{jk} + \beta_2 INDV_{ijk} + \beta_3 SES_{jk} + \gamma_k + \varepsilon_{ijk}$ <p>Where, EDUC is an education outcome for individual i from household j and village k. LOWCASTE is a dummy variable indicating whether the household belongs to a low caste, referenced against the high caste group. INDV is a vector of individual level characteristics. SES is a vector of socioeconomic indicators for household j, while the final term captures village effects.</p>
	If it does play a role, then through what mechanisms does caste determine outcomes?	Qualitative	Elite informant responses on (a) presence of caste-based disparities in educational outcomes (b) factors believed to contribute to different outcomes among <i>biraderis</i>

Essay	Empirical Questions Addressed	Methods Used	Description
<b>Paper 3</b> <b>Caste Fractionalization, Land Inequality and Caste Dominance: Understanding the Drivers of Poor Educational Outcomes in Rural Pakistan</b>	What role, if any, do caste fractionalization, land inequality and caste power heterogeneity play in determining education outcomes?	Quantitative	<p>Multivariate regression to understand relationship between key parameters, using:  <math display="block">LIT_{ijk} = \alpha + \beta_1 FRAC_k + \beta_2 LL_k + \beta_3 FRACSQ_k + \beta_4 FRAC_k * LL_k + \beta_5 FRAC_k * DOM_{jk} + \beta_6 LL_k * DOM_{jk} + \beta_7 SES_{ijk} + \varepsilon_{ijk}</math> </p> <p>Where, LIT is a binary indicator of literacy for individual i from household j and village k. FRAC is a measure of caste fractionalization in the village where the individual resides, while FRACSQ is its square. LL is a dummy variable indicating whether the individual lives in a landlord-dominated village or not. FRAC*LL, FRAC*DOM and LL*DOM are interaction terms of caste fractionalization with the landlord status of the village; caste fractionalization with the dominant status of the household; and landlord status of village with the dominant status of the household, respectively. SES is a vector of individual level characteristics as well as an array of socioeconomic indicators for household j.</p>
	If they do play a role, then through what mechanisms do these parameters determine outcomes?	Qualitative	Paired, controlled case comparisons similar to Mills method of agreement/ differences
<b>Paper 4</b> <b>Can Social Capital Enhance Educational Outcomes? Empirical Evidence from Rural Pakistan</b>	What is the level of social capital in rural Pakistan?	Quantitative	<p>Summary survey responses to measure social capital</p> <p>Multivariate regression to understand relationship between education and social capital using:  <math display="block">EDUC_{ijkv} = \alpha + \beta_1 SOCCAP_k + \beta_2 INDV_{ijkv} + \beta_3 SES_{ijkv} + \beta_4 VILLAGE_v + \varepsilon_{ijkv}</math> </p> <p>Where, EDUC is an education outcome for individual i from household j, kinship group k in village v. SOCCAP is a measure of social capital. INDV is a vector of individual level characteristics. SES is a vector of socioeconomic indicators for household j while VILLAGE captures differences in caste and land ownership in the villages.</p>
	What role, if any, does social capital play in enhancing educational outcomes?		
	If it does play a role, then through what mechanisms does social capital enhance outcomes?	Qualitative	<p>Informant responses on collective action within and across kinship groups</p> <p>Comparative case study of two villages with high social capital but divergent education outcomes</p>

### A.3 Instrument Design

Two key instruments were used to solicit the data used in this thesis. The first of these instruments was a customized household survey, which elicited demographic, socioeconomic and educational attainment data. The survey instrument was designed specifically to address a lack of secondary data sources particularly on caste affiliation and social capital metrics at the *biraderi* level in Pakistan. The second instrument used was an interview guide, which solicited data on village history, facilities, agricultural conditions, as well as information on cooperation, trust and conflict within and across kinship groups. As expected, quantitative analysis in this essay collection relies almost entirely on the primary data collected using the survey instrument, while qualitative analysis is based on data collected using the latter interview guide.

#### A.3.1 Household Survey Design

The heart of any survey is the questionnaire. To construct an appropriate instrument, I first operationalized my research questions by creating an extensive list of the parameters needed to address them. In line with suggestions in the literature (see Krosnick and Presser 2008), I then located established, pretested survey instruments with similar themes and began adapting their questions or items (as they are technically known) for my own survey.

Additions related to the specific nature of my research of course had to be made from scratch particularly in the areas of caste affiliation, collective action, social capital and kinship group dynamics. When writing these additional questions, I closely followed recommendations made by authors such as Krosnick and Fabrigar (2014) and United Nations (2005) on (1) Wording and clarity of questions (2) Scaling of answer options and (3) Organizing questions and ordering answer options. As per convention, for instance, questions were kept short; five point scales were used for unipolar questions; and simpler questions were placed earlier in the questionnaire, with more sensitive items and demographic details appearing later on. Item writing for a survey is a fairly complex process and although I already had previous experience in the arena, I further prepared for this task by attending two courses on survey design.

A copy of the final survey instrument employed is available in Appendix B. Table A.2 outlines its ten sections and describes where the contents of each module were primarily adapted from. In particular, the following four surveys were used extensively as the basis for item writing:

1. Pakistan Social and Living Standard Measurement Survey (PSLM), which is a nationally representative survey of social indicators administered by the federal government of Pakistan annually since 2004. The contents of this survey are

consistent with the World Bank's guidelines outlined in the Living Standards Measurement Study (LSMS) and contains variables on outcomes such as health, education, economic activities, and housing, etc.

2. Learning and Achievement in Punjab Schools (LEAPS) household survey, which is one of the several instruments used in the LEAPS project that was administered jointly by the World Bank, Harvard University and the Punjab Government in the province of Punjab, Pakistan in the 2000s. The survey was conducted in order to assess the status and quality of education in rural Pakistan and all instruments were pretested locally. The household survey in particular solicits demographic, socioeconomic and educational attainment data.
3. World Values Survey (WVS), which is an established global attitudinal survey that covers indicators such as networks and trust. The survey is administered by the WVS Association, headquartered in Sweden. It was first implemented in 1981 and since then has covered over 100 countries, including Pakistan.
4. Research Consortium on Educational Outcomes and Poverty (RECOUP) survey on education outcomes, which is an instrument that was used in a project by Cambridge University to examine the role of education in improving individual outcomes for the poor in Pakistan. The survey was implemented in 2007 in over 1000 households from nine districts of Punjab and Khyber Pakhtunkhwa and its household survey instrument solicits demographic, socioeconomic and educational attainment data.

Given the low levels of literacy in rural Pakistan, the household survey was designed to be delivered *face to face* by an interviewer who was meant to read out *closed-ended* questions together with a list of mutually exclusive answer options to respondents<sup>91</sup>. Only a handful of questions asked open-ended questions (such as the nature of collective action in the village or the primary village problem). While not explicitly provided as options to respondents, answers such as “Don’t know”, “Other” and “Unwilling to respond” were accepted and coded.

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<sup>91</sup> The use of supplementary hand-outs with answer options was considered but ruled out due to the literacy issue.

**Table A.2: Contents of Household Survey**

Section	Contents Summary	Development
1. <b>Basic Information</b>	Unique Household ID, Enumerator Codes, Date and Time of interview, Language of Interview	Developed by researcher
2. <b>Demographic Details</b>	Name and Age of Respondent, Ethnicity and <i>Biraderi</i> Details	Adapted from PSLM and RECOUP survey
3. <b>Household Roster</b>	Name, Age, Marital Status and Occupation Status of all residents of household	Adapted from PSLM
4. <b>Education Roster</b>	Ability to Read and Write, Add and Subtract, as well as details of Schooling of all residents of household	Adapted from PSLM, LEAPS and RECOUP survey
5. <b>Education Service Delivery</b>	Importance of Schooling, Details of School attended by Household Children and Level of Satisfaction, School Council Information, Costs	Adapted from LEAPS survey
6. <b>Devolution and Local Government Law</b>	Familiarity with Local Government System and associated Local Institutions, Political Participation	Developed by researcher
7. <b>Government Services and Satisfaction</b>	Availability and Access to Public Services and Satisfaction with Government Provision	Adapted from PSLM and Amin et al. (2008)
8. <b>Social Capital and Collective Action</b>	Participation in Formal Associations, Informal Sociability Statistics, Opinions on Harmony and Instances of Collective Action	Adapted from WVS and Jones and Woolcock (2009)
9. <b>Trust and Values</b>	Trust in Various Individuals and Institutions	Adapted from WVS and Jones and Woolcock (2009)
10. <b>Asset and Expenditure Profile</b>	Household Wealth, Income and Assets	Adapted from PSLM, LEAPS and RECOUP survey

On the ground, it is common in Pakistan for most NGOs, development agencies and individual researchers to use teams of bilingual interviewers who translate questions written in English into the local language as they see fit during the interviewing process. In contrast, due to chances of misinterpretation, I decided to standardize the Urdu translation beforehand instead. The survey was thus *translated* by a professional Urdu writer who had previous experience in translating questionnaires from English to Urdu. Because I am personally fluent in Urdu, following the translation, I reviewed the questionnaire to consider whether it was suitable. In addition, a family member assisted me by *back translating* core portions of the survey from Urdu to English so I could further validate the quality of the translation.

Regardless of how closely a survey's design follows accepted best practices, questionnaires tend to benefit from several rounds of validation. My survey underwent two rounds of validation. First, the original English version was *reviewed* by my primary and secondary supervisor and the minor changes they recommended were incorporated into the design. Second, I *piloted* the translated survey with ten local participants in Urdu. This pretesting involved one on one delivery with rural



residents and elite informants who were familiar with the dynamics of rural Pakistan. This delivery was followed by a focus group in which I discussed the interpretation of key terms as well as addressed any obvious omissions in answer categories. In general, few items were changed in the survey instrument following the focus group, although several answer options were added in, for instance, questions regarding occupation, *biraderi* and income sources. Data from these pilot surveys were excluded from the final dataset as they were implemented for testing only.

Of course a critical component of any survey is the consent form. Because respondents were less educated, a form was designed to be read out orally prior to implementation of the survey. The Oral Consent Form was adapted from templates available online.

### *A.3.2 Interview Topic Guide Design*

The process of developing the interview topic guide for elite informants was similar to that of the design of the household survey. However, because there were fewer pretested topic guides to adapt, the guides had to be mostly self-developed. In line with the scholarship, however, particular care was taken to limit bias created due to the choice of words in this guide.

Unlike the survey which was translated by a professional writer, I *translated* the topic guide from English to Urdu myself. This mode made sense as I planned to personally administer all interviews rather than use research assistants for this purpose. Like the survey, nonetheless, the topic guide did also undergo two rounds of validation. First, the original English version was *reviewed* by both my primary and secondary supervisor and changes recommended were incorporated. In particular, my supervisors recommended specific changes to (a) ensure questions were not biased and (b) explore local political dynamics in greater detail. Second, I *piloted* the topic guide with five participants familiar with the rural Pakistan setting. This piloting did not significantly alter the topic guide.

Table A.3 displays the themes of the topic guide, a copy of which is available in Appendix B. In general, the guide asked the same set of *open-ended* questions of respondents. While conducting the interviews, however, I followed a semi-structured format in that I sometimes did deviate from the guide if additional interesting information was offered. Moreover, I also used a standard set of additional questions related directly to the performance of school management councils when speaking to council members or to parents. The same oral consent form used in the survey was modified slightly to be used along with the interview guide for elite informants.

**Table A.3: Contents of Interview Topic Guide**

Section	Contents Summary
1. <b>Basic Information</b>	Respondent's demographic and occupational details
2. <b>Village history and characteristics</b>	History of village and profile, land ownership patterns over time, <i>biraderi</i> composition over time, local political dynamics
3. <b>Education provision in village and importance</b>	General prevalence of education, education differences by <i>biraderi</i> , quality of government schools, private schools presence, school councils
4. <b>Village problems and history of collective action</b>	Sense of harmony and trust in village, instances of collective action within and across <i>biraderis</i> , village problems
5. <b>Village patrons / agents</b>	Name and role of village patrons and active local agents

#### A.4 Sampling Design

Pakistan comprises of four provinces, a capital territory (Islamabad) and a territory (Federally Administered Tribal Areas). Of the four provinces, only Punjab and Sindh were selected for this study. This selection was made for several reasons. First, limiting the scope of the study made practical sense. Second, it was important to specifically exclude areas where unique security or cultural considerations would have added dimensions to the analysis which were not specifically being studied in this thesis. Third, it was necessary to ensure some level of comparability between the selected villages and as the more developed provinces, Punjab and Sindh offered such possibilities. Finally, together these two provinces house approximately 80% of the country's population (based on Census 1998) making them appropriate sites from which larger inferences could be drawn.

Administratively, the provinces in Pakistan are made up of districts. Below these districts are sub-districts, followed by union councils, which then finally consist of individual villages and their residents. From each province I thus first selected a district. Next, I selected four villages from each district, making a total sample of 8 rural communities. While this sample of 8 villages qualifies as a small N analysis, in several areas of this PhD collection my findings hinge on comparing individual respondents living in these villages with each other. In total, I surveyed about 350 representative households across the 8 villages gathering data for some 2500 individuals, thereby enabling a kind of large N analysis for certain research questions. Multiple sampling techniques were used to allow me to select units for study at each of these levels. These techniques are displayed in Table A.4 and are described in greater detail below.

**Table A.4: Summary of Sampling Methods used by Level**

Level	N	Sampling Method	Criteria/ Description
<b>District</b>	2 Faisalabad Hyderabad	<b>Purposive</b>	<ul style="list-style-type: none"> <li>• Have significant rural areas</li> <li>• Offer variety in land ownership and caste composition</li> <li>• Have comparable rural employment opportunities</li> <li>• Have comparable overall human development indicators including education, health and income</li> </ul>
<b>Village</b>	8, of which: 4 from Faisalabad 4 from Hyderabad	<b>Purposive, Most Similar Cases</b>	<ul style="list-style-type: none"> <li>• Offer variety in land ownership and caste composition</li> <li>• Be average sized (250 - 400 households)</li> <li>• Be spatially concentrated in one geographic location</li> <li>• Have at least one government middle school within main settlement</li> <li>• Derive a sizeable portion of livelihood from agriculture</li> <li>• Be not more than 120 minutes away from a main town or city</li> </ul>
<b>Participants – Survey</b>	353 households (covering 2,521 individual members)	<b>Random stratified</b>	<ul style="list-style-type: none"> <li>• Stratification at level of <i>biraderi</i></li> </ul>
<b>Participants – Interviews</b>	67 interviewees	<b>Purposive Snowball</b>	<ul style="list-style-type: none"> <li>• Village notable, or parent or key <i>biraderi</i> member</li> </ul>

#### *A.4.1 Districts Selection*

Seawright and Gerring (2008) argue that when selecting case studies, purposive sampling is generally preferred over random sampling as the size of the sample tends to be small. Following from this, I employed purposive sampling to select my two districts. My criteria were simple: I wanted two districts with substantial rural areas that offered variety in the two central explanatory variables of land ownership and caste composition patterns. In addition, to ensure comparability I wanted the two districts to have similar rural employment opportunities as well as similar levels of overall human development indicators (such as education, health and income). After much research, I selected Faisalabad district from Central Punjab and Hyderabad district from Central Sindh.

Faisalabad (originally Lyallpur) was set up in the late 19<sup>th</sup> century in British India as a canal colony (Dawn 2008). Today, the district has an estimated population of 7.4 million (ibid.) and comprises of the third largest city in Pakistan as well as a substantial rural area. Administratively, the district is divided into the eight sub-districts of Lyallpur, Madina, Jinnah, Iqbal, Samundari, Tandiawala, Jaranwala and Chak Jumra, with several of these sub-districts containing a mix of urban and rural regions. Faisalabad overall is renowned as an industrial district for its extensive textile segment. Moreover, its rural areas are largely fertile, making it one of the major agricultural areas of Punjab. Key crops grown include wheat, sugarcane, cotton, rice, maize and mangos. Faisalabad is home to, among others, the Arain, Gujjar, Jat and Rajput *biraderis*.

Hyderabad, on the other hand, was founded in 1768 on the site of a small fishing village (ADPC 2009). Although originally the neighbouring areas of Matiari, Tando Allahyar and Tando Muhammad Khan were a part of Hyderabad, today the district is much smaller and comprises only of the four sub-districts of Hyderabad city, Hyderabad rural, Latifabad and Qasimabad. The district is home to an estimated population of 3.4 million (News 2012) and includes a large city and a substantial rural area. The city of Hyderabad itself is Sindh's second largest city after Karachi and the overall sixth largest in Pakistan, housing a substantial manufacturing sector with industries such as textiles, cement, pottery and soap. Additionally, like Faisalabad, the rural areas are fertile making Hyderabad a major centre for agricultural produce. Cultivation is dependent on canal irrigation, and the main crops include sugarcane, wheat, rice, cotton and mangos (ADPC 2009). Prominent *biraderis* found in the district include the Mir, Syed, Leghari (originally a Baloch tribe) and Junejo clans.

Are these two districts comparable? Faisalabad and Hyderabad are not only two of the most developed districts of the nation in terms of economic performance, but their large rural areas also belong to comparable agricultural zones. This implied that it would be possible to find within them analogous villages with overall similar levels of poverty, livelihood sources, and employment patterns. Each of these in turn was meant to ensure that I could hold village socioeconomic profile pretty much constant in my analysis. Moreover, future employment opportunities often drive enrolment decisions. Consequently, I further wanted to standardize the village socioeconomic profile so that my findings would not be dramatically influenced by widely divergent expected returns to education. There was, nonetheless, one economic difference between the two districts that was important. Susceptibility to floods is high in Hyderabad particularly in the Latifabad sub-district as well as in certain parts of the rural region - this meant livelihoods would be more vulnerable in such areas. To prevent this difference from affecting comparability, when selecting villages I deliberately excluded flood-prone areas of Hyderabad from my sampling frame.

On the human development front, education statistics in Punjab are overall significantly better than those in Sindh and statistics of Faisalabad overall are likewise better than those of Hyderabad overall. And although my selected two districts have rather similar Human Development Indices, which stand at 0.68 and 0.67 for Faisalabad and Hyderabad, respectively, against 0.62 for Pakistan overall (Jamal and Khan 2007), more detailed education metrics do show further disparities. Literacy in rural Faisalabad stands at 58%, for instance, against 47% for rural Hyderabad (PBS 2013). Similarly, the Net Enrolment Rate for ages 6 to 10 in Faisalabad rural is 74% versus just 56% in rural Hyderabad. Fortunately, both districts have in the past two decades made significant strides in improving the quality of government schools through dedicated programmes for infrastructure,

textbooks and teacher training. Nonetheless, because of the differences in education outcomes, when choosing villages, I had to be especially cognizant of the multiple factors other than those proposed in my essays that could be contributing to the variance.

#### *A.4.2 Village Selection*

One of the key criteria for selecting cases is that they should provide variation in the parameters of interest (Seawright and Gerring 2008), with most scholars arguing that this variation should be on independent – and not on the dependent - variables (see Goertz and Mahoney 2012). In much of my work and in the third essay in particular, the independent variables of (1) caste heterogeneity and (2) land heterogeneity at the village level are critical in allowing me to make causal claims. Therefore, when selecting my villages, I purposively chose eight sites to get a variety in caste composition and land ownership patterns. Half the villages in my sample are thus dominated in terms of numbers by members of one *biraderi*, while the rest have numerous *biraderis* in their settlements. Similarly, half the villages are dominated by one big landlord (owning at least 75 acres of land), while the other half have more egalitarian land-ownership patterns.

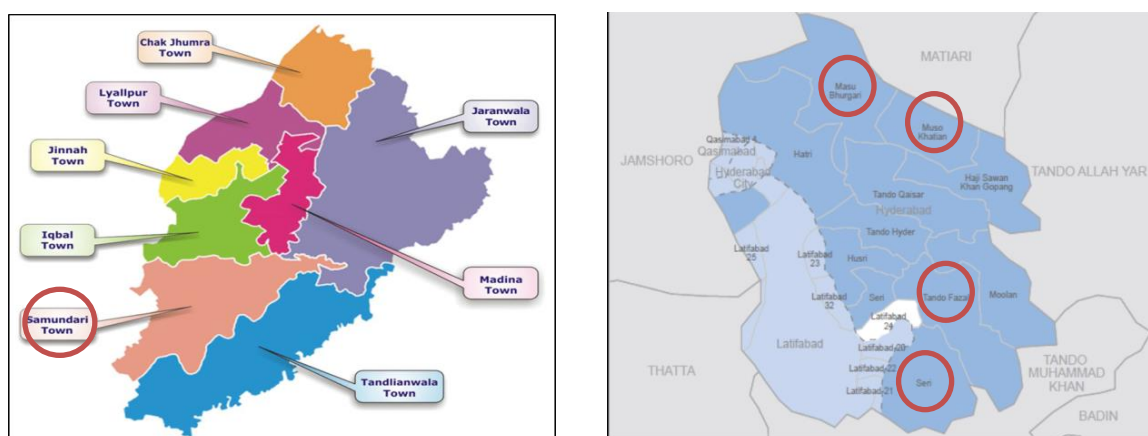
Besides providing variety on these characteristics, villages had to meet a further short list of standardized criteria for selection. Each village chosen had to: be of average size (250 - 400 households), be spatially concentrated in one geographic location and have at least one government middle school within the main settlement. Moreover, villages had to derive a sizeable portion of their livelihood from agriculture and could not be more than 120 minutes away from a main town or city. In addition to enhancing the manageability of the fieldwork, these criteria served to ensure comparability of villages. The spatial concentration and presence of a government middle school, for instance, standardized schooling supply conditions between villages which are often key determinants of enrolment. The agrarian nature of villages on the other hand was important to observe caste relations in the conditions in which they tend to be most prominent (see Quigley 1993) as well as to ensure analogous local employment opportunities. Likewise, a similar distance from a big settlement ensured comparable access to outside employment opportunities. On the whole, my sampling method at the village level is consistent with the *Most Similar Cases* categorization defined by Gerring (2004) in that my villages differ on the X variable, but are similar otherwise. The third essay presents key indicators that further illustrate their similarity.

Applying my selection criteria practically was not an easy task. Pakistan has not held a Census since 1998. Because several new districts and union councils were formed and several others were reorganized under a Decentralization Law in the early 2000s, the 1998 sampling frames are seriously outdated. This problem is much more acute in Hyderabad where not only serious administrative reorganization has taken place, but data on sub-districts and union councils is also deficient from

even before the reorganization. To address this shortcoming, I used two specific techniques to help me purposively select villages. First, I worked with local experts to identify a list of villages that could potentially meet my requirements. In Punjab, my local expert was a middle manager in the government-sponsored Punjab Rural Support Programme. In Hyderabad, on the other hand, my expert was a middle manager in the local office of a foreign, private development consultancy firm. Second, after identifying several potential villages with the help of these experts, I undertook multiple scoping visits to consider village viability. Using the Scoping questionnaire provided in Appendix B, in each site being scoped, I solicited estimates on village size, composition, education facilities and livelihood. These estimates ultimately allowed me to make the final selection.

In general, in each of these scoping visits, I established contact with the local community either through a teacher in the government school or through a local politician. These community gatekeepers served both as initial contacts and as key resources later on if the village was selected for study. The use of such community gatekeepers to assist in participant recruitment in particular is a common practice, and I found it beneficial in allowing me access to notable persons in the final villages selected (see Hennink et al. 2011). Even though I did not offer any monetary reward to these gatekeepers, in keeping with the local tradition, in Faisalabad the local community contact was given a box of sweetmeats as a show of gratitude. In Hyderabad, the local contact was instead presented with an Ajrak, which a traditional scarf associated with the Indus civilization and commonly given among Sindhis as a sign of respect.

**Figure A.1: Maps of Areas under Study. Faisalabad on left, Hyderabad on right**



Sources: Faisalabad Map – LEAPS Project Report 2007. Hyderabad Map – ADPC 2009

Figure A.1 shows a map of the two districts, highlighting the rural regions from which the final villages were selected. As can be seen from the left map given in the figure, all villages in Faisalabad hail from the mostly rural sub-district of Samundari. Note that the Faisalabad map does not depict the distinct union councils from which the four Faisalabad villages were selected, which are specifically named in Table A.5. In Hyderabad, which is shown on the right map in the figure,

villages were similarly selected entirely from the sub-district of Hyderabad rural which can be distinguished from the other three sub-districts in the map by the darker blue colour. This map also shows the four distinct union councils from which the final four villages were selected, which are circled in red. Table A.5 supplements these maps by listing the eight villages, their broader geographic location and their classification by heterogeneity in terms of caste composition and land ownership. The actual villages, as the reader would have noted in the PhD essays, are anonymized and denoted only by the numbers 1 through 8. The categorization of Villages A and B is also specifically used in the fourth essay, wherein Village A corresponds to Village 6; and Village B corresponds to Village 5.

**Table A.5: Summary of Selected Villages**

District	Union Council	Village	Caste Heterogeneity	Land Heterogeneity
Faisalabad	UC123	1	High	Low
	UC104	2	Low	High
	UC128	3	Low	Low
	UC128	4	High	High
Hyderabad	Musa Khatian	5	High	Low
	Masu Burgri	6	Low	Low
	Seri	7	High	High
	Tando Fazal	8	Low	High

It is important to highlight that, like many other PhD researchers, I chose the final villages pragmatically by attempting to optimize how closely villages appeared to meet my criteria together with the limitations I had with respect to time, local expertise, finances and access. As a result, two points have to be made here so that readers can make reasonable inferences about potential sampling bias and representativeness at the level of the village. One, in light of my selection criteria, I would argue that my findings should be indicative of similar villages, but may not necessarily prove representative of the whole district or province. This is an important qualification that I make in the relevant essays as well. Second, having said that, it is equally important to acknowledge that my central independent variables of caste and land heterogeneity are likely to be exogenous to education outcomes. As I argue more extensively in the third essay, a variety of evidence suggests both factors have remained essentially unchanged at least since the independence of Pakistan in 1947, if not longer. Consequently, in spite of my pragmatism, this plausible exogeneity should considerably reduce chances of biased statistical findings specifically in the final two essays of this collection.

#### *A.4.3 Participant Selection*

The purpose of the household survey being conducted within villages was to allow inferences about residents and particularly about different caste groups. Therefore, a representative stratified random sampling design was adopted in which households in each village were first stratified by *biraderi*

and then each unit or household within a *biraderi* was given a similar probability of being selected for the survey. The decision to stratify the sample by *biraderi* was not only consistent with survey practices in rural Pakistan, but also in line with the requirements of my research questions.

To arrive at the total sample size of approximately 350 for the household surveys, I used a mix of rule of thumb, rough sample size calculations<sup>92</sup> and practical considerations. In the end, I sampled almost 14% of my total village population, conducting at least 40 surveys per village. I implemented these surveys using the systematic sampling technique whereby to sample 14% of households, on average I tried to sample every 7<sup>th</sup> unit. *Biraderi* members tend to live together in the same neighbourhood in villages so this systematic sampling worked within the stratified framework easily. Actual numbers for *biraderi*-wise sampling were calculated before implementing the survey to be proportionate to their estimated village population proportions. Thus, if *Biraderi* A comprised 50% of a village, at least 20 of the total 40 surveys were conducted with members of *Biraderi* A.

Participants for interviews and focus groups, on the other hand, were selected using a mix of purposive and snowball sampling methods. Prior to the fieldwork, I made a list of people who were most likely to know about village dynamics and schooling conditions. This list included village heads, large landlords, local NGO workers, local politicians, school teachers and parents of school-age children. Although I had no specific number of persons to be interviewed in mind, my goal was to speak to at least two village notables, two parents, and one school representative in each village. Following these minimum purposively sampled interviews, I used snowballing techniques to ask respondents to refer me to other influential persons, *biraderi* heads and parents of school-going children. As is common in qualitative work, the final number of over 65 interviewees was driven by the principle of saturation, whereby I continued to conduct interviews and collect information in each village until the content I learned became redundant (see Hennink et al. 2011).

## A.5 Study Implementation

I used a team to assist me in implementing the household surveys, but conducted all interviews myself. I also hired a research assistant in each district to help me supervise the survey teams and to provide translation assistance for the local regional language. I describe the implementation of the survey first and then the interviews in more detail below.

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<sup>92</sup> Formula for sample size from United Nations (2005): Sample size= ((z statistic squared) X (key indicator estimate) X (1-key indicator estimate) X (default sample design effect of 2.0) X (multiplier to account for anticipated non-response rate)) divided by ((proportion of target population accounted for in total population) X (average household size) X (margin of error to be attained squared)). Estimates used ((1.96<sup>2</sup>) X (0.55 adult literacy rate) X (0.45) X (2.0) X (1.1)) divided by ((0.7 population aged 15 and above) X (7) X (0.1 error rate X 0.55 literacy)<sup>2</sup>). Calculation yields recommended sample size of 306 households, implying 38 per village.



### *A.5.1 Household Survey Implementation*

Implementation of the household survey entailed three processes: (1) Hiring a survey team to assist in delivery (2) Mapping the villages to enable random stratified sampling and finally (3) Organizing and implementing the survey.

#### *Hiring the Survey Team*

I used slightly different methods of team recruitment in the two districts. In Faisalabad, I recruited a team of nine students who were studying for a graduate degree in Rural Sociology from the Faisalabad University of Agriculture. The students were recommended by the Head of the Rural Sociology department, who I had contacted prior to my visit with details of my planned fieldwork. I was assured that all graduate students had undertaken a course in conducting household surveys in rural Pakistan and therefore were well suited to the exercise. From the list of twenty odd interested students I was given, I shortlisted the final candidates based on their resume and their performance on a one day training course on survey methods, which I personally conducted. The team was paid a flat daily rate provided they conducted a minimum number of surveys daily, which was adjusted based on quality of delivery.

In Hyderabad, on the other hand, I was unsuccessful in attempts to recruit quality graduate students<sup>93</sup>. As a consequence, I arranged to borrow professional rural sociologists from the Hyderabad branch of an international boutique development consultancy firm. In total, the Hyderabad survey team consisted of five sociologists from this firm, and three others who this organization sometimes used part-time. All members of the team had previous experience in working in rural Hyderabad. As a result, I compensated the Hyderabad team at a slightly higher rate than what I paid in Faisalabad. Like the Faisalabad interviewers, I spent a whole day training the Hyderabad team on my questionnaire and the standards I wanted to be followed with respect to survey delivery.

#### *Mapping Villages*

In order to enable stratified random sampling for the survey, once I had selected the eight villages for study I had to map each one of them in order to conduct a rough census of the households present. This of course was necessary because, as I mentioned earlier, there were no updated sampling frames available in Pakistan. In line with convention, I defined households as units of related family members who ate from the same kitchen using the same purse. To perform the census exercise, I hired an engineer in Faisalabad, and an architect in Hyderabad specifically for this purpose. The process of mapping in each of the villages involved the following steps:

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<sup>93</sup> See also Challenges faced during fieldwork section.

1. Show Google Maps print of village to local expert and community gatekeeper
2. With the assistance of both, draw a larger rough map of the village making notes on (1) landmarks (2) the *biraderis* residing in each area and (3) estimates of how many households of each *biraderi* were present
3. Take a walking tour of the village with mapping specialist and community gatekeeper to physically verify and refine the map by:
  - a. Marking off landmarks such as schools, mosques, etc.
  - b. Counting doors or asking residents to help verify the number of households in each neighbourhood, especially if neighbourhoods were not well defined or if multiple households were present within locked gates

Even though my frame construction exercise was similar to that recommended in the literature for areas difficult to map completely, it was admittedly not perfect. Nonetheless, I consider coverage error to be minimal in my estimates in light of the time and finance constraints. Still, the data do require two disclaimers. First, the Faisalabad estimates are much more likely to be accurate as villages here were physically well organized. Moreover, each household tended to have a separate door that could be counted. The same was not true for Hyderabad as the villages were spatially spread out. In addition, due to cultural and security reasons, members of the same *biraderi* had often installed a locked gate to their individual neighbourhoods. This limited access and forced me in several cases to rely on estimates of households within these gates instead. Second, in cases where distinct house doors were not present, it was still much easier to get relatively good estimates of the households residing within the same gate for high caste individuals. This was because not only were they better educated and therefore better at estimating numbers if asked directly to do so, but also because village notables in generally knew them well and could count the individual households off themselves. Again, the same was not true of low caste households living together. To compensate for this, when calculating proportionate samples for low caste households I generally rounded estimates up.

#### *Organizing and implementing the survey*

Survey teams spent two days on the first village they surveyed and then one day on each additional village as their familiarity with the questionnaire grew. The daily implementation itself involved (a) creating sub-teams of interviewers, which generally included one male and one female interviewer (b) assigning these sub-teams to neighbourhoods with maps, physical survey forms, and formal allocation of which *biraderi* household to survey based on the proportion calculations mentioned above and (c) regularly auditing and cross-checking team progress. As noted above, I managed these

duties with the assistance of my research assistant and often also with the help of the local community gatekeeper.

In particular, when allocating households to sub-teams at the beginning of the day, I asked the gatekeeper to accompany us. The gatekeeper introduced my team and me to residents and briefly explained what we were doing so participants would be receptive to our survey. Respondents were informed that they still had the right to refuse, which was then explicitly explained to them as part of the oral consent agreement read out by interviewers. The use of a male and female sub-team allowed us to adapt to demands made by respondents that they be interviewed by a member of the same sex. As a consequence of these two procedures, I have an almost 100% response rate.

Regular audits and cross-checks were implemented to ensure that the quality of delivery, interaction with the respondent, and data recording was in line with widely accepted standards of survey implementation. Overall, I personally audited parts of at least 10% of the survey interviews that were conducted, while my research assistant audited another 20%. At the end of each survey day, I also held a debriefing session in which the survey team summarized their views and findings, highlighted any issues they faced and clarified any queries they had. I used this daily debriefing session to correct any mistakes I had noted during my audits and to randomly check the physical survey forms. Except for one village in Hyderabad, which I subsequently dropped from my sample due to suspicion that answers had been fabricated (see Challenges section for details), I was satisfied that the survey was implemented to a high standard. Table A.6 reports the total surveys conducted in each village.

**Table A.6: Summary of Household Surveys Conducted**

District	Village	# Estimated Households	# Households Surveyed	% Surveyed	# Household members data gathered for
Faisalabad	1	300	43	14	309
	2	250	40	16	270
	3	325	44	14	346
	4	350	45	13	338
Hyderabad	5	250	45	18	325
	6	325	46	14	307
	7	400	50	13	321
	8	325	40	12	305
Total		2,525	353	14	2,521

#### *A.5.2 Informant Interviews Implementation*

I conducted semi-structured interviews and focus groups with a total of 67 individuals outlined below in Table A.7. Consistent with best practices, in each interview I began with small talk in order

to build rapport and read out an oral consent form. Interviews lasted from about 45 minutes to 90 minutes. Although interviews were generally conducted in Urdu, some respondents felt more comfortable answering my queries in the regional languages of Punjabi or Sindhi. My skills in both these regional languages are at the beginner level, and thus parts of such interviews had to be translated into Urdu for me by my research assistants.

Although I preferred to conduct one on one interviews, for school council members a focus group format was adopted in that multiple respondents were interviewed together. The interview guide, however, remained the same. Moreover, at times village notables felt uncomfortable answering my questions alone and thus included other influential informants, thereby turning the interview into one with a focus group format. Given the cultural and social norms of these villages, when such people were added by influential village notables it was not possible to exclude them. Most informants spoke to me on the condition of anonymity – as a consequence, the names of specific individuals are not provided in the table below.

**Table A.7: List of Interviewees by Village**

Village	Individual Interviewees	Focus Groups	Total
<b>Village 1, Faisalabad</b>	1. Village Head, Jat <i>biraderi</i> 2. Head Teacher, Girls' School 3. Head Teacher, Boys' School 4. <i>Biraderi</i> Head, Syed <i>biraderi</i>	Girls' School council – 3 members Boys' School council – 3 members	10
<b>Village 2, Faisalabad</b>	1. Village Head and Large Landlord, Jat <i>biraderi</i> 2. Head Teacher, Boys' School 3. Politician in Village 4. Parent of school-going girl	Boys' School council – 4 members	8
<b>Village 3, Faisalabad</b>	1. Acting Head Teacher, Girls' School 2. School Teacher, Boys' School 3. Politician in Village 4. Doctor at Government Health Unit 5. Government official running local rural support program	Village Head, Gujjar <i>biraderi</i> and other family members – 3 individuals	8
<b>Village 4, Faisalabad</b>	1. Village Head and Large Landlord, Rajput <i>biraderi</i> 2. Head Teacher, Boys' School 3. Head Teacher, Girls' School 4. School Teacher, Boys' School 5. <i>Biraderi</i> Head, Mughal <i>biraderi</i>	<i>Biraderi</i> Head and other key members of Raja <i>biraderi</i> – 3 individuals	8

Village	Individual Interviewees	Focus Groups	Total
<b>Village 5, Hyderabad</b>	<ol style="list-style-type: none"> <li>1. Government Official and <i>Biraderi</i> Head, Sipio</li> <li>2. <i>Biraderi</i> Head, Solangi <i>biraderi</i></li> <li>3. Head Teacher, Mixed School</li> <li>4. Politician in Village</li> </ol>	Village notables from various <i>biraderis</i> – 4 individuals	8
<b>Village 6, Hyderabad</b>	<ol style="list-style-type: none"> <li>1. Head Teacher, Boys' School</li> <li>2. Retired University Professor, Leghari <i>biraderi</i></li> <li>3. Politician in Village</li> <li>4. Girls' School Teacher, Menghwar <i>biraderi</i></li> <li>5. NGO worker, school support program</li> </ol>	Boys' School council – 4 members	9
<b>Village 7, Hyderabad</b>	<ol style="list-style-type: none"> <li>1. Village Head and Large Landlord, Mir <i>biraderi</i></li> <li>2. Brother of Large Landlord, resident in city</li> <li>3. Acting Head Teacher, Boys' School</li> <li>4. Politician in Village</li> <li>5. NGO worker, rural support program</li> </ol>	Parents of school-going children – 3 individuals	8
<b>Village 8, Hyderabad</b>	<ol style="list-style-type: none"> <li>1. Village Head and Large Landlord, Mir <i>biraderi</i></li> <li>2. Head Teacher, Boys' School</li> <li>3. School Teacher, Boys' School</li> <li>4. Family Patriarch, Mir <i>biraderi</i></li> <li>5. <i>Biraderi</i> Head, Syed <i>biraderi</i></li> </ol>	Parents of school-going children – 3 members	8
<b>Total Individuals Interviewed</b>	37	30	67

## A.6 Data Collation and Validation

Data collation and validation for the in-depth interviews was relatively straightforward. Approximately 70% of respondents permitted me to record our interaction, and I made hand-written notes on each interview both during and immediately following our conversations. To prepare this qualitative data for analysis later on, I typed up detailed notes on each interview by listening to my recorded conversations (if available) and reviewing my hand-written notes. I then coded my typed notes for (1) the key themes I wanted to explore in my PhD, and (2) the recurring topics within each village. This annotation allowed me to cross-reference, for instance, narratives of village history and examples of collective activity or patronage provided by village notables. During this collation process, I also highlighted quotes that could potentially be used later on in my text and translated these quotes verbatim. In addition, for each village I also coded a daily field diary I had maintained in which I recorded general observations, challenges and preliminary views.

The survey, in contrast, required much more work before the data was ready for analysis. Briefly, this work involved the following processes:

1. Data Entry

- a. Survey team members were asked to enter data from physical survey forms into predesigned excel sheets and were compensated for this activity separately.
- b. Due to time restrictions, however, data entry for approximately 70% of the surveys conducted was outsourced to these team members, while I personally performed data entry for the remaining 30% of surveys.

2. Data Validation through Auditing

- a. In each district, the relevant research assistants randomly audited 10% of the data entered by the survey teams to ensure accuracy.
- b. Following this, I randomly checked almost 40% of the surveys that were entered by the survey team. Certain enumerators did a worse job entering data and for two out of the total seventeen interviewers I had hired, I cross-checked and corrected 100% of the data entered. In addition, it appeared that some questions had been more difficult than others to code for all enumerators. For such questions, I went back to almost all of the original surveys to check the hand-written answer against the code entered.
- c. I also randomly audited 20% of the survey data that I had entered personally.
- d. During this auditing process, I performed basic data cleansing activities such as standardizing answers if multiple units of measurement had been used, and coding missing and “Don’t know” answers consistently.

3. Data Conversion and Further Validation

- a. I then converted and combined the individual excel sheets into two STATA datasets – one at the household level and the second at the individual level, containing details of each of the over 2500 individuals for whom data had been collected.
- b. Once in STATA, additional data cleansing exercises were performed such as ensuring the formats of answers were correct, that outliers for key questions were cross-checked and validated, and that there were no distinct patterns in the answers based solely on enumerator

## **A.7 Study Challenges**

Fieldwork, by its very nature, is a challenging task. I faced a number of issues while in the field, but the following four challenges, and how I addressed them, particularly merit further discussion.

### **1. Ethical Concerns**

My research, and the survey in particular, required interaction with people who were poor, and often less educated. In order to ensure their rights were respected and no undue pressure was created during the interaction, the LSE school policy on fieldwork was followed closely. Following from this policy, three specific steps were taken.

First, all interactions were preceded with the reading of an oral consent form – the form was meant to ensure that participants were informed of the goals of the research, and of their right to refuse to be interviewed. Oral consent was recorded by the survey team onto the form for each participant. Similar procedures were in place for all the interviews I conducted, in which I read out a slightly shorter version of the survey oral consent form and recorded participant consent on my notes. A copy of this oral consent form is given in Appendix B along with the survey. Second, no participants were paid for their participation and this mode of interaction was made clear to all respondents at the beginning of their interaction with my team or me. In fact, each participant was informed of the nature of our proposed interaction in advance so that they could make decisions to participate of their own will. Finally, steps were taken to ensure the anonymity of respondents as they were guaranteed confidentiality for all responses. As of now, only I have access to the complete identifying information. If and when my dataset is made public for use by other researchers, this identifying information will be removed.

### **2. Safety and Security Concerns**

As is the case in any developing country, certain security precautions had to be taken to conduct this fieldwork in rural Pakistan. In general, all fieldwork was conducted during the day time. Moreover, during scoping visits, informants were specifically asked about the local security situation and compromised road routes were subsequently avoided. My fieldwork months also overlapped with a major religious holiday (Muharram) during which security tends to be tightened in Pakistan due to fears of possible violence. The fieldwork plan was therefore amended to specifically avoid such dates.

As the principal investigator of this project, I was also responsible for the safety of my survey team. Four specific procedures were implemented on this front. First, I arranged for

transport to take all team members to the study sites together. Second, I contacted community gatekeepers and sometimes even large landlords in advance in order to gain their protection while in their village. Third, I divided my teams into sub-teams of male and female members. Although these members conducted most of their surveys separately, they worked in the same neighbourhood all day and were directed to keep track of each other. In general, male interviewers conducted their interviews with respondents outside the home of residents. However, in keeping with the local culture, most female interviewers were requested to work with female respondents inside. In instances where anyone felt uncomfortable with the respondent, team members were instructed to first contact their sub-team counterpart, and then my research assistant or me directly. Finally, my research assistants and I made audit rounds to not only check that everyone was progressing but also to ensure they were safe.

These four measures for security worked well, and only one concerning incident occurred in Village 3. During the day's first round of interviews, a male respondent alarmed a female interviewer who had been invited into his house. In answering a simple closed-ended question on village problems, this respondent began to describe the rampant drug problem in the neighbourhood and then proceeded to admit that he himself often took drugs and had murdered someone while under the influence recently. The female interviewer, who was fortunately already at the end of her interview when this happened, told the respondent she had all the necessary data and was ready to leave. She then contacted both her male team member and my research assistant who both rushed to the house where she was and brought her to me. Following this incident, I arranged for additional local residents through the gatekeeper to accompany interviewers if they were invited inside someone's house in this particular village. These assistants were compensated with the equivalent of a one day wage.

### 3. Issues with Team Quality

Finding quality members for the survey team given my time and finance constraints was challenging. To assist in my survey, I initially recruited graduate students studying through the local University of Agriculture both in Faisalabad and in Tando Jam, Hyderabad. Although I completed the survey in Faisalabad using this student team successfully, I faced serious challenges with the student team I had initially hired in Hyderabad.

During the 10% audit that I was conducting on the first day of field visits, I found that approximately half the survey team members had left the house assigned to them within 20 minutes of entering. However, usually the survey took about 45 minutes to administer completely. A further check revealed that some members of the team had not asked



respondents all the questions in the survey, although the physical survey form they handed in for that household appeared to have recorded answers for all questions. This led my research assistant and me to suspect that parts of the surveys had been fabricated. As a consequence, I decided to destroy all the surveys conducted, drop this particular village from my sample and to replace the survey team completely.

This incident was the primary reason why I ended up with slightly different methods of team recruitment in the two districts, with the final survey team in Hyderabad consisting of professional sociologists rather than graduate students. The village where I faced problems with survey fabrication was replaced by an alternative village with similar characteristics.

#### 4. Challenges related to Data Quality

It is commonly accepted in the literature that at times respondents lie, at other times they do not have the relevant information to answer questions, and at other times still they do not recall information correctly (see Beam 2012). At the same time, it is also widely acknowledged that the demographic and socioeconomic profile, manner of asking questions, and prior beliefs of researchers all can similarly affect the interviewer-interviewee interaction. That said, every effort was taken to adopt best practices in design and delivery of the two instruments used to gather data for this thesis, as well as in the analysis that followed. As already noted in earlier sections, instruments were validated to avoid bias in design, team members were trained, surveys were audited, data entry was cross-checked, informant interview responses were coded and cross-referenced and almost all findings were triangulated using mixed methods. Taken together, in my view, the multiple procedures described in this Appendix have yielded data of an acceptable quality on which to base the findings presented in this essay collection.

## A.8 Biraderi Breakup

The following two tables summarize the *biraderis* found in the data used throughout this thesis. Table A.8 lists the key *biraderis* given in Ibbetson's (1916) classical text on Panjab castes, and maps them on to *biraderis* from the 4 villages from Punjab in my sample. Table A.9 supplements this information and lists all the *biraderis* in my sample from the 8 villages in Punjab and Sindh, and also provides the number of individuals belonging to each kinship group in my full sample of over 2500.

**Table A.8: Biraderi Mapping for Punjab Villages**

Ibbetson's Categories	Key Biraderis in Ibbetson (1916)	Biraderis from Sample Mapped to Ibbetson Numbering
<b>Landowning and Agricultural</b>	<b>Major Landholding</b> e.g. Jat, Rajput, Rawat, Bhatti, Chauhan, Bhajwa	Jat (Caste 1), Rajput (Caste 2), Bhatti (type of Jat/Rajput)
	<b>Minor Agricultural</b> e.g. Arain, Mali, Gujjar, Khokar, Kharal, Dogar	Arain (Caste 7), Gujjar (Caste 8), Khokar (Caste 58)
	<b>Foreign Races</b> e.g. Ansari, Mughal, Qureshi, Sheikh	Ansari (type of Sheikh), Mughal (Caste 37), Qureshi (type of Sheikh), Sheikh (Caste 17)
	<b>Baloch/ Pathan and Allied Races</b> e.g. Leghari, Jatoi, Bugti, Khosa, Afridi, Tanaoli, Malik	Malik
<b>Religious, Professional, Mercantile</b>	e.g. Brahman, Syed, Nai, Mirasi, Khojah, Khatri	Syed (Caste 24)
<b>Vagrant, Menial, Artisan</b>	e.g. Leather-workers (Chamar, Mochi), blacksmiths (Lohar), potters (Kumbhar), water-carriers (Mallah, Machi), washerman (Dhobi), scavenger (Chuhra, Musalli)	Masih (type of Chuhra – Caste 4)

**Table A.9: Number of Persons in Full Data Sample by Biraderi**

<b>No.</b>	<b>Biraderi</b>	<b>Persons</b>
1	Agheem	49
2	Ansari	70
3	Arain	117
4	Baloch	21
5	Bhatti	16
6	Burio	16
7	Gujjar	236
8	Jat	356
9	Katyar	13
10	Kereo	204
11	Khaskkeli	28
12	Khokar	26
13	Kumbhar	15
14	Kumbrani	41
15	Leghari	266
16	Malik	74
17	Mallah	16
18	Masih	41
19	Menghwar	115
20	Mir	132
21	Mughal	58
22	Qureshi	29
23	Rajput	187
24	Sheikh	37
25	Sipio	129
26	Solangi	121
27	Syed	29
28	Umrani	18
29	Other	61
	<b>Total</b>	<b>2521</b>

## A.9 References

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## **Appendix B: Research Instruments**

### **Outline**

B.1 Scoping Questionnaire .....	
B.2 Household Survey .....	
B.3 Oral Consent Forms .....	
B.4 Interview Guide .....	

## Scoping Questions for Village Resident/ Community Gatekeeper

Basic introduction and greetings. Explain purpose and request for short chat about village.

Comment on some feature of the village.

1. Approximately how many households reside in this village?
2. Does this village have settlements that are further away from this main area? Approximately how many households are there?

Inquire about what respondent does for a living.

3. What is the main source of livelihood in the village?
4. Do people own their land? How much land on average do they own?
5. Are there bigger holdings also? How big? Who are the bigger landlords?
6. What are the main crops? How is the land irrigated?

Inquire about how long resident's family has been in village.

7. How many different biraderis in the village? Which is the dominant one?
8. What is the religion of most of the people in this village? Do persons of other religions also reside here? Which ones?

Ask for confirmation about the local school and its level.

9. Besides this, are there other schools in the village? Primary or secondary?
10. Who is the head teacher of the government school? Can you introduce us to him/ her?

## Scoping Questions for School Teacher

Basic introduction and greetings. Explain purpose and request for short chat about school and village.

Confirm/ crosscheck basic data about school

1. When was this school established?
2. How many students are in this school?
3. How many teachers do you have?
4. What shifts do you run?

Probe for more details about local schooling

5. What are the 3 biggest needs of the school?
6. Does this village think education is important?
7. Are there differences in enrolment by gender? By biraderi? By religion?
8. Is there an active SMC? Who are they? I would like to meet the members on a future date, will you be able to help arrange this?

**B.2**

Tick here when survey  
completed

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## HOUSEHOLD SURVEY

### PROJECT: EDUCATION DELIVERY AND VALUES SURVEY (EDVS)

Household ID

--	--	--	--	--	--

Province      Village

District

Household

Tick here when AC has  
reviewed this survey

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Tick here when data  
entry is complete

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HH ID

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## SECTION 1 – BASIC INFORMATION (this section is for interviewer only)

	QUESTION	ANSWER	CODES AND NOTES												
1	Enumerator code and name شمار کوڈ اور نام	a. Code <table border="1"><tr><td></td><td></td><td></td></tr></table> b. Name _____				<i>This question is for interviewer only. Refer to Handout D for codes.</i>									
2	Household ID گھرانہ کی شناخت <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							Province <table border="1"><tr><td></td></tr></table> District <table border="1"><tr><td></td></tr></table> Village <table border="1"><tr><td></td></tr></table> Household No. <table border="1"><tr><td></td><td></td><td></td></tr></table>							<i>This question is for interviewer only</i>  <i>Combine the relevant codes from below to create a Household ID of six digits. Enter this in first column. This is the full ID that should be entered into database and at the top of every page.</i>  Province: 1 = Punjab 2 = Sindh  District 1 = Faisalabad 2 = Hyderabad  Village: Refer to Handout E
3	Full household address گھرانہ کا مکمل پتہ		<i>This question is for interviewer only. Enter details to make it easy to locate again. Ideally also mark location on attached map.</i>												



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## SECTION 1 – BASIC INFORMATION (this section is for interviewer only)

	QUESTION	ANSWER	CODES AND NOTES
4	Is house a replacement household? Why? کیا یہ گھر چنے گئے گھر انے کا متبادل ہے؟ کیوں؟	a. Replacement? <input type="checkbox"/> b. Why? <input type="checkbox"/>	<i>This question is for interviewer only</i>  1 = Yes 2 = No  Why? 1 = Original house selected could not be found 2 = Original was not available at home 3 = Original refused to participate
5	Oral consent read to respondent and agreed to دوبانی اجازت نامہ پڑھ کر سنایا گیا	<input type="checkbox"/>	1 = Yes 2 = No  <i>Note: Oral consent format is available in Handout "C". Read this out as it is. Pls do not continue unless you have read the consent statement and gotten consent.</i>
6	Interview details انٹرویو کی تفصیلات	a. Date <input type="text"/> <input type="text"/> <input type="text"/> b. Start Time <input type="text"/> <input type="text"/> c. Finish Time <input type="text"/> <input type="text"/>	<i>Enter Date as Day, Month and Year e.g. 21-11-12</i>  <i>Enter Time using 24 hour clock e.g. 15:20</i>
7	Language of interview انٹرویو کی زبان	<input type="checkbox"/>	1 = Urdu 2 = Punjabi 3 = Sindhi

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## SECTION 2 – DEMOGRAPHIC DETAILS OF HOUSEHOLD

	QUESTION	ANSWER	CODES AND NOTES
1	What is the name of respondent? جواب دہندہ کا کیا نام ہے		Enter full name, including husband/father's name
2	What is the name of the head of this household? گھرانے کے سربراہ کا کیا نام ہے		Enter full name, including husband/father's name Enter "SAME" if household head is same as respondent
3	Age and date of birth of respondent جواب دہندہ کی عمر اور تاریخ پیدائش درج کریں	a. Age <input type="text"/> b. D.O.B <input type="text"/> <input type="text"/> <input type="text"/>	Enter Age as per previous birthday Enter Date as Day, Month and Year e.g. 21-11-52 If respondent is not sure of day or month, enter 00 for relevant item. You can try to prompt them using key events in Pakistan history
4	How long has the household head been resident in the village? گھرانے کا سربراہ اس گاؤں کا کتنے عرصے سے رہا/رہی ہے	<input type="text"/>	1 = Less than 1 year 2 = 1 – 5 years 3 = 5 – 10 years 4 = More than 10 years
5	If household has moved to village in last ten years, then why and where from? اگر گھرانہ دس سال کے عرصے کے اندر اس گاؤں میں آیا ہے تو کیوں اور کہاں سے آیا کیوں	a. Why? <input type="text"/> b. Migrated from _____	Skip if household has been in village for 10+years 1 = Better employment opportunities 2 = Better living standards 3 = Did not like the previous neighbours 100 = Other, pls specify

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## SECTION 2 – DEMOGRAPHIC DETAILS OF HOUSEHOLD

	QUESTION	ANSWER	CODES AND NOTES
6	What is the religion of household? گھرانے کا تعلق کس مذہب سے ہے	<input type="text"/>	1 = Muslim Sunni 2 = Muslim Shia 3 = Ismaili 4 = Christian 5 = Parsi 6 = Hindu 7 = Sikh 8 = No religion 100 = Other, pls specify
7	What is ethnicity of household? گھرانے کی علاقیت کیا ہے	<input type="text"/>	1 = Punjabi 2 = Sindhi 3 = Balochi 4 = Pathan 5 = Muhajir 6 = Seraiki 100 = Other, pls specify
8	What language does household speak at home? گھرانے میں کون سا زبان بولی جاتی ہے	<input type="text"/>	1 = Punjabi 2 = Sindhi 3 = Balochi 4 = Pushto 5 = Urdu 6 = Seraiki 100 = Other, pls specify
9	What is biraderi or zaat or quom of household? What is sub-zaat?	a. Biraderi <input type="text"/>	1 = Abbasi 2 = Ansari 3 = Arain 18 = Mir 19 = Mistry 20 = Mohana

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## SECTION 2 – DEMOGRAPHIC DETAILS OF HOUSEHOLD

	QUESTION	ANSWER	CODES AND NOTES
	<p>گھرانے کی برادری یا ذات یا قوم کیا ہے</p> <p>ذیلی ذات کیا ہے</p>	<p>b. Sub-zaat _____</p>	<p>4 = Baloch 5 = Bagri 6 = Bhatti 7 = Bheel 8 = Butt 9 = Gujjar 10 = Jat 11 = Kharral 12 = Khashkeli 13 = Khokar 14 = Laar 15 = Lachhi 16 = Malik 17 = Masiah 100= Other, pls specify</p> <p>21 = Mochi 22 =Mughal 23 = Muslim Sheikh 24 = Naich 25 = Pathan 26 = Qureshi 27 = Raja 28 = Rajput 29 =Rehmani 30 =Sheikh 31 =Solangi 32 =Sunhar 33 =Syed</p>
10	<p>Is there a head for your biraderi in this village? What is their name?</p> <p>اس گاؤں میں آپ کی برادری کا کوئی سربراہ ہے؟ اُن کا کیا نام ہے</p>	<p>a. <input type="checkbox"/></p> <p>b. _____</p>	<p>1= Yes 2 = No</p>
11	<p>Why is this person the head of your biraderi?</p> <p>یہ آپ کی برادری کے سربراہ کیوں ہیں</p>	<p><input type="checkbox"/></p>	<p>1 = Hereditary position 2= Person with most education 3 = Person with most economic power 4 = Chosen by consent 5 = Chosen due to other skills/abilities 6 = Chosen due to contacts and influence 100 = Other, pls specify</p>

HH ID

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## SECTION 3 – HOUSEHOLD ROSTER

I am going to ask you some basic details about the people who live in this house with you.

اب میں آپ سے گھر میں ساتھ رہنے والے افراد کے بارے میں چند بنیادی سوالات کروں گا

*Clarification: A person who lives in the household is defined as someone who eats from the same cooking unit. Do not include members who have not lived at home for the last six months unless they are full-time students living away from home. The first entry should be that of the respondent.*

ID	a. NAME	b. RELATIONSHIP TO HEAD (see Codes below)	c. SEX 1 = Male 2 = Female	d. AGE Enter Age as per previous birthday	e. MARITAL STATUS (see Codes below)	f. HAS NIC? 1=Yes 2= No	g. OCCUPATION STATUS Select up to 3 that apply (see Codes below and also add description)
1							
2							
3							
4							
5							
6							
7							

HH ID

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### SECTION 3 – HOUSEHOLD ROSTER

ID	a. NAME	b. RELATIONSHIP TO HEAD (see Codes below)	c. SEX 1 = Male 2 = Female	d. AGE <i>Enter Age as per previous birthday</i>	e. MARITAL STATUS (see Codes below)	f. HAS NIC? 1=Yes 2= No	g. OCCUPATION STATUS Select up to 3 that apply (see Codes below and also add description)
8							
9							
10							
11							
12							
<b>b. Relationship to Head Code</b> 1 = Head 2 = Spouse 3 = Son or Daughter 4 = Grandchild 5 = Father or Mother 6 = Brother or Sister 7 = Nephew or Niece 8 = Son or Daughter-in-law 9 = Brother or Sister-in-law 10 = Father or Mother-in-law 11 = Servant/their relatives 100 = Other, pls specify		<b>e. Marital Status Code</b> 1 = Never Married 2 = Currently Married 3 = Widow / widower 4 = Divorced 5 = Nikkah solemnised but Rukhsati not taken place		<b>g. Occupation Status Code</b> 1 = Farming – self-cultivator 2 = Farming – tenant cultivator 3 = Livestock Rearing 4 = Salaried job 5 = Currently not working 6 = Enrolled in School/ Madrassa/ College 7 = Self-employed/ Trader 8 = Employed skilled labourer 9 = Employed unskilled labourer 10 = Labour abroad 11 = Housekeeping/ housewife			

HH ID

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## SECTION 4 – EDUCATION ROSTER

For these same people who are part of your household, I am going to ask you to tell me about their education.

اب میں آپ سے گھر کے ان ہی افراد کی تعلیم کے بارے میں چند سوالات کرونگا

Fill this in for each member entered in the household roster. Use the same ID number to keep rows consistent with previous page.

ID	a. CAN PERSON READ NEWSPAPER IN ANY LANGUAGE? 1 = Yes 2 = No	b. CAN PERSON ADD OR SUBTRACT? 1 = Yes 2 = No	c. HAS PERSON HAD ANY FORMAL EDUCATION? (religious education is not included - see codes and notes below)	d. TYPE OF SCHOOL? (see codes below)	e. HIGHEST GRADE COMPLETED (see codes below)	g. WHAT ARE REASONS FOR NOT SENDING TO SCHOOL? Up to 2 reasons allowed (see codes and note below)
1						
2						
3						
4						
5						
6						
7						
8						
9						

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## SECTION 4 – EDUCATION ROSTER

ID	a. CAN PERSON READ NEWSPAPER IN ANY LANGUAGE?  1 = Yes 2 = No	b. CAN PERSON ADD OR SUBTRACT?  1 = Yes 2 = No	c. HAS PERSON HAD ANY FORMAL EDUCATION? <i>(religious education is not included - see codes and notes below)</i>	d. TYPE OF SCHOOL?  <i>(see codes below)</i>	e. HIGHEST GRADE COMPLETED  <i>(see codes below)</i>	g. WHAT ARE REASONS FOR NOT SENDING TO SCHOOL? Up to 2 reasons allowed  <i>(see codes and note below)</i>				
10										
11										
12										
<table border="1"> <tr> <td> <b>c. Any Formal Education Codes</b>             1= Attended in past - Go to (d)            2 = Never attended – Skip to (g)            3 = Currently enrolled – Go to (D)         </td> <td> <b>d. Type of School Codes</b>             1 = Government            2 = Private school            3 = Religious institution            4 = NGO/ Trust school            100 = Other, pls specify            200 = Not applicable         </td> <td> <b>e. Highest Grade Code</b>   <i>For grades 1 to 12, enter class as number e.g.3 if highest formal schooling is till class 3.</i>             More codes:            20 = Bachelors            21 = Masters            22 = MPhil/ PhD            23 = No formal schooling            200 = Not applicable         </td> <td> <b>g. Reasons for not attending school Codes</b>  <i>Answer this if skipping ahead from (c) or if child age 5-15 is not enrolled in school. You can enter up to 2 codes</i>            1 = Education is costly            2 = School is too far away            3 = School is sub-standard            4 = Helps in domestic work            5 = Helps in other work            6 = Parents/ family does not permit            7 = Child unwilling            100 = Other, pls specify            200 = Not applicable         </td> </tr> </table>							<b>c. Any Formal Education Codes</b>  1= Attended in past - Go to (d) 2 = Never attended – Skip to (g) 3 = Currently enrolled – Go to (D)	<b>d. Type of School Codes</b>  1 = Government 2 = Private school 3 = Religious institution 4 = NGO/ Trust school 100 = Other, pls specify 200 = Not applicable	<b>e. Highest Grade Code</b>  <i>For grades 1 to 12, enter class as number e.g.3 if highest formal schooling is till class 3.</i>  More codes: 20 = Bachelors 21 = Masters 22 = MPhil/ PhD 23 = No formal schooling 200 = Not applicable	<b>g. Reasons for not attending school Codes</b> <i>Answer this if skipping ahead from (c) or if child age 5-15 is not enrolled in school. You can enter up to 2 codes</i> 1 = Education is costly 2 = School is too far away 3 = School is sub-standard 4 = Helps in domestic work 5 = Helps in other work 6 = Parents/ family does not permit 7 = Child unwilling 100 = Other, pls specify 200 = Not applicable
<b>c. Any Formal Education Codes</b>  1= Attended in past - Go to (d) 2 = Never attended – Skip to (g) 3 = Currently enrolled – Go to (D)	<b>d. Type of School Codes</b>  1 = Government 2 = Private school 3 = Religious institution 4 = NGO/ Trust school 100 = Other, pls specify 200 = Not applicable	<b>e. Highest Grade Code</b>  <i>For grades 1 to 12, enter class as number e.g.3 if highest formal schooling is till class 3.</i>  More codes: 20 = Bachelors 21 = Masters 22 = MPhil/ PhD 23 = No formal schooling 200 = Not applicable	<b>g. Reasons for not attending school Codes</b> <i>Answer this if skipping ahead from (c) or if child age 5-15 is not enrolled in school. You can enter up to 2 codes</i> 1 = Education is costly 2 = School is too far away 3 = School is sub-standard 4 = Helps in domestic work 5 = Helps in other work 6 = Parents/ family does not permit 7 = Child unwilling 100 = Other, pls specify 200 = Not applicable							



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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
1	<p>In your opinion, how important is it to send boys to school?</p> <p>۱۔ آپ کے خیال میں لڑکے کو اسکول بھیجنا کتنا ضروری ہے</p>	<input type="text"/>	<p>1 = Extremely important بہت زیادہ ضروری ہے</p> <p>2 = Very important زیادہ ضروری ہے</p> <p>3 = Moderately important ضروری ہے</p> <p>4 = Slightly important چھوٹا سا ضروری ہے</p> <p>5 = Not at all important غیر ضروری ہے</p>
2	<p>In your opinion, how important is it to send girls to school?</p> <p>۲۔ آپ کے خیال میں لڑکی کو اسکول بھیجنا کتنا ضروری ہے</p>	<input type="text"/>	<p>1 = Extremely important بہت زیادہ ضروری ہے</p> <p>2 = Very important زیادہ ضروری ہے</p> <p>3 = Moderately important ضروری ہے</p> <p>4 = Slightly important چھوٹا سا ضروری ہے</p> <p>5 = Not at all important غیر ضروری ہے</p>

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
3	<p>People often consult with others about sending their children to school. Which of the following person/s play an important role in decision-making related to the education of children in your household? Choose up to 3.</p> <p>۳۔ عام طور سے لوگ بچوں کو اسکول بھیجنے کے لئے دوسروں سے مشورہ کرتے ہیں۔ آپ کے بچوں کو اسکول بھیجنے کے فیصلے پر کون اثر انداز ہوتا ہے</p>	<div><div></div><div></div><div></div></div> <div>a      b      c</div>	<p>1 = Own household 2 = Neighbours/ friends 3 = Village notables, pls specify who 4 = Own biraderi/ biraderi head 100 = Other, pls specify</p>
4	<p>If household has children aged 5 - 15, then what is the name of the school the majority of children in the household attend? Why?</p> <p>۴۔ اگر گھر میں ۵-۱۵ سال کے بچے ہیں تو گھر کے زیادہ تر بچے کس اسکول میں جاتے ہیں اور کیوں؟</p>	<p>a. School Name _____</p> <p>b. Why? <div></div></p>	<p>Skip this question if there are no school age children.</p> <div><div>1 = Close to home 2 = High quality 3 = Low cost 4 = No other option 100 = Other, pls specify 200 = Not applicable</div><div>5 = Female teachers 6 = Male teachers 7 = Biraderi attends school 8 = School owner is known</div></div>
5	<p>For the school attended by majority of children in household -- how satisfied are you with the school?</p>	<div></div>	<p>Skip if there are no school age children.</p> <div><div>1 = Extremely satisfied 2 = Very satisfied</div><div>بہت زیادہ مطمئن</div></div>

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
	۵۔ آپ اس اسکول سے کتنے مطمئن ہیں جہاں گھر کے زیادہ بچے جاتے ہیں		<p>زیادہ مطمئن</p> <p>3 = Moderately satisfied</p> <p>اطمینان بخش</p> <p>4 = Slightly satisfied</p> <p>کچھ حد تک</p> <p>5 = Not at all satisfied</p> <p>غیر اطمینان بخش</p>
6	Have you heard of a School Management Council (SMC)? کیا آپ نے اسکول مینجمنٹ کونسل [ایس ایم سی] کا نام سنا ہے	<input type="checkbox"/>	<p>1 = Yes, Go to next question</p> <p>2 = No, Go to <b>Q 12</b></p>
7	Are SMCs active in your village schools?	<input type="checkbox"/>	<p>1 = Yes, Go to next question</p> <p>2 = No, Go to <b>Q 12</b></p>
8	Does the school that the majority of children in the house attend have a School Management Council (SMC)?	<input type="checkbox"/>	<p><i>Skip this question if there are no school age children.</i></p> <p>1 = Yes, Go to next question</p> <p>2 = No, Go to <b>Q 12</b></p>

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES						
9	Are you a member of the SMC? ۹۔ کیا آپ ایس ایم سی کے ممبر ہیں سوال چھوڑ دیں اگر اسکول ایس ایم سی نہیں	<input type="checkbox"/>	Skip this question if school does not have an SMC. 1 = Yes 2 = No 200 = Not applicable						
10	Have you ever attended an SMC meeting? ۱۰۔ کیا آپ نے کبھی ایس ایم سی کی میٹنگ میں شرکت کی ہے	<input type="checkbox"/>	Skip this question school has no SMC.  1 = Yes, Go to Q 12 2 = No, Go to next question 200 = Not applicable						
11	If you have never attended an SMC meeting, then why not? ۱۱۔ اگر آپ نے کبھی ایس ایم سی میٹنگ میں شرکت نہیں کری تو کیوں نہیں؟	<input type="checkbox"/>	Skip this question if respondent has attended SMC or there are no SMCs in the village.  1 = Other family member attends meetings, specify who 2 = Want to attend but too busy 3 = Meetings do not accomplish anything 4 = Meetings are not democratic 5 = Meetings are not open to me 6 = Do not know how to attend 7 = Cannot be bothered						
12	In most villages, a large number of children do not attend school. Which, if any of the following, are the key issues in getting children to go to school in your village? Choose up to 3.	<table><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>a</td><td>b</td><td>c</td></tr></table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a	b	c	1 = Lack of facilities in schools 2 = Teacher absenteeism 3 = Poor teaching quality 4 = High expense 5 = Schools too far
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
a	b	c							

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
	<p>۱۲۔ کافی گاؤں ایسے ہیں جہاں بہت زیادہ بچے اسکول نہیں جاتے۔ آپ کے خیال میں وہ کون سے خاص عوامل ہیں جن کی وجہ سے گاؤں کے بچے اسکول نہیں جاتے۔ زیادہ سے زیادہ تین جواب دے سکتے ہیں</p>		<p>6 = Co-education 7 = Too many students in class 8 = Children from other biraderis/ religions in school 9 = Teacher from other biraderi/ religion 10 = Children have other domestic work/employment 11 = Against wishes of village notable, specify who 12 = Against wishes of household members 100 = Other, pls specify</p>
13	<p>Does anyone monitor the performance of teachers in the village schools? Who?</p> <p>۱۳۔ گاؤں کے اسکول میں اساتذہ کی کارکردگی کی کوئی نگرانی کرتا ہے۔ کون</p>	<input type="checkbox"/>	<p>1 = Head teacher 2 = Community 3 = Village notable 4 = No one 100 = Other, pls specify</p>
14	<p>An SMC is meant to be a committee of parents, teachers and other notables from your village that meets to discuss matters of the school. For any of the issues identified, how effective do you think an SMC might be in addressing it?</p> <p>۱۴۔ ایس ایم سی سے مراد ایک ایسی کمیٹی ہے جو والدین، اساتذہ اور گاؤں کے بااثر افراد پر مشتمل ہوتی ہے۔ جو مل کر اسکول کے معاملات پر بنیاد پر خیال کرتے ہیں۔</p>	<input type="checkbox"/>	<p>1 = Extremely effective انتہائی زیادہ پُراثر 2 = Very effective بہت زیادہ پُراثر 3 = Moderately effective زیادہ پُراثر 4 = Slightly effective</p>

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
	آپ کے خیال میں ایس ایم سی کتنی اچھی طرح کچھ یا تمام مشکلات جن کی نشاندہی کی گئی ہے ان پر قابو پاتی ہے۔		کچھ حد تک 5 = Not at all effective کوئی اثر نہیں
15	If you feel that an SMC cannot be at all effective in handling the key issues in sending children to school in the village, then why do you feel this way? ۱۵۔ اگر آپ کے خیال میں بچوں کو گاؤں کے اسکول بھیجنے کی درپیش مشکلات کو ایس ایم سی نہیں سنبھال سکتی۔ تو آپ ایسا کیوں سوچتے ہیں؟	<input type="checkbox"/>	Ask this question only if respondent replies Not at all effective to prior question. Skip otherwise.  1 = SMC has no real authority 2 = SMC has poor leadership 3 = SMC does not understand problems 4 = SMC does not represent views of village 5 = SMC does not care 6 = SMC has too much interference from outside 100 = Other, pls specify 200 = Not applicable
16	In general, how satisfied are you with what the government has done for education in your village? ۱۶۔ آپ ان اقدامات سے کس قدر مطمئن ہیں جو گورنمنٹ نے تعلیم کے لئے آپ کے گاؤں میں کئے	<input type="checkbox"/>	1 = Extremely satisfied بہت زیادہ مطمئن 2 = Very satisfied زیادہ مطمئن 3 = Moderately satisfied

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
			اطمینان بخش 4 = Slightly satisfied کچھ حد تک 5 = Not at all satisfied غیر اطمینان بخش
17	Compared to ten years ago, how would you rate the government's performance on education in your village? ۷۔ آپ کے گاؤں میں تعلیم کے حوالے سے گورنمنٹ کی کارکردگی کو گزشتہ دس سالوں کے مقابلے میں کس طرح دیکھتے ہیں	<div></div>	1 = Better than before پہلے سے بہتر 2 = Like before پہلے جیسا 3 = Worse than before پہلے سے خراب
18	Which of the following intermediaries have played a positive role in education in your village over the past ten years? Pls provide the name of relevant person/ organization. Choose up to 3	<div><div>a</div><div>b</div><div>c</div></div> Names: _____ _____	1 = MNA 2 = MPA 3 = Nazim 4 = Union councillor 5 = Village notable 6 = NGO 7 =Own community/biraderi 8 = No one 100 = Other, pls specify

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## SECTION 5 – EDUCATION SERVICE DELIVERY

	QUESTION	ANSWER	CODES AND NOTES
19	<p>If your household has school-going children, then in the last month how much was spent on education per child on the following?</p> <p>۱۹۔ اگر آپ کا بچہ اسکول جاتا ہے تو گزشتہ ماہ تعلیم پر کتنا خرچ آیا</p>	<p>a. School fees _____</p> <p>b. Transport _____</p> <p>c. Private Tuition _____</p> <p>d. Pocket money for school _____</p>	<p><i>Skip if no school-going children in household</i></p> <p><i>Enter values in rupees</i></p>
20	<p>If your household has school-going children, then in the last year how much was spent on education per child on the following?</p> <p>۲۰۔ اگر آپ کا بچہ اسکول جاتا ہے تو گزشتہ سال تعلیم پر کتنا خرچ آیا</p>	<p>a. Annual fees _____</p> <p>b. Uniform _____</p> <p>c. Textbooks _____</p> <p>d. Other, specify _____</p>	<p><i>Skip if no school-going children in household</i></p> <p><i>Enter values in rupees</i></p>



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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
1	<p>How familiar are you with the local government system?</p> <p>۱۔ آپ لوکل گورنمنٹ نظام سے کتنا واقف ہیں</p>	<input type="checkbox"/>	<p>1 = Very familiar بہت حد تک</p> <p>2 = Somewhat familiar کچھ حد تک</p> <p>3 = Not at all familiar قطعاً نہیں</p>
2	<p>If you had the choice between two government systems which I will describe now, which one would you choose?</p> <p>۲۔ اگر آپ کو گورنمنٹ کے دو نظام جو کہ میں بتاؤں گا میں سے ایک کا انتخاب کرنا ہو تو کس ایک کا انتخاب کریں گے</p> <p>In the first system, local government is run by a bureaucrat who does what provincial and federal government want for education, health and infrastructure.</p> <p>In the second system, local government is run by elected officials who have authority over services like education, health and infrastructure.</p>	<input type="checkbox"/>	<p><i>Skip this question if person says they are not at all familiar with the system</i></p> <p>1 = First option is better 2 = Second option is better 3 = Both options are the same 200 = Not applicable</p> <p><i>Clarification: Local government is for example a district, or a union council or a tehsil. Service delivery is how government services such as education and health are provided.</i></p>

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
3	<p>We want to check how accessible and popular local government officials are. Do you know who your local union councillor is? Pls provide the name</p> <p>۳۔ ہم یہ جاننے کے لئے کہ سرکاری اہلکار کتنے اچھے ہیں اور ان باتگ آپ کی رسائی ہے۔ کیا آپ اپنے یونین کونسل کو جانتے ہیں انکا نام بتائیں</p>	<p>a. Know the name? <input type="checkbox"/></p> <p>b. Name _____</p>	<p>1 = Yes 2 = No</p>
4	<p>In the last five years, have you ever had contact with this union councillor or any other member of the local government? Pls name who contact was with</p> <p>۴۔ گزشتہ پانچ سالوں میں کیا آپ اس یونین کونسلر یا کسی اور لوکل گورنمنٹ کے ممبر سے ملے ہیں۔ اسکا نام بتائیں جن سے رابطہ ہوا</p>	<p>a. Contact? <input type="checkbox"/></p> <p>b. Name _____</p>	<p>1 = Yes 2 = No</p>
5	<p>What was the reason for contact?</p> <p>۵۔ رابطہ کی وجہ</p>	<p>Reason _____</p> <p>_____</p>	<p><i>Skip if no contact made. Note answer in free form</i></p>

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
6	A lot of people do not vote in local elections. Did you vote in the last local government election? ۶۔ کافی لوگ لوکل الیکشن میں ووٹ نہیں ڈالتے کیا آپ نے گزشتہ الیکشن میں ووٹ ڈالا تھا	<input type="checkbox"/>	1 = Yes 2 = No
7	If yes, then who did you vote for and why? ۷۔ اگر ہاں تو ووٹ کس کو اور کیوں	a. Name _____ b. Why? <input type="checkbox"/>	1 = Same biraderi 2 = Belong to the same political party 3 = Liked his policy platform 4 = Was part of voting block 5 = Village notable instructed me to vote for this person 6 = Know him/her personally 7 = Was promised a favour in return
8	If no, then why did you not vote? ۸۔ اگر نہیں تو ووٹ کیوں نہیں دیا	<input type="checkbox"/>	1 = Was not aware of elections 2 = Did not like anyone's policies 3 = Too busy 4 = Not interested in politics 5 = Village notable instructed me not to vote 6 = Voting does not accomplish anything 7 = Voting process was cumbersome 8 = Do not have an NIC
9	How important do you think it is for the government to hold new local elections? ۹۔ انتہائی ضروری ہے	<input type="checkbox"/>	1 = Extremely important انتہائی ضروری ہے

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
	۹۔ آپ کے خیال میں حکومت کانے لوکل الیکشن کرانا کتنا ضروری ہے		2 = Very important بہت ضروری 3 = Moderately important ضروری 4 = Slightly important کسی حد تک 5 = Not at all important ضرورت نہیں
10	Do you plan to vote in the upcoming local (NOT GENERAL) elections? ۱۰۔ کیا آپ آنے والے لوکل الیکشن [عام انتخابات نہیں] میں ووٹ ڈالنے کا ارادہ رکھتے ہیں	<input type="checkbox"/>	1 = Yes 2 = No
11	If yes, then who will you vote for and why? ۱۱۔ اگر ہاں تو آپ کس کو ووٹ دیں گے اور کیوں	a. Name _____  b. Why? <input type="checkbox"/>	1 = Same biraderi 2 = Belong to the same political party 3 = Liked his policy platform 4 = Was part of voting bloc 5 = Village notable instructed me to vote for this person 6 = Village notable so must vote for him/her 7 = Know him/her personally 8 = Was promised a favour in return 9 = Like him/her 10 = Have not decided yet

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
12	<p>Are you or is anyone in your family active in politics?</p> <p>۱۲۔ کیا آپ یا آپ کے گھرانے کا کوئی فرد سیاست میں متحرک ہے</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
13	<p>If yes, then who and what is their designation?</p> <p>۱۳۔ اگر ہاں، تو کون اور اس کا کیا عہدہ ہے</p>	<p>a. Active? <input type="checkbox"/></p> <p>b. Who? <input type="checkbox"/></p> <p>c. Designation? _____</p>	<p>1 = Yes 2 = No</p> <p><i>In who, mention code of person from household roster</i></p>
14	<p>Have you heard of a Community Citizen Board (CCB)?</p> <p>۱۴۔ کیا آپ نے کمیونٹی سٹیٹیزن بورڈ [سی۔سی۔بی] کے بارے میں سنا ہے</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
15	<p>In the last five years, how active has the CCB been in your village?</p>	<input type="checkbox"/>	<p><i>Skip if person has not heard of CCB.</i></p> <p>1 = Very active</p> <p>بہت زیادہ متحرک</p>

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
	۱۵۔ گزشتہ پانچ سالوں میں آپ کے گاؤں میں سی۔سی۔بی کتنی متحرک ہے		2 = Somewhat active کچھ حد تک متحرک 3 =Not at all active متحرک نہیں ہے
16	Have you heard of a Village Neighborhood Committee (VNC)? ۱۶۔ کیا آپ نے ویج نیبر ہڈ کمیٹی [وی۔سی۔این] کے بارے میں سنا ہے	<input type="checkbox"/>	1 = Yes 2 = No
17	In the last five years, how active has the VNC been in your village? ۱۷۔ گزشتہ پانچ سالوں میں آپ کے گاؤں میں وی۔این۔سی کتنی متحرک ہے	<input type="checkbox"/>	<i>Skip if person has not heard of VNC.</i> 1 = Very active 2 = Somewhat active 3 =Not at all active
18	Have you heard of a Musalihat Anjuman committee? ۱۸۔ کیا آپ نے مصالحت انجمن کمیٹی کے بارے میں سنا ہے	<input type="checkbox"/>	1 = Yes 2 = No

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## SECTION 6 – DEVOLUTION AND LGO 2001

	QUESTION	ANSWER	CODES AND NOTES
19	<p>In the last five years, how active has this committee been in your village?</p> <p>۱۹۔ گزشتہ پانچ سالوں میں آپ کے گاؤں میں مصالحت انجمن کمیٹی کتنی متحرک ہے</p>	<input type="checkbox"/>	<p><i>Skip if person has not heard of MA.</i></p> <p>1 = Very active 2 = Somewhat active 3 = Not at all active</p>
20	<p>Have you ever participated in any of these three organizations?</p> <p>۲۰۔ کیا آپ نے کبھی ان تینوں اداروں میں سے کسی ایک کے ادارے میں حصہ لیا ہے</p>	<input type="checkbox"/>	<p><i>Skip if person has not heard of any organizations</i></p> <p>1 = Yes 2 = No</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
1	<p>I am going to read out the names of some places to you. Pls indicate the distance to the closest one to your house.</p> <p>۱۔ میں آپ کو کچھ جگہوں کے نام پڑھ کر سناؤں گا۔ اپنے گھر سے قریب ترین فاصلہ کی جگہ کی نشاندہی کریں</p>	<p>a. Govt. School _____</p> <p>b. Govt. health unit _____</p> <p>c. Mosque _____</p> <p>d. Police station _____</p> <p>e. Public transport _____</p> <p>f. Market _____</p> <p>g. Government office _____</p>	<p>Record distance in km. If distance is 99km, be careful in inputting as this may be interpreted as Don't Know.</p>
2	<p>In the last 12 months when someone from your household was ill, how often did you use the government provided local basic health unit/ hospital?</p> <p>۲۔ گزشتہ بارہ ماہ میں گھر کے کسی فرد کے بیمار ہونے کی صورت میں آپ کتنی روانی سے سرکاری فراہم کردہ بنیادی صحت یونٹ یا ہسپتال گئے ہیں</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	<p>1 = Always ہمیشہ</p> <p>2 = Most of the time زیادہ تر</p> <p>3 = About half the time عموماً</p> <p>4 = Sometimes کبھی کبھار</p> <p>5 = Never کبھی نہیں</p>



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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
3	<p>To what extent were you satisfied with the service provided?</p> <p>۳۔ فراہم کردہ سہولیات سے آپ کس حد تک مطمئن ہیں</p>	<input type="checkbox"/>	<p><i>Skip if person has not used service.</i></p> <p>1 = Extremely satisfied بہت زیادہ مطمئن</p> <p>2 = Very satisfied زیادہ مطمئن</p> <p>3 = Moderately satisfied اطمینان بخش</p> <p>4 = Slightly satisfied کچھ حد تک</p> <p>5 = Not at all satisfied غیر اطمینان بخش</p>
4	<p>What type of change have you seen in this service over the past 10 years?</p> <p>۴۔ گزشتہ دس سالوں میں ان سہولیات میں آپ نے کیا تبدیلیاں محسوس کیں</p>	<input type="checkbox"/>	<p><i>Skip if person has never used the service</i></p> <p>1 = Better than before پہلے سے بہتر</p> <p>2 = Like before پہلے جیسا</p> <p>3 = Worse than before پہلے سے خراب</p> <p>200 = Not applicable</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
5	<p>In the last 12 months when travelling, how often did you use public roads?</p> <p>۵۔ گزشتہ بارہ ماہ میں سفر کے لئے آپ نے کتنا بار ریہ سڑک سفر کیا</p>	<input type="checkbox"/>	<p>1 = Always ہمیشہ</p> <p>2 = Most of the time زیادہ تر</p> <p>3 = About half the time عموماً</p> <p>4 = Sometimes کبھی کبھار</p> <p>5 = Never کبھی نہیں</p>
6	<p>To what extent were you satisfied with the service provided?</p> <p>۶۔ آپ کس حد تک اس سہولت سے مطمئن ہیں</p>	<input type="checkbox"/>	<p><i>Skip if person has not used service.</i></p> <p>1 = Extremely satisfied</p> <p>2 = Very satisfied</p> <p>3 = Moderately satisfied</p> <p>4 = Slightly satisfied</p> <p>5 = Not at all satisfied</p>
7	<p>What type of change have you seen in this service over the past 10 years?</p>	<input type="checkbox"/>	<p><i>Skip if person has never used the service</i></p> <p>1 = Better than before پہلے سے بہتر</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
	<p>۷۔ گزشتہ دس سالوں میں اس سہولت میں آپ نے کیا تبدیلیاں محسوس کی</p>		<p>2 = Like before پہلے جیسا</p> <p>3 = Worse than before پہلے سے خراب</p> <p>200 = Not applicable</p>
8	<p>In the last 12 months when there was a police related issue, how often did you contact the police?</p> <p>۸۔ گزشتہ بارہ ماہ میں پولیس سے متعلق معاملے میں آپ نے کتنا پولیس سے رابطہ کیا</p>	<input type="checkbox"/>	<p>1 = Always ہمیشہ</p> <p>2 = Most of the time زیادہ تر</p> <p>3 = About half the time عموماً</p> <p>4 = Sometimes کبھی کبھار</p> <p>5 = Never کبھی نہیں</p>
9	<p>To what extent were you satisfied with the service provided?</p>	<input type="checkbox"/>	<p>Skip if person has not used service.</p> <p>1 = Extremely satisfied بہت زیادہ مطمئن</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
	۹۔ فراہم کردہ سہولیات سے آپ کس حد تک مطمئن ہیں		<p>2 = Very satisfied</p> <p>3 = Moderately satisfied</p> <p>4 = Slightly satisfied</p> <p>5 = Not at all satisfied</p> <p>زیادہ مطمئن اطمینان بخش کچھ حد تک غیر اطمینان بخش</p>
10	What type of change have you seen in this service over the past 10 years? ۱۰۔ گزشتہ دس سالوں میں اس سہولت میں کیا تبدیلی محسوس کی	<input type="checkbox"/>	<p><i>Skip if person has never used the service</i></p> <p>1 = Better than before پہلے سے بہتر</p> <p>2 = Like before پہلے جیسا</p> <p>3 = Worse than before پہلے سے خراب</p> <p>200 = Not applicable</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
11	Which public service holds the first priority for improvement in the village for you? ۱۱۔ آپ کے خیال میں گاؤں میں سب سے پہلے کس سہولت بہتری کی ضرورت ہے	<div></div>	1 = Health 2 = Education 3 = Roads and infrastructure 4 = Sanitation 5 = Social protection programs 6 = Security and policing 7 = Drinking water 100 = Other, pls specify
12	Which public service holds the second highest priority for improvement in the village for you? ۱۲۔ آپ کے خیال میں گاؤں میں دوسری کس سہولت میں بہتری کی ضرورت ہے	<div></div>	1 = Health 2 = Education 3 = Roads and infrastructure 4 = Sanitation 5 = Social protection programs 6 = Security and policing 7 = Drinking water 100 = Other, pls specify
13	In your view, whose responsibility is it to improve these public services that are of importance to you? Choose up to 3	<div><div></div><div></div><div></div><div>a</div><div>b</div><div>c</div></div>	1 = Central government 2 = Local government 3 = NGOs 4 = Village Notables 5 = Community members 6 = Biraderi head 100 = Other, pls specify
14	How much confidence do you have in the federal or provincial government to improve the quality of public services in	<div></div>	1 = A great deal قطعی امید

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
	<p>your village?</p> <p>۱۴۔ آپ کو کتنا اعتماد ہے کہ صوبائی یا وفاقی حکومت آپ کے گاؤں میں عوامی سہولیات میں بہتری لائیں گی</p>		<p>2 = Quite a lot کافی حد تک</p> <p>3 = Not very much بہت زیادہ نہیں</p> <p>4 = None at all بالکل نہیں</p>
15	<p>How much confidence do you have in the local government to improve the quality of public services in your village?</p> <p>۱۵۔ آپ کو کتنا اعتماد ہے کہ لوکل حکومت آپ کے گاؤں میں عوامی سہولیات میں بہتری لائیں گی</p>	<input type="checkbox"/>	<p>1 = A great deal</p> <p>2 = Quite a lot</p> <p>3 = Not very much</p> <p>4 = None at all</p>
16	<p>Are there NGOs active in your village? Pls name them.</p> <p>۱۶۔ کیا آپ کے علاقے میں این۔ جی۔ او متحرک ہیں۔ نام بتائیں</p>	<p>a. Presence? <input type="checkbox"/></p> <p>b. NGOs _____</p> <p>_____</p>	<p>1 = Yes</p> <p>2 = No</p>
17	<p>How much confidence do you have in NGOs to improve the quality of public services in your village?</p>	<input type="checkbox"/>	<p><i>Skip if no NGO in village</i></p> <p>1 = A great deal</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
	<p>۱۷۔ آپ کو کتنا اعتماد ہے کہ این۔ جی۔ او آپ کے گاؤں میں عوامی سہولیات میں بہتری لائیں گی</p>		<p>قطعاً امید 2 = Quite a lot کافی حد تک 3 = Not very much بہت زیادہ نہیں 4 = None at all بالکل نہیں</p>
18	<p>Who are the village notables in this village? Name up to 3 in order of decreasing influence.</p> <p>۱۸۔ اس گاؤں کے بڑے کون ہیں نہیں با اثر افراد کے نام انکی حیثیت کے مطابق بتائیں</p>	<p>a. _____ b. _____ c. _____</p>	<p>Enter names of village notables</p>
19	<p>For the one notable who you think has the most influence in the village, what is the source of power of this notable?</p> <p>۱۹۔ گاؤں کا وہ ایک بڑا جس کو آپ زیادہ با اثر سمجھتے ہیں اس بڑے کی طاقت کا ذریعہ کیا ہے</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	<p>1 = Biraderi 2 = Religion 3 = Agricultural Land (Landlord) 4 = Economic power 5 = Support from political party 6 = Coercion from armed men 7 = Education</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
20	<p>How much confidence do you have in this or other similar village notables to improve the quality of public services in your village? Pls name specific notables who you think may be helpful</p> <p>۲۰۔ آپ کہ کتنا اعتماد ہے کہ یہ بڑا یا دوسرے بڑے آپ کے گاؤں میں بہتری لائیں گے</p>	<input type="text"/>	<p>1 = A great deal قطعاً امید</p> <p>2 = Quite a lot کافی حد تک</p> <p>3 = Not very much بہت زیادہ نہیں</p> <p>4 = None at all بالکل نہیں</p>
21	<p>For the one person who you think has the most influence in the village, how eager are they to improve the quality of education in the village?</p> <p>۲۱۔ کوئی ایک ایسا شخص جو آپ کے خیال میں گاؤں میں سب سے بااثر ہو۔ وہ گاؤں میں اچھی تعلیم کی ترقی کا کتنا خواہشمند ہوگا</p>	<input type="text"/>	<p>1 = Extremely eager انتہائی خواہشمند</p> <p>2 = Very eager بہت خواہشمند</p> <p>3 = Moderately eager خواہشمند</p> <p>4 = Slightly eager کافی حد تک</p> <p>5 = Not at all eager بالکل نہیں</p>



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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
22	<p>If you or your village needed something, who in the government would you most likely contact?</p> <p>اگر آپ کو یا آپ کے گاؤں کو کسی چیز کی ضرورت ہو تو حکومت میں سب سے پہلے کس سے رابطہ کریں گے</p>	<input type="text"/>	<p>1 = MNA 2 = MPA 3 = Nazim 4 = Tehsil member 5 = Union councillor 6 = DCO 7 = No one</p>
23	<p>Is it the norm for you to contact the government directly or do you tend to use an intermediary? If you use any intermediary, who do you use?</p> <p>۲۳۔ کیا آپ حکومت سے براہ راست رابطہ کرتے ہیں یا آپ کوئی بااثر ذریعہ استعمال کرتے ہیں؟ اگر ایسا ہے تو کس کے ذریعہ؟</p>	<p>a. <input type="text"/></p> <p>b. <input type="text"/></p>	<p>1 = Direct contact 2 = Through intermediary</p> <p>1 = Neighbors/ friends 2 = Village notables, specify who 3 = Biraderi head/ members</p>
24	<p>In addition to contacting the government, a lot of people also defer to someone of influence in a village. If you or your village needed something, which other such persons might you contact?</p>	<p>a. _____</p> <p>b. <input type="text"/></p>	<p>1 = Neighbors/ friends 2 = Village notables, specify who 3 = Biraderi head 4 = Other biraderi members 5 = NGOs 6 = No one Write down name and what they do</p>

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## SECTION 7 – GOVERNMENT SERVICES AND SATISFACTION

	QUESTION	ANSWER	CODES AND NOTES
25	<p>If you contact a village notable, then is it the norm for you to contact this notable directly or do you tend to use an intermediary? Who do you use as the intermediary?</p> <p>۲۵۔ اگر آپ گاؤں کی بڑے سے رابطہ کرتے ہیں۔ تو کیا آپ براہ راست اس سے رابطہ کرتے ہیں یا آپ کسی کے ذریعہ سے رابطہ کرتے ہیں؟ آپ کس ذریعہ کو استعمال کرتے ہیں؟</p>	<p>a. <input type="text"/></p> <p>b. <input type="text"/></p>	<p>1 = Direct contact 2 = Through intermediary</p> <p>1 = Neighbors/ friends 2 = Other Village notables, specify who 3 = Biraderi head/ members</p>

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
1	<p>I am going to read out the names of some types of voluntary organizations. Pls tell me if you are currently or have previously been part of such a type of organization</p> <p>میں آپ کو چند رضا کار اداروں کے نام پڑھ کر سناؤں گا۔ آپ بتائیں کہ کیا آپ اس وقت یا ابھی ان اداروں کا حصہ رہے ہیں</p> <p>Mosque committee/ Quran group</p>	<input type="checkbox"/>	<p>1 = Currently part of اس وقت حصہ ہوں</p> <p>2 = Used to be part of پہلے حصہ تھا</p> <p>3 = Have never been part of کبھی بھی نہیں</p>
2	<p>Political party</p> <p>If yes, then specify which one</p>	<p>a. <input type="checkbox"/></p> <p>b. _____</p>	<p>1 = Currently part of</p> <p>2 = Used to be part of</p> <p>3 = Have never been part of</p>
3	Panchayat	<input type="checkbox"/>	<p>1 = Currently part of</p> <p>2 = Used to be part of</p> <p>3 = Have never been part of</p>
4	Occupational group/ Labor union	<input type="checkbox"/>	<p>1 = Currently part of</p> <p>2 = Used to be part of</p> <p>3 = Have never been part of</p>

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
5	Village Neighbourhood Committee	<input type="checkbox"/>	1 = Currently part of 2 = Used to be part of 3 = Have never been part of
6	SMC or PTA	<input type="checkbox"/>	1 = Currently part of 2 = Used to be part of 3 = Have never been part of
7	Credit/ committee group	<input type="checkbox"/>	1 = Currently part of 2 = Used to be part of 3 = Have never been part of
8	Other voluntary group, pls specify	<input type="checkbox"/>	1 = Currently part of 2 = Used to be part of 3 = Have never been part of
9	Have you ever been an office member of any of these committees? If yes, specify which one  ۹۔ کیا آپ ان کمیٹیوں میں سے کسی کے عہدیدار رہے ہیں اگر ہاں تو کس کے؟	<input type="checkbox"/>	<i>Skip if person has never been part of such group.</i>  1 = Yes 2 = No 200 = Not applicable
10	Which of these groups are/were you closest to?	_____	<i>Skip if person has never been part of such group.</i> 200 = Not applicable

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
	۱۰۔ ان میں سے کن گروپ آپ قریب ہیں یا تھے		
11	How close would you say these ties are/were? ۱۱۔ آپ کے ان کے ساتھ کتنے قریبی تعلقات ہیں یا تھے	<input type="checkbox"/>	<p><i>Skip if person has never been part of such group.</i></p> <p>1 = Very close بہت قریبی</p> <p>2 = Somewhat close کچھ حد تک</p> <p>3 = Not close at all کوئی تعلق نہیں</p> <p>200 = Not applicable</p>
12	If you were part of any voluntary organization, did this organization ever take any reform action for the betterment of the village? ۱۲۔ اگر آپ کسی رضا کار ادارے کا حصہ رہے ہیں تو کیا اس ادارے نے گاؤں کی بہتری کے لئے کوئی کام کیا	<input type="checkbox"/>	<p><i>Skip if person has never been part of such group.</i></p> <p>1 = Yes</p> <p>2 = No</p> <p>200 = Not applicable</p>

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
13	<p>In the last 12 months, have you attended any political rallies, demonstrations, protests, etc?</p> <p>۱۳۔ گزشتہ بارہ ماہ میں کیا آپ نے کسی سیاسی جلسے، جلوس یا احتجاج میں شرکت کری ہے</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
14	<p>In the last 12 months, have you attended any meeting pertaining to village or school affairs?</p> <p>۱۴۔ گزشتہ بارہ ماہ میں کیا آپ نے گاؤں یا اسکول کے معاملات سے متعلق کسی میٹنگ میں شرکت کی ہے</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
15	<p>How close are you to your biraderi?</p> <p>۱۵۔ آپ اپنی برادری سے کتنا قریب ہیں</p>	<input type="checkbox"/>	<p>1 = Very close بہت قریبی 2 = Somewhat close</p>

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
			<p>کچھ حد تک</p> <p>3= Not close at all</p> <p>کوی تعلق نہیں</p>
16	<p>In the last 3 months, how many times have you visited or been visited by members from your biraderi?</p> <p>۱۶۔ گزشتہ تین ماہ میں آپ نے یا آپ کی برادری نے آپ سے کتنی بار ملاقات کی ہے</p>	<input type="text"/>	<p>Enter number of visits</p>
17	<p>In the last 3 months, how many times have you visited or been visited by members from outside your biraderi?</p> <p>۱۷۔ گزشتہ تین ماہ میں آپ نے یا آپ کی برادری کے علاوہ کسی نے آپ سے کتنی بار ملاقات کی ہے</p>	<input type="text"/>	<p>Enter number of visits</p>

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
18	<p>Do you have any ties with persons of your biraderi from outside this village?</p> <p>۱۸۔ کیا اس گاؤں سے باہر آپ کے اپنی برادری کے کسی شخص سے تعلقات ہیں</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
19	<p>Do you think people such as yourself can work together to improve the quality of life or education provision in your village?</p> <p>۱۹۔ کیا آپ سمجھتے ہیں کہ آپ جیسے اور لوگ مل کر گاؤں کی طرز زندگی اور تعلیم کو بہتر کر سکتے ہیں</p>	<input type="checkbox"/>	<p>1 = Yes 2 = No</p>
20	<p>If no, then why do you think so?</p> <p>۲۰۔ اگر نہیں تو آپ ایسا کیوں سوچتے ہیں</p>	<input type="checkbox"/>	<p><i>Skip if respondent believes that you villagers can work together</i></p> <p>1 = Hard to organize people 2 = People do not want to help each other 3 = Village notable has too much influence, specify who 4 = People are too busy</p>



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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES						
			5 = Villagers do not have the resources or ability 6 = There are too many biraderis in this village and it is hard to work across the divide 7 = My household does not belong to a dominant biraderi 8 = My household is from a minority religion 100 = Other, pls specify						
21	Have there been instances of collective action in the village for its betterment? For what purpose?	a. Yes or No? <input type="checkbox"/> b. Purpose _____ _____	1 = Yes 2 = No  <i>Write purpose in free form</i>						
22	The last time your family faced an emergency, who did you contact for help? ۲۲۔ آخرنی مرتبہ خاندان کی کسی ایمر جنسی کی صورت میں آپ نے مدد کے لئے کس سے رابطہ کیا؟	<input type="checkbox"/>	1 = Neighbors/ friends 2 = Village notables, specify who 3 = Biraderi head 4 = Other biraderi members 5 = NGOs 6 = No one						
23	What kind of help did the person/people you contacted provide? Choose up to 3.	<table border="1"> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>a</td> <td>b</td> <td>c</td> </tr> </table>				a	b	c	1 = Emotional support 2 = Financial support in form of loans or charity 3 = Support in form of physical help/ manpower 4 = Used influence with other people to help
a	b	c							

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
	۲۳۔ رابطہ کرنے والے لوگ یا شخص نے آپ کی کیا مدد کی؟		5 = Advise/guidance
24	How well do you think the residents of this village get along? ۲۴۔ آپ کے خیال میں گاؤں کے لوگ ایک دوسرے کا کتنا خیال رکھتے ہیں	<input type="checkbox"/>	1 = Very well بہت زیادہ 2 = Somewhat well کافی حد تک 3 = Not well at all بالکل نہیں
25	How well do you think residents of this village who are from different biraderis get along? ۲۵۔ آپ کے خیال میں اس گاؤں میں رہنے والے مختلف برادریاں ایک دوسرے کا کتنا خیال رکھتے ہیں	<input type="checkbox"/>	1 = Very well بہت زیادہ 2 = Somewhat well کافی حد تک 3 = Not well at all بالکل نہیں
26	How well do you think residents of this village who are from different religions get along?	<input type="checkbox"/>	1 = Very well بہت زیادہ

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
	۲۶۔ آپ کے خیال میں اس گاؤں میں رہنے والے مختلف مذاہب کے لوگ ایک دوسرے کا کتنا خیال رکھتے تھیں		2 = Somewhat well کافی حد تک 3 = Not well at all بالکل نہیں
27	How often do residents in this village have disagreements or fights? ۲۷۔ کتنی مرتبہ اس گاؤں میں رہنے والوں کے آپس میں اختلافات یا لڑائی ہوئی ہے	<input type="text"/>	1 = Always ہمیشہ 2 = Most of the time زیادہ تر 3 = About half the time عموماً 4 = Sometimes کبھی کبھار 5 = Never کبھی نہیں
28	If there is a conflict, who does the household approach for resolution?	<input type="text"/>	1 = Neighbors/ friends 2 = Village notables, specify who 3 = Biraderi head 4 = Other biraderi members 5 = Government official

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## SECTION 8 – SOCIAL CAPITAL AND COLLECTIVE ACTION

	QUESTION	ANSWER	CODES AND NOTES
	۲۸۔ اختلاف کی صورت میں گھرانہ مصالحت کے لئے کس سے رابطہ کرتا ہے		6 = Police 7 = Panchayat 100 = Other, pls specify
29	Is there a panchayat in this village? ۲۹۔ کیا اس گاؤں میں پنچایت ہے	<input type="checkbox"/>	1 = Yes 2 = No
30	Has the household ever gone to the panchayat for conflict resolution? Did they find it useful? ۳۰۔ کیا گھرانے نے کسی اختلاف کی صورت میں پنچایت سے مصالحت کے لئے رابطہ کیا ہے؟ کیا وہ اسے کارآمد سمجھتے ہیں	a. <input type="checkbox"/> b. <input type="checkbox"/>	1 = Yes 2 = No

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
1	<p>How satisfied would you say you are with your life?</p> <p>۱۔ آپ اپنی زندگی سے کتنا خوش ہیں</p>	<input type="checkbox"/>	<p><i>Skip if person has not used service.</i></p> <p>1 = Extremely satisfied بہت زیادہ مطمئن</p> <p>2 = Very satisfied زیادہ مطمئن</p> <p>3 = Moderately satisfied اطمینان بخش</p> <p>4 = Slightly satisfied کچھ حد تک</p> <p>5 = Not at all satisfied غیر اطمینان بخش</p>
2	<p>In general, how much would you say you can trust Pakistanis?</p> <p>۲۔ عمومی طور پر آپ پاکستانیوں پر کتنا بھروسہ کرتے ہیں</p>	<input type="checkbox"/>	<p>1 = Trust completely مکمل بھروسہ</p> <p>2 = Trust somewhat کافی بھروسہ</p> <p>3 = Do not trust very much بہت زیادہ نہیں</p> <p>4 = Do not trust at all بالکل نہیں</p>

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
3	<p>In general, how much would you say you trust your neighbours in this village?</p> <p>۳۔ عمومی طور پر ایس گاؤں میں</p> <p>آپ اپنے پڑوسی پر کتنا بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>مکمل بھروسہ</p> <p>2 = Trust somewhat</p> <p>کافی بھروسہ</p> <p>3 = Do not trust very much</p> <p>بہت زیادہ نہیں</p> <p>4 = Do not trust at all</p> <p>بالکل نہیں</p>
4	<p>In general, how much would you say you trust people from your own biraderi?</p> <p>۴۔ عمومی طور پر ایس گاؤں میں</p> <p>آپ اپنی برادری کے لوگوں پر کتنا</p> <p>بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>2 = Trust somewhat</p> <p>3 = Do not trust very much</p> <p>4 = Do not trust at all</p>
5	<p>In general, how much would you say you trust people who are from the Syed, Rajput, Arain or Bhatti castes?</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>2 = Trust somewhat</p> <p>3 = Do not trust very much</p> <p>4 = Do not trust at all</p>
6	<p>In general, how much would you say you trust people who are from the Muslim Sheikh, Masihi, Bheel or Chuhra castes?</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>2 = Trust somewhat</p> <p>3 = Do not trust very much</p> <p>4 = Do not trust at all</p>

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
7	<p>In general, how much would you say you trust people of your own religion?</p> <p>۷۔ عمومی طور پر اس گاؤں میں آپ اپنے ہم مذہب لوگوں پر کتنا بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely مکمل بھروسہ</p> <p>2 = Trust somewhat کافی بھروسہ</p> <p>3 = Do not trust very much بہت زیادہ نہیں</p> <p>4 = Do not trust at all بالکل نہیں</p>
8	<p>In general, how much would you say you trust people belonging to other religions?</p> <p>۸۔ عمومی طور پر اس گاؤں میں آپ دوسرے مذاہب کے لوگوں پر کتنا بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>2 = Trust somewhat</p> <p>3 = Do not trust very much</p> <p>4 = Do not trust at all</p>
9	<p>In general, how much would you say you trust people of your own ethnicity?</p> <p>۹۔ عمومی طور پر اس گاؤں میں آپ اپنی علاقائی کے لوگوں پر کتنا بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely</p> <p>2 = Trust somewhat</p> <p>3 = Do not trust very much</p> <p>4 = Do not trust at all</p> <p><i>Clarification: Here ethnicity is based on geography or language so for instance Punjabi or Sindhi or Muhajir</i></p>

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
10	<p>In general, how much would you say you trust people belonging to other ethnicities?</p> <p>۱۰۔ عمومی طور پر اس گاؤں میں آپ دوسرے علاقوں کے لوگوں پر کتنا بھروسہ کرتے ہیں</p>	<input type="text"/>	<p>1 = Trust completely مکمل بھروسہ</p> <p>2 = Trust somewhat کافی بھروسہ</p> <p>3 = Do not trust very much بہت زیادہ نہیں</p> <p>4 = Do not trust at all بالکل نہیں</p>
11	<p>How much of a sense of community and belonging do you feel in your village?</p> <p>۱۱۔ آپ اپنے گاؤں میں کس حد تک اتحاد اور بھائی چارہ محسوس کرتے ہیں</p>	<input type="text"/>	<p>1 = A lot بہت زیادہ</p> <p>2 = Some کچھ</p> <p>3 = Only a little بہت تھوڑا</p> <p>4 = Not at all بالکل نہیں</p>



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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
12	<p>How much of a sense of community and belonging do you feel in your neighbourhood?</p> <p>۱۲۔ آپ اپنے گاؤں میں کس حد تک اپنے پڑوسی سے اتحاد اور بھائی چارہ محسوس کرتے ہیں</p>	<div></div>	<p>1 = A lot بہت زیادہ</p> <p>2 = Some کچھ</p> <p>3 = Only a little بہت تھوڑا</p> <p>4 = Not at all بالکل نہیں</p>
13	<p>How much of a sense of community and belonging do you feel in your biraderi?</p> <p>۱۳۔ آپ اپنے گاؤں میں کس حد تک اپنی برادری سے اتحاد اور بھائی چارہ محسوس کرتے ہیں</p>	<div></div>	<p>1 = A lot</p> <p>2 = Some</p> <p>3 = Only a little</p> <p>4 = Not at all</p>
14	<p>If you could choose, which of the following types of persons would you NOT want as your neighbours? Choose up to 5.</p>	<div><div></div><div></div><div></div><div></div><div></div></div> <p>a      b      c      d      e</p>	<p>1 = People with known diseases</p> <p>2 = People with lots of debt</p> <p>3 = Unemployed persons</p> <p>4 = People with lower wealth than ours</p> <p>5 = People who are less educated than us</p> <p>6 = People with drug/alcohol/ gambling habits</p> <p>7 = People who have recently migrated to village</p> <p>8 = People who belong to another political party</p>

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES										
	۱۴۔ اگر آپ کو موقع دیں تو آپ کس کو اپنا بیٹا یا بیٹا پسند نہیں کریں گے زیادہ سے زیادہ پانچ منتخب کریں		9 = People from a different biraderi 10 = People from a different ethnicity 11 = People from a different religion 100 = Other, pls specify										
15	If you had to work on a community project for the betterment of your village, which of the following types of persons would you NOT want on your project team? Choose up to 5.  ۱۵۔ اگر آپ کو گاؤں کی بہتری کے لئے کمیونٹی پراجیکٹ پر کام کرنا ہو تو آپ کن لوگوں کو ٹیم میں شامل نہیں کریں گے	<table><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td></tr></table>						a	b	c	d	e	1 = People with known diseases 2 = People with lots of debt 3 = Unemployed persons 4 = People with lower wealth than ours 5 = People who are less educated than us 6 = People with drug/alcohol/ gambling habits 7 = People who have recently migrated to village 8 = People who belong to another political party 9 = People from a different biraderi 10 = People from a different ethnicity 11 = People from a different religion 100 = Other, pls specify
a	b	c	d	e									
16	Some people marry persons of different biraderis. Did you marry someone with the same zaat and sub-zaat?	<table><tr><td></td></tr></table>		1 = Same zaat, same sub-zaat 2 = Same zaat, different sub-zaat 3 = Different zaat									

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
	۱۶۔ کچھ لوگ مختلف برادری میں شادی کرتے ہیں۔ کیا آپ نے شادی اپنی ہی ذات اور ذیلی ذات والے سے شادی کی ہے		
17	<p>A lot of people prefer that their close relatives marry people like themselves. How favourable would you be if a close relative of yours such as your daughter or son was going to marry someone from a different biraderi?</p> <p>۱۷۔ لوگ خاندان میں آپس میں ہی شادی کرنا پسند کرتے ہیں۔ اگر آپ کی بیٹی یا بیٹا برادری سے باہر شادی کرنا چاہتے ہوں تو آپ کتنی حمایت کرو گے</p>	<input type="checkbox"/>	<p>1 = Very favourable بہت حمایت</p> <p>2 = Mostly favourable کچھ حمایت</p> <p>3 = Neither favourable nor unfavourable نہ حمایت نہ مخالفت</p> <p>4 = Somewhat opposed کچھ حد تک مخالفت</p> <p>5 = Very opposed بہت مخالفت</p>
18	<p>If you would be somewhat or very opposed, then why would you feel this way?</p>	<input type="checkbox"/>	<p>1 = It is not as per tradition</p> <p>2 = Loss of prestige</p> <p>3 = Sanctions from community</p> <p>4 = Other biraderis are less trustworthy</p> <p>100 = Other, pls specify</p>

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## SECTION 9 – TRUST AND VALUES

	QUESTION	ANSWER	CODES AND NOTES
	۱۸۔ اگر آپ اس بات کے کچھ حد تک بابائیکل مخالف ہیں تو آپ ایسا کیوں سوچتے ہیں		
19	How favourable would you be if a close relative of yours was going to marry someone from a different religion?	<input type="checkbox"/>	1 = Very favourable بہت حمایت 2 = Mostly favourable کچھ حمایت 3 = Neither favourable nor unfavourable نہ حمایت نہ مخالفت 4 = Somewhat opposed کچھ حد تک مخالفت 5 = Very opposed بہت مخالفت
20	How favourable would you be if a close relative of yours was going to marry someone from a different ethnicity?	<input type="checkbox"/>	1 = Very favourable 2 = Mostly favourable 3 = Neither favourable nor unfavourable 4 = Somewhat opposed 5 = Very opposed

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
1	Does the family own the dwelling that it is living in currently? ۱۔ خاندان جس گھر میں رہتا ہے وہ ان کا اپنا ہے	<input type="checkbox"/>	1 = Yes 2 = No
2	What is the type of dwelling the family lives in currently? ۲۔ جس گھر میں خاندان رہتا ہے اسکی حالت کیا ہے	<input type="checkbox"/>	1 = Permanent (Pukka) 2 = Semi-permanent (Kuchha Pukka) 3 = Temporary (Kuccha)
3	How many rooms does the house you are currently living in have? ۳۔ اس گھر میں کتنے کمرے ہیں	<input type="checkbox"/>	Enter number given by respondent
4	What kind of water supply does the house you are currently living in have? ۴۔ گھر میں پانی کیسے آتا ہے	<input type="checkbox"/>	1 = Piped water in home 2 = Pipes water outside home 3 = Hand pump 4 = Water motor 5 = Covered well 6 = Open well 7 = River, stream, pond 8 = Tanker truck 9 = Mineral water 100 = Other, pls specify

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
5	How much time, in minutes, does it take to reach the water source?  ۵۔ کیا گھر کے اندر بیت الخلاء ہے	<input type="text"/>	Enter number of minutes 200 = Not applicable
6	Does the house you are currently living in have a toilet within the premises?  ۶۔ کیا گھر کے اندر بیت الخلاء ہے	<input type="text"/>	1 = Yes 2 = No
7	Does the house you are currently living in have an electricity connection?  ۷۔ کیا گھر کے میں بجلی ہے	<input type="text"/>	1 = Yes 2 = No
8	Is there soling on the streets outside the house? If yes, then when was soling provided?  ۸۔ کیا گھر کے باہر گلیاں پختہ ہیں اگر ہاں، تو یہ کب پختہ بنیں	a. <input type="text"/> b. <input type="text"/>	1 = Yes 2 = No  For part b, enter year as four digits e.g. 1998
9	If the family owns the dwelling, then if you were going to sell the house today, how much would you get?  ۹۔ اگر خاندان اپنا گھر آج بیچنا چاہے تو اس کی کیا مالیت ملے گی	<input type="text"/>	Enter value in rupees

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
10	<p>I am going to read a list of assets. Pls tell me if the household owns this asset.</p> <p>۱۰۔ میں گھر پیلوسامان کی تفصیل پڑھ رہا ہوں۔ کیا یہ سامان ہے</p> <p>Bed</p>	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
11	Fan/ Cooler	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
12	Radio	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
13	TV	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
14	Fridge/ Freezer	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
15	Telephone	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
16	Mobile phone	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>
17	Bicycle	<input type="checkbox"/>	<p>1 = Yes</p> <p>2 = No</p>

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
18	Motorcycle/ Rickshaw	<input type="checkbox"/>	1 = Yes 2 = No
19	Car	<input type="checkbox"/>	1 = Yes 2 = No
20	Tractor	<input type="checkbox"/>	1 = Yes 2 = No
21	In the last two agriculture seasons, did the household own any agricultural land? ۲۱۔ آخری دو زرعی سیزن میں کیا گھرانہ کے پاس اپنی زرعی زمین تھی	<input type="checkbox"/>	1 = Yes 2 = No
22	If yes, then how many acres? How many of these acres are under cultivation? ۲۲۔ اگر تھی تو کتنی تھی؟ اس میں سے کتنی زمین پر کھیتی باڑی ہوتی ہے	a. <input type="text"/> b. <input type="text"/>	<i>Skip if household does not own any agricultural land. Enter answer in acres.</i>  1 acre is: 4840 square yards 4047 square meters 100 decimals or cents
23	If you were going to sell the land today, how much would you get? ۲۳۔ اگر آپ آج یہ زمین بیچیں تو اس کی کیا مالیت ہوگی	<input type="text"/>	Enter value in rupees



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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
24	Is part or all of this land rented out to others? ۲۴۔ کیا اس زمین کا کچھ حصہ یا پوری زمین کرایے پر دی ہوئی ہے	<input type="checkbox"/>	1 = Yes 2 = No
25	Has the household rented any land from others in the past two agricultural seasons? ۲۵۔ کیا گھرانہ نے گزشتہ دو زراعتی سیزن میں کسی سے زمین کرایے پر لی ہے	<input type="checkbox"/>	1 = Yes 2 = No
26	If yes, then under what terms? ۲۶۔ اگر ہاں، تو کن شرائط پر	<input type="checkbox"/>	1 = Sharecropping 2 = Fixed rent 3 = Tenancy
27	I am going to read another list of assets. Pls tell me if the household owns this asset and how many. ۲۷۔ میں سامان کی ایک اور فہرست پڑھ رہا ہوں۔ ان میں سے آپ کے پاس کتنی چیزیں ہیں Cattle	<input type="checkbox"/>	1 = Yes 2 = No  <i>Enter number in space provided as whole units</i>

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES										
28	Sheep/ goats	<input type="checkbox"/>	1 = Yes 2 = No										
29	Poultry	<input type="checkbox"/>	1 = Yes 2 = No										
30	Other livestock, pls specify	<input type="checkbox"/>	1 = Yes 2 = No										
31	What are the sources of livelihood for this household? Note down all that apply ۳۱۔ گھرانہ کی گذر بسر کیسے ہوتی ہے تمام کی تفصیل لکھیں	<table border="1"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>a</td> <td>b</td> <td>c</td> <td>d</td> <td>e</td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a	b	c	d	e	1 = Own farm activities 2 = Casual labor in agriculture 3 = Casual labor in non-agri sector 4 = Salaried employment in agriculture 5 = Salaried employment in non-agri sector 6 = Business in trade/ manufacturing 7 = Charity/ alms/ public transfer, pls specify 8 = Interest Income/ property rentals 9 = Remittances 100 = Other, pls specify
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
a	b	c	d	e									
32	If household was involved in agricultural labor, then what were the terms of the contract with the landlord? ۳۲۔ اگر گھرانہ زرعی مزدور ہے تو مالک کے پاس کن شرائط پر کام کرتے ہیں	<input type="checkbox"/>	Skip if household did not identify agricultural labour as income source  1 = Paid fixed wage 2 = Wage + loan 3 = Wage + payment in kind										

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
33	<p>In the last three months, what the average atta consumption of the household? What % of this was purchased from outside? What is the average price per kilo?</p> <p>۳۳۔ گزشتہ تین ماہ میں گھرانے نے کتنا آٹا استعمال کیا۔ کتنے فیصد باہر سے خریدا۔ اسکی فی کلو اوسط قیمت کیا تھی</p>	<p>a. _____</p> <p>b. _____</p> <p>c. _____</p>	<p>Enter atta consumption in kilos</p> <p>Enter % as full unit e.g. 35%</p> <p>Enter price in rupees</p>
34	<p>What % of your monthly food consumption other than atta do you grow on your own?</p> <p>۳۴۔ آٹا کے علاوہ آپ کتنے فیصد اپنی دیگر غذا خود پیدا کرتے ہیں</p>	<p>_____</p>	<p>Enter % as full unit e.g. 35%</p>
35	<p>What is the annual household expenditure for the following items?</p> <p>۳۵۔ مندرجہ ذیل چیزوں پر آپ کا سالانہ کتنا خرچہ آتا ہے</p>	<p>a. Electricity _____</p> <p>b. Gas _____</p> <p>c. Phone _____</p> <p>d. Travel _____</p>	<p>Enter value in rupees</p>

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
		e. Clothing/ Shoes _____ f. Soap/hygiene/cosmetics _____ g. Paan/naswar/cigarettes _____ h. Books/newspapers _____	
36	What is the amount of debt taken on by the household in the last 12 months? ۳۶۔ گزشتہ بارہ ماہ میں گھرانے نے کتنا قرضہ لیا ہے	<input type="text"/>	<i>Enter value in rupees</i> <i>Enter 0 if household did not take any loan</i>
37	If loan was taken, then who was the loan taken from? ۳۷۔ اگر قرضہ لیا ہے تو کس سے لیا ہے	<input type="text"/>	1 = Bank 2 = Village Notable 3 = Landlord 4 = Village Moneylender 5 = Biraderi 100 = Other, pls specify
38	What were the terms of the loan? ۳۸۔ قرضہ کن شرائط پر لیا ہے	a. <input type="text"/> b. <input type="text"/>	1 = Interest-free 2 = With interest, how much? 3 = To be repaid in kind or through labor

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## SECTION 10 – ASSET AND EXPENDITURE PROFILE

	QUESTION	ANSWER	CODES AND NOTES
39	<p>How would you compare the wealth of this household to that of other households in this village?</p> <p>۳۹۔ گاؤں کے دوسرے گھرانے کے مقابلے میں اس گھرانے کی مالی حیثیت کیا ہے</p>	<input type="text"/>	<p>1 = Richer than others 2 = Just as rich as others 3 = Less rich than others</p>
40	<p>How would you compare the income of the household this year to that in the previous year?</p> <p>۴۰۔ گاؤں کے دوسرے گھرانے کے مقابلے میں اس گھرانے کی آمدنی کیا ہے</p>	<input type="text"/>	<p>1 = Better than before 2 = Like before 3 = Worse than before</p>

## **ORAL CONSENT**

I am conducting a survey for a researcher from a renowned university. Because you are a resident of this village and the head of this household, I would like to invite you to participate in this survey.

The purpose of this study is to understand the views of Pakistanis residing in rural areas on things like education, government services and community living. The survey will be delivered orally and has a question and answer format. I will generally read a question to you together with some potential answers, and I will request you to select the answer that you think reflects your views. The total survey should not take long and I expect that you will not experience any discomfort during its delivery. If you do not want to continue with the survey at any point in time, I will stop the survey at your request.

All the answers you give me are confidential and will not be shared with persons outside of the study team. If we refer to your answers in the future, either your answers will be combined with those of others so you cannot be individually identified, or we will change your name to protect your privacy. No one in this or in any other village will be told that you participated in this study or what you said during the survey.

There are no direct rewards for participating, but your opinions will help others understand what the views and concerns of Pakistanis are on important issues such as education and government. Although I cannot provide any firm assurance, we hope that this study will help improve living conditions of this and of other similar villages in Pakistan in the future.

If this is acceptable to you, I will begin asking you the questions now.

میں ایک بہت مشہور یونیورسٹی کے ریسرچر کے لئے یہ جائزہ لے رہا ہوں۔  
کیونکہ آپ اس گاؤں کے رہائشی ہیں اور اپنے گھرانے کے سربراہ بھی ہیں،  
لہذا میں آپ کو اس جائزے میں شرکت کی دعوت دیتا ہوں۔

اس جائزے کا مقصد دیہی علاقوں میں رہنے والے پاکستانیوں کے تعلیم، سرکاری سہولیات  
اور سماجی رہن سہن کے بارے میں خیالات جاننا ہے۔ یہ سروے ذہنی سوالات و جوابات کے  
طریقے پر مبنی ہے۔ میں آپ سے ایک سوال کروں گا بمعہ چند ممکنہ جوابات کے ساتھ۔  
آپ سے درخواست ہے کہ آپ مجھے وہ ممکنہ جواب بتادیں جو آپ کے خیالات کی صحیح ترجمانی کرتا ہو۔  
اس سروے کو مکمل کرنے میں زیادہ وقت نہیں لگے گا اور اس کو مکمل کرنے میں آپ کو کوئی پریشانی نہیں ہوگی۔  
اگر کسی وقت آپ اس سروے کو روکنا چاہیں تو روک سکتے ہیں۔ میں آپ کی درخواست پر سروے روک دوں گا۔

آپ کے دیئے گئے جوابات صیغہ راز میں رکھیں گے اور تعلیمی ٹیم کے علاوہ باہر کسی کو بھی نہیں بتائے جائیں گے۔  
آپ کے جوابات دیگر جوابات کے ساتھ ملا دیئے جائیں گے اس لئے آپ کی انفرادی شناخت مستقبل میں بھی نہیں ہو سکتی  
یا ہم آپ کی شناخت چھپانے کے لئے آپ کا نام تبدیل کر دیں گے۔ اس گاؤں میں  
یا دیگر گاؤں میں یہ کسی کو بھی نہیں بتایا جائیگا کہ آپ نے اس سروے میں شرکت کی ہے۔

اس سروے میں حصہ لینے کا کوئی انعام تو نہیں ہے مگر آپ کے خیالات سے ہمیں یہ جاننے میں مدد ملے گی  
کہ اہم مسائل جیسے کہ تعلیم اور حکومت کے بارے میں آپ کی کیا رائے ہے۔ ہم یقین سے نہیں کہہ سکتے  
مگر امید کرتے ہیں کہ اس سروے کی وجہ سے پاکستان میں یہاں اور ایسے دیگر گاؤں میں مستقبل میں بہتری آئے گی۔

اگر یہ آپ کو منظور ہے تو میں سروے کو شروع کروں۔

### Topic Guide for Village Informants

**Purpose:** To solicit information on village characteristics  
To understand views on education importance and delivery  
To solicit views on collective action problems

#### A. Introduction & Oral Consent

#### B. Village Characteristics

- a. Tell me a little bit about the history of this village
- b. Assets and Earnings
  - i. How many households live in the village?
  - ii. How do most people in this village earn their livelihood? What are the main summer and winter crops?
  - iii. What is land ownership structure like? Has this been changing over time?
  - iv. How wealthy is this village compared to other villages?
  - v. Which are the wealthier families? Which are the poorer ones?
  - vi. How much does the village rely on government social security programs and/or charity?
  - vii. What kind of water supply is available in the village?
  - viii. What is availability of electricity like?
  - ix. Where is the closest...
    1. Hospital
    2. Market
    3. Government office
- c. Dynamics
  - i. What is the ethnic and religious make-up of village? Has this been changing over time?
  - ii. Which biraderis dominate the village? Has this been changing over time?
  - iii. Have people been migrating out of or into the village? Who and why?
  - iv. Do the different biraderis get along? Do they ever interact? Show map to confirm where the different biraderis live.
  - v. Do the biraderis have heads? What is their role?
  - vi. Village notables
    - a. What kind of relationship do you have with the villagers?
    - b. What kinds of problems do villagers normally bring to you?
    - c. Who are the other village notables? How long have they been around?
    - d. What is your relationship like with these other notables?
    - e. How is their relationship with villagers?
    - f. What kinds of problems do villagers normally take to the other notables?
    - g. *Check about*
      - a. Dominant landlord?



- b. Panchayat leaders?
  - c. Politicians? Any union councillors in village?
  - d. School principal and teachers?
  - e. Business owners?
- vii. Are there NGOs active in village? Which ones?

### **C. Education Provision**

- a. Importance
  - i. How important is education to you personally?
  - ii. How important is education to the village? Do people send their boys and girls to school? Why or why not? Until what age?
  - iii. How many people in this village are literate?
- b. Schooling
  - i. How many schools are there in the village?
  - ii. When were they built?
  - iii. Who built them?
  - iv. What are the 3 biggest problems in these schools?
- c. Government performance
  - i. Performance
    - a. In what areas has the government made improvements to this village?
    - b. In what areas is the performance lacking?
    - c. What kind of job is the government doing in education provision in the village?
  - ii. Election
    - a. Who is your local government representative?
    - b. What party is this person from?
    - c. Who else ran for elections?
    - d. Why do you think this particular representative won elections?
    - e. Who did you vote for?
    - f. Are you familiar with the LG system? In your view, how does LGO 2012 compare to LGO 2001?
  - iii. Involvement
    - a. How often does LG get involved in education issues in the village?
    - b. What is generally the nature of this involvement?
    - c. Is there any other external involvement in improving schooling in village?
    - d. Do senior LG officials ever visit this village?
- d. SMCs
  - i. Do you know if SMCs are active in schools? How active are they?
  - ii. Who sits on the SMCs in your village?
  - iii. Have SMCs been successful in improving education in village at all? Why or why not?

### **D. Village Problems and Collective Action**

- a. Trust
  - i. How much of a sense of belonging is there in the village?
  - ii. Does the sense of belonging transcend religion? Biraderi? Neighborhood?

- iii. Do you think that people in this village generally want to help each other?
  - iv. Who do villagers normally turn to when they need something?
- b. Problems
  - i. What would you say are the three top challenges faced by this village?
  - ii. How helpful is the government in these areas?
  - iii. Are there any actions you or other village notables have taken in the area?
- c. Biraderi related
  - i. Have biraderis been following their traditional occupation? Have there been instances of social mobility?
  - ii. How close are the same biraderis that live in this village within themselves?
  - iii. Have there been instances of fission in the biraderis?
  - iv. What do people think about working closely with people of other biraderis? Does this happen in the village?
- d. Collective action
  - i. What do you think about villagers working together to improve aspects of the village such as poor quality of education or bad roads for instance?
  - ii. Has such a thing ever been attempted in the village?
  - iii. What were/might be some problems in such a scenario?
  - iv. Have you ever encouraged them to work together like this?
  - v. How are conflicts between the villagers handled?

## Additional Questions for School Staff/ SMC Members/ Parents

**Purpose:** To solicit information on nature of SMC authority  
To understand actions taken by SMCs to affect student performance

### A. School Information (from school principal only)

- a. Has this school been part of annual census? What is the EMIS ID of this school?
- b. Characteristics
  - i. How many students attend school? What biraderis do they come from?
  - ii. How many teachers do you have? Male or female?
  - iii. What shifts do you run?
  - iv. Confirm facilities via EMIS
  - v. Is the school part of any government programmes for improvement? Which ones?
- c. SMC basics
  - i. Does the school have an SMC?
  - ii. When was the SMC formed in this school?
  - iii. Is it active?

### B. SMC Membership (*Use supplementary hand out to solicit this info*)

- a. How long have you been a member?
- b. Who is the chairman of the SMC?
- c. How many members in school SMC?
- d. Can you provide their names and designations pls? I would like to also interview them for this study.
- e. Who selected these SMC members?
- f. How representative of the village is the SMC in terms of biraderi? In terms of socio-economic status?
- g. How long is the standard serving term for SMCs?

### C. Reform Implementation in School

- a. Are you familiar with the directives to implement SMC by the government?
- b. Why did the school decide to implement the reform?
- c. Implementation
  - i. Were you given any support on implementing SMCs by the government?
  - ii. Was reform in your school supported by an NGO or other organization?
  - iii. Did anyone spearhead the SMC locally? Who?
- d. Implementation challenges
  - i. Were there any challenges that you faced during implementation? If yes, then what were they?
  - ii. What was the reaction of the community to implementation?
  - iii. What was the reaction of village notables to implementation?
  - iv. What was the reaction of teachers unions in the region to implementation?  
*Probe further if reaction was negative.*
- e. Monitoring
  - i. How often, if ever, has the school been visited by government officials?

- ii. Has anyone ever checked the composition, working, or performance of SMCs since implementation?

**D. Locus of Decision-Making (Use supplementary hand out to solicit this info)**

- a. How much authority do you have over...
- b. How often do you make decisions on...
  - i. School maintenance
    - 1. Repairs
    - 2. Building new structures (new toilets, building, etc.)
  - ii. Pedagogy and lesson planning
    - 1. Curriculum
    - 2. Textbook selection
    - 3. Teaching plan design
    - 4. Teaching material selection
  - iii. Teacher management
    - 1. Hiring of permanent teachers
    - 2. Hiring of temporary teachers
    - 3. Firing
    - 4. Transfer
    - 5. Salary setting and increments
    - 6. Performance bonuses
    - 7. Monitoring
  - iv. Student testing
  - v. Finances
    - 1. Budgeting
    - 2. Financing
    - 3. Spending
  - vi. Other

**E. SMC Performance**

- a. Meeting History
  - i. How often has SMC met in the last 12 months?
  - ii. How many times did you attend?
  - iii. What is a typical SMC meeting like?
  - iv. Are these meetings documented? Can I take a look at the last few minutes?
  - v. Who tends to dominate the conversation?
  - vi. Which members never speak up? Why do you think this is?
  - vii. What is the leadership of the chairman like? *Prompt for if chairman provides focus, tries to enhance inclusiveness, gives updates on progress, recommends areas for improvement.*
  - viii. How democratic do you think decision-making is?
  - ix. Are there instances of members using their influence outside of the SMC to help the school?
  - x. When is the next SMC meeting? Can I observe?
- b. Actions Taken
  - i. What are the three biggest challenges/problems in your school?
  - ii. Has the SMC done anything to tackle these issues?
  - iii. Has the SMC taken any specific actions to improve facilities in the school?

- iv. Does the school have a school improvement plan?
  - v. How often does the SMC communicate with the teaching staff and in general what is the communication about?
  - vi. Has the SMC taken any specific actions to monitor teacher absenteeism/teaching?
  - vii. Are there are non-monetary incentives offered to teachers?
  - viii. What would you say are the three biggest achievements of the SMC to date?
  - ix. What are the three biggest challenges the SMC faces in working effectively?
  - x. Do any other village notables help or advise you in the decisions you make?
- c. Funding and Spending
- i. Where does the funding for the SMC come from?
  - ii. What is the value of funds that have been available over the last 3 years?
  - iii. Who decides how to use the SMC funds?
  - iv. What have funds been used for in the last few years?