Right to Education – From Policy to Practice: Social Exclusion and Gender in Delhi's Primary Education System

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A thesis submitted to the Faculty of Graduate and Postdoctoral Studies in partial fulfillment of the requirements for the MA degree in Globalization and International Development, Specialization in Women's Studies

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Abstract

This thesis explores patterns of access and experiences of meaningful access under India's *Right of Children to Free and Compulsory Education Act, 2009* (RTE Act) from a critical gender perspective (Fraser, 1997; Jackson, 1999). Within the RTE Act, special attention is given to Section 12(1)(c), the free private school seats provision. The argument is that in order to fully analyze education progress, research must advance beyond focusing on physical access to exploring indicators of *meaningful access*. This thesis discusses the construction of a quantitative variable, 'silent exclusion', as a composite drawn from wider qualitative research.

The first available data from the *Insights into Education* household survey in Delhi are analyzed using statistical and econometric techniques. It was found that private unaided recognized schools remain inaccessible for the most marginalized households. Child's sex was not found to have a significant effect on school management choice, and both boys and girls attended privately and publically managed elementary schools in the sample. Four access issues pertaining to the free seat provision were identified: public awareness; reaching intended beneficiaries; low success rates for applicants; and continuing financial challenges for households accessing a free seat. In terms of children's schooling experiences, low levels of silent exclusion were reported overall. Explicit displays of discrimination and exclusion were not found in the sample; however, less visible displays of exclusion were noted, such as a lack of leadership opportunities for children from lower income households, scheduled castes/tribes, and children attending government-managed schools. A lack of political and social pressure to fully implement the RTE Act at the local level is evident, which raises the question of how much a law in itself can bring about social change in the education sector.

Acknowledgements

First and foremost, I would like to thank my co-superivsors, Dr. Prachi Srivastava and Dr. Lauchlan Munro for their guidance and support throughout this process. Prachi, I am extremely grateful for your advice during the speedbumps, and for your attention to detail to ensure this project was thorough and complete, even while on sabbatical and maternity leave! It has been an honour to be a part of your wider project –thank for entrusting me with this unique opportunity. Lauchlan, I can't thank you enough for stepping in and taking on more than you'd originally bargined for when you agreed to work with me! Thank you for your consistant encouraging remarks when it seemed like the task was greater than hours in the day allowed.

I would be remiss not to mention Dr. Nasser Ary Tanimoune and to thank him for graciously providing his expertise and assisting with my questions surrounding the appropriate use of logistic modeling. Thank you also to CORD India, and all the respondents of the household survey. I pray this thesis properly represents you and your hard work, as well as your dreams for your chidren's education.

To my amazing Ottawa community – thank you for your listening ears, fun distractions, patience, prayers, and shoulders to cry on as I dedicated much time and attention to this task.

To my dear family – thank you from the bottom of my heart. In particular, to my parents, Gordon and Sandy Sutherland – without your love and unwavering support, I would not be where I am today. Thank you for demonstrating for me a deep passion to love the children in our lives, to serve those in needs, to fight injustices, and to live a life of faith through it all. For the hours spent listening on the phone as I processed or ranted, to logistical support, to your consistent blessing to follow my dreams and calling, even if they lead me to places far from home. Your academic pursuits and hearts to love and serve those around you have instiled the same passions within me.

"It takes so little to make a child happy, this it is a pity in a world full of sunshine and pleasant things, that there should be any wistful faces, empty hands, or lonely little hearts" - Louisa May Alcott

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List of Acronyms

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CORD India	Collaborative Research and Dissemination
CREATE	Consortium for Research on Educational Access, Transitions and Equity
DA	Delhi Administration
DISE	District Information System for Education
DPEP	District Primary Education Programme
EDA	Exploratory Data Analysis
EFA GMR WIDE	Education for All Global Monitoring Report World Inequality Database on Education
EWS	Economically Weaker Section
GAD	Gender and Development
GSDP	Gross State Domestic Product
IDRC	International Development Research Centre
IDSN	International Dalit Solidarity Network
IIIPS	International Institute for Population Sciences
KG	Kindergarten
KV	*Kendriya Vidyalaya*
MCD	Municipal Corporation of Delhi
MDG	Millennium Development Goals
MPI	Multidimensional Poverty Index
NCT	National Capital Territory
OBC	Other Backward Class
OHCHR	Office of the United Nations High Commissioner for Human Rights
PROBE Team	Public Report on Basic Education in India
REB	Research Ethics Board
Rs.	Rupee
RTE Act	India's Right of Children to Free and Compulsory Education Act, 2009
SC	Scheduled Caste
SES	Socio-economic Status
SSA	*Sarva Shiksha Abhiyan*
ST	Scheduled Tribe
SV	*Sarvodaya Vidyalaya*
UN	United Nations
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UEE	Universal Elementary Education
UNCRC	United Nations Convention on the Rights of the Child
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Emergency Fund
UNTC	United Nations Treaty Collection
WID	Women in Development

Chapter 1: Introduction

Historically, research on equity in education has primarily focused on children's physical access to schools. The question of physical access is complicated, and becomes even more elusive when questions of school retention and social inclusion are taken into consideration. This is especially true of developing countries, where enrolment rates are increasing, yet overall achievement rates continue to be low, and dropout rates are high. As Jansen (2009) notes, these trends make it clear that 'gaining physical access to schools is one thing; keeping children in school is a completely different matter' (p. 7). In order to fully analyse whether or not participation in education is meaningful, research must advance beyond focusing on determinants of formal access, and explore the ideas of *meaningful access* (Jansen, 2009; Pendlebury, 2009), *silent exclusion* (Lewin, 2007), and *social exclusion* (Kabeer, 2000; Jackson, 1999; Fraser, 1997; Lewis & Lockheed, 2008) from and within schools and classrooms.

India is a good example of why a more detailed analysis of access to education is needed. There is persisting inequality along many dimensions, including within the education system (UNDP, 2014). Gender inequality is of particular concern. India ranks 130th out of 188 countries for gender inequality in the United Nations Development Program's (UNDP) 2014 Human Development Index, with a gender inequality index value of 0.563 (UNDP, 2014). More specific to education, there is vast inequality between the sexes regarding dropout and achievement, with only 27% of the female population aged 25 and older reaching, but not necessarily completing, secondary education as compared to 56.6% of the same demographic of males (UNDP, 2014).

While attendance and gender parity increased between 2000 and 2013 (see Table 1) the question of whether girls and boys are receiving meaningful access to quality and inclusive education remains largely unanswered. Globally, despite gains in mandating equal opportunities for both males and females, data reveal that gender-based exclusion within education systems still occurs (Pandey, 1996; Mirza, 2006; Vendramin, 2003; Vendramin, 2006; Mattu & Hussain, 2003). Gender- and socio-economic-based discrimination in the classroom, combined with poor quality education, affects students' motivation to

remain in school, and dropout disproportionately affects students based on socio-economic status, gender, caste, and religion (Lewin, 2007; Little, 2010; Ramachandran, 2009; Ramachandran & Naorem, 2013; Watkins, 2004).

It can be hypothesized that the same phenomenon is happening in India, as females continue to display higher rates of dropout and lower levels of educational attainment (EFA GMR WIDE, 2014). Previous studies indicate high dropout between grades 2 and 4 in particular for both males and females with low socio-economic status, but worse for females. In 2000, UNDP (2013) reported the expected years of schooling completed in India as 9.5 for males, and only 7.4 for female (see Table 2 for primary competition rates unpacked by wealth and location). Recent statistics suggest that the number of expected years of school have risen for both males and females; however, females continue to lag behind their male counterparts, and discrepancies between urban and rural locations and wealth persist.

	2000	2011
School enrolment, primary (%, net)	81	93
Ratio of girls to boys in primary and secondary education (%)	79	98

Table 1. Select world development indicators on education in India
Source: The World Bank, 2014
Note: *Indicates proportion of relevant age group.

	Female (urban)	Male (urban)
Poorest quintile	74%	77%
Richest quintile	98%	98%

Table 2. Disaggregated primary completion rate in India amongst those of primary graduation age, wealth and location (2007)
Source: EFA GMR WIDE, 2014

Recent education provisions in India have pushed for additional attention to be given to disadvantaged households and marginalized groups in order to increase participation and access. Specifically, the *Right of Children to Free and Compulsory Education Act, 2009* (RTE Act), was passed in 2010 as the first legally binding education framework in India to support inclusive education (Bhan & Rodricks, 2012; Little, 2010; Noronha & Srivastava, 2013). One of the most controversial sections of the RTE Act is Section 12(1)(c), which states that a school 'shall admit in class I, to the extent of at least twenty-five per cent. [*sic*] of the strength of that class, children belonging to weaker section and disadvantaged group in the neighbourhood and provide free and compulsory elementary education till its

completion' (Government of India, 2009). For each child enrolled under this provision, schools receive a subsidy from the Central Government equal to the school's tuition fee, or the expenditure incurred per child by the state, whichever amount is less (Section 12(2), Government of India, 2009). These are commonly referred to as 'freeships'.

Children eligible for a freeship include those belonging to 'weaker sections' (families earning less than Rs. 100,000/year in Delhi) and 'disadvantaged groups' (children belonging to 'the scheduled caste, the scheduled tribe, the socially and educationally backward class or such other group having disadvantage owing to social, cultural, economic[sic], geographic[sic], linguistic, gender or such other factor, as may be specified by the appropriate Government, by notification') (Section 2(d), Government of India, 2009). However, a state-level government order was issued in Delhi in January 2011 (Government of National Capital Territory [NCT] of Delhi, 2011), restricting eligibility to economically weaker section (EWS) freeships by instituting a residency requirement, and removing gender and geographic criteria (Noronha & Srivastava, 2012). There is concern that this state-level governmental order could be problematic for marginalized groups, especially girls, migrant workers, and those living in slum areas in Delhi (Noronha & Srivastava, 2012).

Past literature argues that Section 12(1)(c) of the RTE Act speaks to India's focus on the privatization of education in order to achieve universal elementary education in the midst of 'purported' public resource constraints (Srivastava, 2010; Woodhead, Frost & James, 2013). While presented as a practical solution for increasing quality and overall access to education in the midst of a lack of public resources (Tooley, 2004; Tooley & Dixon, 2003), this lean towards privatization raises other concerns about social exclusion and hierarchy within the school system (Ramachandran, 2009; Woodhead et al., 2013). As Vasavi (2003) argues, the privatization of education increases social exclusion, and the expansion of private schooling to meet universal education has caused the majority of government schools to become: 'schools for children of the most poor and the low-ranked caste groups, resulting in a ghettoization of schooling…such school differentiations also compounds the gender and class differences among a community and in the society at large' (p. 76).

Multiple studies have shown that privatization of education increases inequality and further disadvantages marginalized groups of students (Härmä, 2009; Noronha & Srivastava, 2013; UNESCO, 2009). Thus, critical analysis of the RTE Act's provisions and how they may influence access and experience is needed to expose any persisting inequalities within the education system, and further, as a means to advocate for sociopolitical and structural change in favour of the most disadvantaged (Jackson & Verberg, 2007). It has been six years since the Act came into effect, and an appropriate time to review the scope of its reach regarding marginalized children. Very few studies have focused on determining patterns of access to education under the RTE Act, and even fewer from a social exclusion perspective.

The current study will build from and contribute to a larger research project headed by Prof. Prachi Srivastava. [1] Collaborative Research and Dissemination (CORD), a research organisation in Delhi, was the local partner. This wider research team developed and administered the *Insights into Education* survey in 2015 to collect household-level data on issues of education access, choice, and experience in Delhi. The current MA research seeks to contribute to this project by disaggregating a sub-set of the *Insights into Education* household survey data on schooling access and experience by sex, household income level, caste/community, and religion to provide a more detailed overview of the patterns of schooling access and experience in Delhi since the implementation of the RTE Act. This MA study seeks to analyse whether patterns of schooling access and experience are differential between certain groups of children in order to better understand the lived experiences of disadvantaged groups, and ultimately, to seek the full realization of children's right to education.

1.1 Research Questions

The current research follows a critical, feminist approach to perform exploratory data analysis and econometric modeling on a subset of household survey data collected by the larger project. The data were analysed according to two main research objectives: *ascertaining patterns of schooling access,* and

[1] This thesis will contribute to the larger SSHRC-funded research project, 'The Right of Education and the Role of Non-state Private Actors: the case of India'.

understanding children's schooling experiences. Together, these research objectives shed light on broader questions about meaningful access and education participation from a social exclusion perspective.

The first research objective seeks to provide a better understanding of which children accessed different types of schools in private and public sectors. Using data from one catchment area in Delhi, the following research questions were examined:

1. Who went to which type of school at the elementary level? Were there different patterns of access between children of different groups (sex, income level, caste/community, and religion) within and across government and private school types?

2. Were children from a particular gender, income level, caste/community, or religion more likely to (a) apply for freeships, and (b) be accepted in free seats?

The second research objective focuses on children's experience of schooling once they are enrolled. Drawing from Lewin's (2007) model of 'the zones of exclusion', and specifically, the concept of 'silent exclusion', this objective seeks to determine any patterns of silent exclusion and negative schooling experiences reported by families accessing different school types. Lewin (2007) defines *silent exclusion* as experienced by 'children who remain formally enrolled in school…[but] their attendance is sporadic, they are discriminated against for socio-cultural reasons, or their achievement is so low that they cannot follow the curriculum' (p. 857). This study considers aspects of silent exclusion that focus on discrimination, lack of social integration, and lack of leadership opportunities in the classroom.

The second research objective seeks to answer the following overarching questions: *Do students experience discrimination and silent exclusion in the classroom once enrolled? Do children from specific social backgrounds experience higher rates of silent exclusion in the classroom?* To address this objective, the following specific research questions were examined:

1. Was there a correlation between sex or other background characteristics (household income level, caste/community, religion) and children's experience of silent exclusion in the classroom?

2. Overall, did students of different social backgrounds experience more silent exclusion in public or private schools?

3. Did children from certain backgrounds (sex, income level, caste/community, religion) attend school less regularly than their peers from other social groups?

4. Did the reasons for irregular school attendance differ between boys and girls? Between school management types? Between social groups?

Many past studies focusing on access examine the first set of research questions only. Analysis is limited to enrolment numbers and an overview of physical participation. This methodological trend is evident in the seemingly impressive statistics noting recent increases in India's primary enrolment, particularly for girls (UNDP, 2013; The World Bank, 2014). Using public policy terms, the first set of research questions may be considered a *first generation problem* for access to education. Growth of these indicators is important. However, raising enrolment rates is necessary but not sufficient for providing meaningful educational opportunities for children and fully realising children's rights. Furthermore, power relations within the school system suggest that even if students gain access to education, access on its own will do little to ease social stratification (Srivastava, 2010). In other words, attending school, but being excluded (whether silently or otherwise) from social and/or learning activities is not beneficial. The current study seeks to expand the discussion on access to education by including questions on both access, and the *second generation problem* of silent exclusion and children's experiences in school once enrolled. The aim is to provide a more informed picture of meaningful access for the most marginalized.

It should be noted that these research questions are complex and extensive, and that due to the small sample size available for the current study, they cannot be fully answered. The current study presents an initial exploratory review of the situation, and future research should build from this foundation to ask the same questions with the full, more extensive dataset. Together, these efforts will address the research objectives and help shed light on the broader issue of meaningful access and school participation.

1.2 Hypotheses

Given the number of correlations examined in this study in relation to the sample size available, this research was primarily exploratory in nature, rather than explicitly testing hypotheses. The hypotheses served primarily to guide the analysis and organize the discussion, as well as to inform

econometric analysis. The researcher is aware that with so many hypotheses and variables involved, false positives may emerge in the analysis. Care has been taken to account for this limitation.

The researcher hypothesized that patterns of meaningful access disproportionately benefits boys, children from higher-income households, children from non-scheduled castes/non-tribal communities, and children from the majority religion, Hinduism. These hypotheses can be verified by the rate of access to school sectors and segments of sectors that are perceived to be of higher quality and have prestige. Similarly, it was hypothesized that more children from these groups would apply for and be accepted for freeships than their counterparts from other groups.

It was predicted that school-related expenses, the gendered division of labor, and safety concerns, both at school and during the commute to school, would be among the main reasons reported for differences in schooling access and dropout rates between girls and boys. In this context, safety is especially problematic for children who must walk a long distance to attend school, and for girls who have reached puberty (Wu, Goldschmidt, Boscardin, & Azam**,** 2007). These factors were also predicted to influence attendance patterns, with poorer children from any of these groups more negatively affected. It was hypothesized that differential access to individual school types within the public and private sectors would be evident when the data were disaggregated for sex, income level, caste/community, and religion.

In terms of children's experiences within the classroom, it was hypothesized that girls from marginalized castes/communities would experience the most silent exclusion in the classroom, compared to their male counterparts and those from non-marginalized castes/communities. This was predicted to be especially true for female students from scheduled castes/tribal communities and lower household income bands who attended private schools by means of a freeship. It was predicted that children from marginalized groups accessing schools via freeships would be treated differently (i.e., negatively) in the classroom as compared to their relatively less disadvantaged counterparts accessing the same school/classroom on a full-fee basis.

Furthermore, school management was predicted to be an important variable, with higher levels of silent exclusion expected to be reported by students attending public schools, as compared to those

attending private schools. The exception to this was predicted for students attending private schools through freeships, i.e. freeship students in private schools were predicted to experience more silent exclusion than non-freeship students in private schools.

If these hypotheses are supported through larger studies they may suggest that even though education enrolment rates in India have increased, meaningful access to primary education remains elusive for a number of children. If demonstrated in the current research, further investigations into these concerns and gaps in provision would be warranted in an effort to reduce inequality within the Indian education sector to guarantee the right to education for all children, no matter their social status.

1.3 Summary of Research Findings

Overall, initial results were encouraging. Enrolment and attendance rates in the catchment area were high and echoed impressive gains being made on these indicators across the country. Reported experiences of silent exclusion at school were low overall, and the majority of children were reported to never have experienced explicit displays of discrimination and social segregation at school during the previous school year.

However, less explicit experiences of exclusion were noted as experienced by children from various marginalized socio-economic groups. Furthermore, when indicators of access were reviewed at a deeper level, it was found that schools in the private sector remained inaccessible for the most marginalized in the community. Lastly, current findings reveal gaps in the provision of EWS freeships, as well as persistent challenges for households accessing education through freeships. As with most public policy debates, gaps between the policy as written and the policy in practice are persistent, and may impede the RTE Act's ability to address deeply embedded social exclusion.

Chapter 2. Literature Review

2.1 Education in India

2.1.1 Policy Context

Following India's independence in 1947, education was included as a fundamental right in the 1950 constitution (Government of India, 2015b); however few resources were allocated for improving the provision of mass education in the country. Drèze and Sen (2013) go so far as to suggest that India's newly formed democratic system was focused primarily on economic growth, and as a result, the provision of basic needs, particularly for women and other disadvantaged groups, was largely overlooked. Specifically, education, healthcare, and other components of social development were not considered priorities for public resources post-independence. This oversight may be considered one of the country's largest failures from a human rights perspective (Drèze & Sen, 2013).

The past 30 years have seen considerable change in India's education landscape. Education has received relatively more attention and has slowly become more of a critical issue for development. While reflecting on changes between their first report on basic education in 1996 and the follow-up report in 2011, the Public Report on Basic Education in India (PROBE) Team noted that, 'Education has become a public issue of concern to voters, and media attention has begun to focus more on what goes on in India's school and how the system can be extended and improved' (PROBE Team, 2011, p. 7).

National policies on education were created in 1968 and 1986, with a revision in 1992. A new education policy was initiated in 2015. At the time of writing this new education policy was being drafted. It is interesting to note that during this process, the Government of India was reaching out to stakeholders across the country for insight into education needs and goals using a 'time-bound grassroots consultative process' (Government of India, 2015a). The former two national policies focused on expanding the coverage of primary education, with universal access as the ultimate goal (Government of India, 1968; 1998). This goal gained momentum from rising global attention to the need for better access to education following the 1990 Education for All Conference in Jometien and UNICEF's World Summit

for Children (also in 1990). At the time, India's education goals also matched well with those established by the Dakar World Education Forum and the Millennium Development Goals (MDG) Summit in 2000.

A number of schemes were launched under the 1968 and 1986 national policies on education in an attempt to increase student retention and expand the coverage of quality primary education. These schemes were initially born at the state-level, and responded to state-specific issues; however, multi-state initiatives quickly followed and ushered in a new era of education policy complicated by a decentralized governance model (PROBE Team, 2011). Examples of such initiatives include *Operation Blackboard, 1986,* which sought to improve primary school facilities as means of improving retention, and the World Bank-led *District Primary Education Program* (DPEP). This multi-state district-based program was launched in 1993-4 and was a major initiative with the aim to universalize primary education. In 2001, the Government of India launched *Sarva Shiksha Abhiyan* (SSA) (Education for All Campaign) as its overarching mission for elementary education. New education programs and efforts were created under this mission at both the Central and state levels. SSA was conceptualized as a means to bring the wide variety of education programs and schemes at state and multi-state levels under one figurative roof (PROBE Team, 2011).

It is interesting to note the minor changes related to gender concerns and reducing inequality that began to emerge in these early initiatives. Attention to differing needs by gender first emerged through Operation Blackboard, which aimed to provide separate toilet facilities for boys and girls. Operation Blackboard also sought to staff schools with at least two teachers, one of whom would be female if at all possible (PROBE Team, 2011). Next, DPEP's aims included 'reducing gender and social gaps in enrolment, dropout rates, and learning achievements to less than 5 per cent' (PROBE Team, 2011, p. 8; Government of India, 2012). SSA took this a step further with the objective to 'bridge all gender and social category gaps at primary stage by 2007 and at elementary stage education level by 2010' (PROBE Team, 2011, p. 8; Government of India). Despite hints of recognizing inequality issues within the primary school system, the predominant focus of all of these initiatives continued to be increased enrolment rates.

It was not until SSA that attention began to be given to the quality of education available (Kidwai, Burnette, Rao, Nath, Bajaji, & Bajpai, 2013).

The passing of the RTE Act in 2009 served as a major turning point in the provision of elementary education (Kidwai et al., 2013). For the first time, states were required by law to ensure equitable learning opportunities for all students regardless of background. Section 8(c) states: 'The appropriate Government shall ensure that the child belonging to weaker section and the child belonging to disadvantaged group are not discriminated against and prevented from pursuing and completing elementary education on any grounds' (Government of India, 2009). As the PROBE Team (2011) notes, this legal development shifted 'universal primary education from an aspirational Directive Principle of State Policy to a Constitutional obligation' (p. 17). With this new legislation, focus shifted to include not only increased access to, but also improved quality of, education.

Despite impressive strides in the development of legislation to ensure equitable access to primary education and investment in the field of elementary education, early data suggest that enforcing these provisions remains a major challenge and that financial allocations remain inadequate (Kidwai et al., 2013; PROBE Team, 2011). Furthermore, and of interest to this study, it has been reported that the 'political will' (Brock & Cammish, 1997, p. 16) needed to resolve the issue of gender discrimination and reduced participation in school is largely missing, especially at the local level (Brock & Cammish, 1997; Mehendale, Mukhopadhaya & Namala, 2015; Srivastava & Noronha, forthcoming). Kidwai et al. (2013) even go so far as to suggest that:

> The education sector has made sudden and immense progress in enabling almost universal access to primary schooling. However, the development in quality aspects of schools has not kept pace with access. This widening gap between access and quality, if not filled in time, can possibly reverse the developments made so far (p. 10).

These concerns call for more research on how well the RTE Act addresses persisting gaps in education. Initial reviews have concluded that, while the RTE Act contains many notable visions for expanding education access and equality, it falls short on multiple issues, including feasibility, and clarity for defining which children are eligible for the uptake of freeships (Jain & Dholakia, 2009; Jha, Ghatak,

Mahendiran & Bakshi, 2013; Shah & Agarwal, 2010). Furthermore, concerns have been voiced that the RTE Act is not fully consistent with the UN's Convention of the Rights of the Child (UNCRC), nor with overarching principles of social justice and equality when it comes to school choice, retention, and inclusion of students once they have enrolled (OHCHR, 2013; IDRC Foundation, 2013; Mukerji & Walton, 2012; Sadgopal, 2010). Specifically, concerns over the RTE Act's definition of 'a child' being those aged 6-14, has been criticized as being narrow in light of the UNCRC's commitment to provide free and equal access to quality schooling opportunities for all children under 18 (OHCHR, 2013).

India has also ratified the Convention on the End of Discrimination against Women (CEDAW) in 1993 (UNTC, 2016), indicating a commitment to 'the maximum participation of women on equal terms with men in all fields' (UN Women, 1980). A detailed review of the RTE Act from a gender mainstreaming perspective (UN, 2002) could not be found in the literature at the time of the current study. Therefore, concerns regarding whether or not India's commitment to CEDAW is reflected in its education policies and programs remain largely unaddressed. However, an initial review the RTE Act reflects this commitment to a limited degree. According to the RTE Act, gender may be considered a source of discrimination and disadvantage used to determine a child's eligibility for a free seat (Government of India, 2009, Section 8(c); Section 9(c)). Further research is needed to determine if a gender mainstreaming approach was incorporated in the creation and implementation of the RTE Act.

2.1.2 Education Systems

Multiple factors relating to India's approach to education interact to create a complex environment in which to implement the RTE Act (Rhines Cheney, Brown Ruzzi, & Muralidharan, 2005). The sheer size of India's education system (second only to China's) is one such factor. There were a reported 1,303,812 recognized schools across the country providing elementary education in 2009-2010 (DISE, 2011). Of this total number, 4,946 schools were located in the national capital, Delhi (DISE, 2011).

Adding to the complexity is India's decentralized governance model for education. Primary education was the responsibility of the Central Government, but became a 'concurrent subject' in 1976, meaning that both the Central and state governments have shared responsibility for the financing and provision of schooling (Little, 2010). Despite it being a concurrent subject, the primary responsibility for education rests with the states, which have the freedom to institute their own provisions. While there is some state-level flexibility with the RTE Act, all state provisions must comply with the Act.

Lastly, the variety of school management types present at the local level adds to the already complex environment. These management types are outlined in Table 3.

Government and Private Sector School Management recognized by the Directorate of Education for the Government of the National Capital Territory of Delhi	
Municipal Corporation of Delhi (MCD)	Local body mainly responsible for primary education (Municipal Corporation of Delhi, 2011).
Delhi Administration (DA)	Government of Delhi schools without a primary section (i.e. beginning at class 6).
Sarvodaya Vidyalaya (SV)	Composite DA schools with classes 1 through 12 (i.e. from primary to higher secondary).
Kendriya Vidyalaya (KV)	Run by the Central Government. Aim to provide a common program of education for children of Central Government employees in transferable roles, such as Defense and Para-Military personnel (Kendriya Vidyalaya Sangathan, 2016).
Private Unaided (Recognized)	Recognized private schools managed by trusts and organizations that do not receive financial aid from the government.
Private Unaided (Unrecognized)	Unrecognized private schools managed by trusts and organizations that do not receive financial aid from the government. Recognition of all schools is legally required under the RTE Act, and therefore, these schools are meant to be phased out.
Private Aided	'Public-private hybrids.' Independently managed but receive state government grant-in-aid to cover the majority of expenditures (Srivastava, 2008).

Table 3. Government and private sector school management recognized by the Directorate of Education for the Government of the National Capital Territory of Delhi
Sources: Directorate of Education, Govt. of NCT of Delhi, n.d.; Härmä, 2011.

2.2 Delhi: Strengths & Challenges for Education

Delhi is an interesting case study for reviewing the implementation of the RTE Act. The territory hosts a range of relevant socio-economic characteristics, some of which serve to improve the provision of meaningful access to education for all children, while others hinder and further complicate this goal. Located in northern India, Delhi is one of the fastest growing cities in the country, with respect to both people and income (Government of NCT of Delhi, 2015). The National Capital Territory (NCT) of Delhi

is ‘the most prosperous state with highest per capita income in India’ (Government of NCT of Delhi, 2015, p. 1). From 2005-2014, the gross state domestic product (GSDP) growth rate was 9.14%, compared to the 7.61% national growth rate for the same period (Government of NCT of Delhi, n.d.).

However, there are also challenges for development, such as Delhi’s history and experience with rapid urbanization. Delhi has the highest population density out of all the states and Union Territories, recorded as an average of 11,297 people per sq. km in 2011 (Government of NCT of Delhi, 2015). In 2011, the area’s urban population was 97.50% of the total NCT population, or 16.37 million people. Population growth rates in the region have substantially declined in recent years, following similar trends in other major cities such as Mumbai and Kolkata (Government of NCT of Delhi, 2015). The rate of migration to the city has also stabilized if not declined; however, the government notes that ‘Delhi continues to be a favorable destination for large number of people seeking livelihood, better employment opportunities and higher education’ (Government of NCT of Delhi, 2015, p. 2). Even though population growth rates appear to have stabilized, the large population in Delhi adds to the already complex environment for the provision of education and other social services.

The child sex ratio in Delhi (number of female children per thousand male children 0-6 years of age) was 866 in 2011 (Government of NCT of Delhi, 2015). It has stayed relatively stable in recent years, yet remains below the national average (Table 4). Concern over this discrepancy has been noted, and the government has undertaken action to reduce the gap. Approaches include implementing stringent actions against female feticide, and the elimination of sex determination practices during pregnancy. Data on sex ratios for elementary school-aged children were not available.

	Child Sex Ratio	
	2001	**2011**
Delhi	868	866
India	927	914

Table 4. Child sex ratios (females per 1000 males, ages 0-6)
Sources: Government of India (2011); Government of NCT of Delhi (2015).

High rates of poverty prevail in Delhi, with 1.696 million people estimated to be living below the poverty line determined by the State Specific Planning Commission (Government of NCT of Delhi,

2015). This estimate was equal to 9.91% of the total population of Delhi at the time it was recorded in 2015.

Nevertheless, Delhi has demonstrated increased commitment to social security in recent years. Expenditure on social service sectors has steadily increased over the last three Five Year Plans (Table 5). Table 6 breaks down the projected expenditures for social services in the Twelfth Five Year Plan (2012-2017) to reveal Delhi's top five priority sectors, and how they are weighted in relation to each other. Education in particular remains a declared priority, with 'achievement of Universal Elementary Education (UEE) a declared objective of the government…expected to strengthen the social fabric of democracy through the provisioning of equal opportunities to all' (Government of NCT of Delhi, 2015, p. 13). Additional education schemes have been implemented by the Government of NCT of Delhi to increase education participation, beyond the national schemes noted above. Approaches include supplying textbooks and uniforms in publicly-managed and government-assisted schools, scholarships to students, and reimbursement of tuition fees for students admitted in private schools under the RTE Act (Government of NCT of Delhi, 2015).

	Delhi's actual expenditure on social service sectors (% of total expenditure)
Tenth Five Year Plan (2000-2005)	48.79
Eleventh Five Year Plan (2006-2011)	57.12
Twelfth Five Year Plan (2012-2017)	65.75[2]

Table 5. Delhi's actual expenditures on social service sectors since 2000
Source: Government of NCT of Delhi, 2015

Sector	**% of total planned outlay (2012-2017)**
Transport	24.39
Medical	15.46
Education	15.17
Water Supply and Sanitation	12.94
Housing & Urban Development	11.59

Table 6. The five priority social service sectors in Delhi's Twelfth Five Year Plan
Source: Government of NCT of Delhi, 2015

Unfortunately, concerns pertaining to the implementation of the RTE Act in Delhi remain, as with its effect on children's meaningful access to education. Noronha and Srivastava's (2012; 2013)

[2] Expenditure over first three years of the Twelfth Five Year Plan.

preliminary study of the RTE Act in Delhi revealed early implementation issues. Most relevant to the current study is the conclusion that:

> Of immediate concern regarding the implementation of the RTE Act is the gap between the official articulation of the regulatory framework *in principle* and how it is mediated by schools and institutional actors *in practice*…It remains to be seen whether the RTE Act can effectively mitigate social exclusion within this context and open up avenues of social mobility (Noronha & Srivastava, 2012, p. 8).

Furthermore, there is emerging evidence that the majority of students accessing freeships are not the most disadvantaged in their communities or the neediest (Indus Action, 2014; Noronha & Srivastava, 2013). At the time it was too early for these initial reviews to say whether or not the measures outlined in the RTE Act are sufficient for providing meaningful access; however, given the implementation trends identified, additional substantial effort must be exerted to ensure meaningful access for all (Noronha & Srivastava, 2012; Indus Action, 2014).

Of particular concern for the current study is the state-level government order issued in Delhi, which restricts the availability of freeships by instituting a residency requirement, and does not include gender or geographic criteria (Government of NCT of Delhi, 2011). Section 2(d) of the RTE Act specifies that states are free to specify which criteria are implemented, according to their local rules (Government of India, 2009). In this sense, Delhi's state-level government order does not violate national law. However, this disregard for gender mainstreaming in local practice raises concerns about the ability of nationally created policies to affect local change and reduce embedded gender-based discrimination in the education sector. In fact, upon ratification of the CEDAW in 1993, India made a declaration alluding to this in regards to Article 5(a). The article states,

> The States Parties shall take all appropriate measures to modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women (UN Women, 1980, CEDAW, Part 1, Article 5(a)).

To this, India declared it, 'shall abide by and ensure these provisions in conformity with its policy of non-interference in the personal affairs of any Community without its initiative and consent' (UNTC, 2016). In other words, India as a nation may be committed to the reduction of gender-based inequality;

however, the Central government is limited in what can be done if there is not a similar commitment at the community and state-level. The onus is thus on states and local governments to reduce discrimination against women and other marginalized groups. The implications of this decentralized political system are evident when education policies, practices, and outcomes are compared across states.

2.3 Gendered Differences in Meaningful Access in India

Overall, India has made tremendous strides in the past 20 years towards increasing elementary school enrolment (Wu et al., 2007; Govinda & Bandyopadhyay, 2008; UNICEF, 2008). According to the World Bank, the net primary enrolment ratio for both sexes was 93% in 2012, compared to 81% in 2000 (World Bank, 2016). India has also displayed impressive gains towards narrowing gender gaps in basic education access. According to the UNDP (2013), gender parity ratio in primary education increased from 0.76 in 1990-91 to 0.98 in 2007-08, suggesting that the gender gap in terms of enrolment in elementary education has been almost eliminated.

However, despite these gains, there remain a shockingly large number of children not attending school in India. In 2014, this number was estimated to be 1.4 million children aged 6-11 (UNESCO, 2014). Social exclusion theorists suggest that education exclusion and a persistent lack of access represents wider socio-political contexts (Kabeer 2000; Jackson, 1999; Stromquist, 2006; Giroux & Penna, 1979; Lewis & Lockheed, 2008; Lewin, 2007).

In the midst of many different school management types, there is a purported rising demand for private schooling evidenced by the public perception that it is superior (Noronha & Srivastava, 2013; Tooley & Dixon, 2003). Past studies have outlined poor teaching and learning conditions of government schools including absentee teachers and head teachers, requiring students to complete domestic chores, lack of facilities including toilets, and a lack of learning occurring even when the teacher is present (PROBE Team, 1999; PROBE Team, 2011).

Analysis of school management and enrolment patterns across the country have revealed that more boys attend private schools in India, while girls are more likely to be enrolled in government

schools (Härmä, 2011; Ramachandran, 2004; Ramachandran, 2012; UNESCO, 2009). As Watkins (2004) notes, willingness and ability to pay for access to private schools differ on many factors, including gender and income. It is common for parents to choose certain children to attend private school when they lack the resources to send all of their children, and a notable pro-male bias has been reported (UNESCO, 2009; Härmä, 2011; De, Majumdar, Samson, & Noronha, 2002).

Not surprisingly, past reports also indicate that socio-economic disparity is the most influential factor in differences in education access (Govinda & Bandyopadhyay, 2008; Lewin, 2007; South Asia Human Development Sector, 2004; UNICEF, 2008; Wu et al., 2007). While poor quality and infrastructure negatively affect all children, these impediments to access disproportionately affect disadvantaged families, especially girls and children from marginalized groups, as compared to the relatively wealthy (Brandyopadhyay & Subrahmanian, 2008; Ramachandran, 2012). As Wu et al, (2007) state, 'gender bias intersects with social exclusion' (p. 120), which in turn intersects with educational exclusion that mirrors the social exclusion found in wider society (Giroux & Penna, 1979; Lewin, 2007; Kabeer, 2000; Kingdon, 2005).

Since 1991, India has made great gains economically, yet income inequality has risen simultaneously with economic growth (Kidwai et al., 2013). This has led to pressing problems with inequality in all sectors across the country, and despite political reform and progress, the education sector remains 'rife with contradictions and inconsistencies' (Kidwai et al., 2013, p.7). As Ramachandran (2012) outlines, 'the interplay of socio-economic inequalities and gender relations creates a complex web that either promotes or impedes girls' ability to go through schooling….In India it is therefore important to understand the intermeshing of poverty, social inequalities and gender relations' (p. 237). Past studies in India have shown that when enrolment and dropout data are disaggregated by gender and social group, the majority of non-enrolled students are girls from scheduled castes or scheduled tribes, and are primarily children of illiterate parents from rural communities (Ramachandran, 2012).

Ramachandran (2012) suggests that differential access to education in India is a result of a complex combination of systemic factors that disproportionately impede certain children's schooling

access and experience. School access literature divides these factors into two categories: *push* factors (or supply side – school-related characteristics and variables which push children away from attending school regularly), and *pull* factors (or demand side – family or community situations and values which pull students away from attending school regularly) (Ramachandran, 2012; Wu et al., 2007; South Asia Human Development Sector, 2004). The category of push factors can be further broken down into two sub-categories: school attributes (infrastructure, facility, etc.) and student experience (how they are treated by teachers and peers; if they are learning; and if they are silently excluded). Analysis reveals that factors on both the supply and demand side lead to patterns in gender-based exclusion from education (Wu et al., 2007; Lewis & Lockheed, 2008; South Asia Human Development Sector, 2004).

It is beyond the scope of this study to determine push and pull factors specific to individual respondents, or to identify the exact factors that influence the patterns of access and experience revealed in the data. However, it is important to understand how the intersectional nature of the variables discussed in this study creates a complex system of factors that may affect meaningful access. This understanding is important for theorizing why we see patterns of access and experience.

2.4 A Framework for Meaningful Access

To allow for the complexity of achieving universal access and equity in education, the term 'meaningful access' has emerged to deepen the conversation and consideration of how to provide quality education to all children (Pendlebury, 2009; Jansen, 2009). Pendlebury (2009) suggests, 'Access is meaningful only when schools ensure epistemological access, and support children's systematic learning of basic skills, knowledge, values and practices, and do so in a manner that respects children's dignity and background' (p. 24-25). Lewin's (2007) definition of meaningful access focuses on retention and completion over time, and thus considers the importance of 'secure enrolment and regular attendance; progression through grades at appropriate ages; meaningful learning which has utility; reasonable access to lower secondary grades…and more equitable opportunities to learn for children from poorer

households, especially girls' (p. 33). The current study uses these broadened definitions of access to education to reveal patterns of both schooling access and children's experience of schooling.

Theories of social exclusion (Kabeer, 2000; Jackson, 1999) and social and cultural reproduction (Bourdieu, 1973; Arnot, 2002), as well as concepts of silent exclusion (Lewin, 2007) and the hidden curriculum (Giroux & Penna, 1979; Kentli, 2009) are incorporated to form the primary theoretical framework of meaningful access for the proposed study. Arguments challenging 'targeting' women, girls and other marginalized groups for specific development projects are also incorporated to outline how this approach of 'targeting' demographics is frequently employed, yet highly ineffective (Kabeer, 1996).

The analysis borrows the critical feminist perspective that education systems can be vehicles of change (Stromquist, 2006), and should not simply be reduced to a social reproductive function (Apple, 1990; Ballantine & Hammack, 2009; Weber, 1947). In this vein, Stromquist (2006) proposes the concept of transformative knowledge and the possibility of creating change for gender equity through the school system. As Ballantine and Hammack (2009) conclude, however, 'Socialization affects attitudes; structural barriers limit access. And the educational system is slow to change' (p. 115). This is not to suggest that an education system can never change and thus, educational analysis is ineffective as a means to bring about social change. Rather, an analysis of inequality within the system is the first step in revealing the need for challenging the dominant discourse and approaches surrounding gendered access to education.

2.4.1 Social Exclusion

Social exclusion, as defined by Kabeer (2000), refers to the exclusion of certain groups from full participation in social life, and serves as a 'unifying framework for analyzing the *social* implications of economic disadvantage and the *economic* implications of social disadvantage' (Kabeer, 2000, p. 1). Fraser (1997) defines social exclusion as a form of injustice that strips individuals of freedom and a positive understanding of self. This exclusion may stem from a variety of factors, including, but not limited to, gender, socio-economic status, class, caste, tribe, and religion (Jackson, 1999, Pendlebury, 2009). The extent to which social exclusion is found within a classroom or within the wider school

system will have a profound effect on meaningful access for children from those marginalized groups (Lewis & Lockheed, 2008). According to Bhan and Rodricks (2012): 'For the RTE Act to succeed, the marginalized children should not just be physically included in schools but should be socially included' (p. 375).

For the current research, Jackson's (1999) theory of social exclusion and gender has been incorporated with Kabeer (2000) and Fraser's (1989; 1997) understanding of the concept to create an in-depth gendered perspective. As Jackson (1999) clearly states: 'Gender difference is an issue of social recognition and valuation, and not simply a social problem' (p. 133). In other words, the framework of social exclusion used cannot be presented as a binary or a dualistic construct when the issue of gender is included. Doing so would suggest an insider/outsider dualism, which is problematic because of its overly simplistic nature, as well as the failure to recognize the possibility of a multiplicity of exclusions, or the experiences of simultaneous exclusion and inclusion.

Furthermore, social exclusion rhetoric does not allow for the understanding that the 'solution' is not to simply treat girls as boys, or vice versa. A recognition and valuation of their differences and needs is necessary in order to provide meaningful access for all children. Analysis, therefore, focuses on intersectionality and multiple exclusions (McCall, 2005; Jackson, 1999; Fraser, 1997; Kabeer, 2000).

2.4.2 Silent Exclusion

To allow for a deeper understanding of the complexity of social exclusion as it relates to education, the *Consortium for Research on Educational Access, Transitions and Equity's* (CREATE) six zones of exclusion in education (Figure 1) have also been incorporated into the analytical framework. Concern about the over-simplified discourse surrounding access to education motivated CREATE to re-conceptualize 'access' and 'exclusion', and to identify six zones of exclusion to better identify and understand children who are likely to be excluded from accessing meaningful education throughout the education system (Lewin, 2007).

Figure 1 depicts a cross-sectional model that identifies which students fall under each 'zone of

exclusion,' as well as the relationship between zones of exclusion and the reported trend in the broader education and development literature of declining enrolment with each increasing grade.

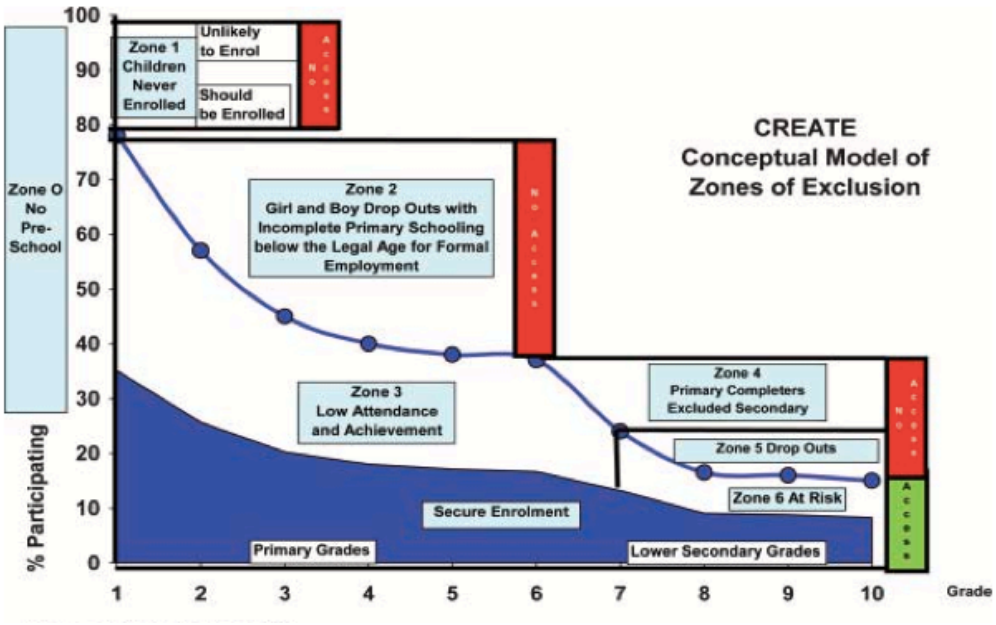

Figure 1. Access and zones of exclusion from primary and secondary education: A hypothetical cross-sectional model
Source: Lewin, 2007, p. 587

This framework has been adapted slightly to suit the classification and structure of grades in India's school system.[3] For the purpose of this research, Zones 1-3 will be used to categorize students into the following elementary school-related classifications:

- Zone 1: Children who have never been to school and thus, are denied any access to primary school.
- Zone 2: Children who enroll in elementary schooling, but who dropout before completing the elementary school cycle (grade 8). These children are often excluded after entry due to push and pull factors that affect attendance.
- Zone 3: Children who enroll in elementary school, but are at risk of dropping out because of varying factors, including silent exclusion and irregular attendance (Lewin, 2007, pp. 585-87).

2.4.3 Instrumentalism and the Practice of 'Targeting' Women/Girls

To address the exclusion experienced by certain groups in society, past efforts focused on targeting those specific groups with development programs and initiatives (Kabeer, 1996; Bradshaw,

[3] In India, 'primary education' refers to Class 1-5 only, while 'elementary education' refers to Class 1-8. Elementary education is considered the full 'basic education' cycle in India, and is the terminology used in the RTE Act.

Castellino & Dio, 2013; Chant, 2006). This practice has been especially popular with liberal feminists seeking to expand opportunities and the rights of women, with the Women in Development (WID) movement as a prime example. During this movement, a two-fold argument was made to support the specific targeting of women, especially in relation to poverty and income generation. First, it was argued that women were among the poorest of the poor. Secondly, it was argued that resources provided to women would be more likely distributed evenly within the household, compared to when resources were provided to men (Dwyer & Bruce, 1988; Palmer, 1977; Kabeer, 1996). Therefore, according to this logic, it made sense to offer programs focused on assisting women to generate more income.

The issue is that while WID and the feminization of poverty rhetoric advocates for gender equality and raises the profile of women in policy and poverty discourse, WID does not address the underlying structural problem of 'unequal gender roles and relations that are at the basis of gender subordination and women's exclusion' (Bradshaw, et al., 2013, p. 3; Chant, 2006; Kabeer, 1996; Aikman & Unterhalter, 2007).

The Government of India has had a long history of targeting assistance to various 'disadvantaged' groups. The RTE Act aims to go beyond such an approach, by expanding educational access for *all* children. However, the EWS freeship provision within the RTE Act is an example of effort concentrated on providing specific marginalized groups, including but not limited to female children, the same academic opportunities as their non-marginalized counterparts. In other words, the approach seen in the freeship provision has the potential to fall into the overly simplistic insider/outsider dualism, of children attending quality private schools, and those not.

Speaking specifically about targeting women for development programs, Kabeer (1996) identifies a worrying gap between policy and practice. She writes, 'A decade of experience has shown that women-specific projects will do little to challenge the marginal place assigned to women within development as long as the norms, practices and procedures which guide the overall development effort remain fundamentally unchanged' (Kabeer, 1996, p. 109). Instead, there is evidence that feminizing anti-poverty programs has exacerbated gender disparities by not recognizing 'the multidimensional nature of poverty

and its gendered dimensions' (Chant, 2008, p. 188). One example of this is found when women are included in formal employment opportunities as a means to improve economic participation. Instead, gender disparities may be exacerbated as this participation in the formal work force is expected to occur in addition to the informal work required, such as reproductive labour, housekeeping, child-minding, etc. In this example, women become overworked and strain is added when programs specifically targeting women or other marginalized groups simply try to include them in systems, rather than recognizing and challenging the true source of their marginalization.

The feminization of poverty discourse has also been criticized for neglecting men's needs and overall gender relations. This is of particular concern given the growing amount of evidence that in some countries, women are beginning to surpass men in respect to educational attainment (Gutmann, 1996; Silberschmidt, 1999; Chant, 2000; 2002; Fuller, 2000).

Furthering the discussion of access from a critical feminist perspective, Jackson (1999) challenges the widely held assumption that exclusion is bad (i.e. a negative state or process), and inclusion is good (i.e. the end goal). Instead, it is suggested that individuals may be simultaneously experiencing inclusion and exclusion, and that 'marginality offers both limitations and opportunities' (Jackson, 1999, p. 130). For example, children may be 'included' by being able to access certain schools, yet 'excluded' from meaningful participation and learning opportunities within the classroom. Furthermore, individuals may be simultaneously included and excluded due to the multiplicity of exclusions and socio-economic characteristics that intersect with gender. As de Haan (1998) outlines, 'Social exclusion can refer to a state or situation, but it often refers to *process*, to the mechanisms by which people are excluded. This focus is on the *institutions* that enable and constrain human interaction' (p. 12-13, original emphasis).

Therefore, care must be taken to not present the current findings on access to certain school management types in Delhi as a dualism, whereby an insider/outsider distinction is made between children accessing schools that are considered more desirable or of higher quality, and those accessing schools deemed to be less desirable. As Jackson (1999) notes in reference to social exclusion:

> Common usage tends to emphasise exclusion as the opposite of integration, and sets up a dualistic opposition between inclusion and exclusion, with limited exploration of the contradictions in the multiplicity of exclusions or the paradoxes of simultaneous inclusion and exclusion (p. 132).

Similarly, Jackson (2003) warns against relying on policies targeted at women or other marginalized groups, as 'changing gender cultures is a long-term process and not immediately tractable to government policies and project' (p. 476).

Gender and Development (GAD) and gender mainstreaming have emerged to expand the discussion beyond men versus women, and instead, focus on overall gender bias and gender power structures (Aikman & Unterhalter, 2007). From this perspective, targeting women and other marginalized groups with specific policies and programs will have a limited impact if deeper issues of gender bias and societal norms are not also addressed (Kabeer, 1996; Chant, 2006). This involves challenging the notion of power in society, and in particular, 'unitary notions of power in which the included are powerful and the excluded are powerless' (Jackson, 1999, p. 132). As Murphy (2001) argues, 'The task of poverty eradication is to eradicate the structures that create and depend upon poverty itself, rather than fix the people who are vulnerable to poverty. The people are transitory, the place is permanent' (p. 32).

2.4.4 Social and Cultural Reproduction Theory

Social and cultural reproduction theory provides a thorough framework for studying inequalities and revealing the presence of power and social control in the education system (Bourdieu, 1973; Arnot, 2002). This school of thought emerged as a strand of conflict theory and explores the political framework of education. It suggests that education systems reproduce 'dominant class structures, codes and corresponding classed identities' (Arnot & Mac an Ghaill, 2006, p. 19). More generally, MacDonald (1977) suggests that:

> The assumption underlying most of the 'reproduction' theories is that education plays a mediating role between the individual's consciousness and society at large…The individual acquires a particular awareness and perception of the society in which he [she] lives. And it is this understanding and attitude towards the social order which constitutes his [her] consciousness…The different emphasis placed…on social order or social change, on macro levels or micro processes, on structural or interactional features, derive from a variety of conceptions of the ability or inability of individuals and social classes to act in and upon the social world (p. 60).

It is important to note at this time that social and cultural reproduction theory originated in North America from neo-Marxism. Therefore, the emphasis is on class. Early social and cultural reproduction theorists viewed schools as an instrument through which individuals were molded to suit the purposes of the dominant capitalist system (Ballantine & Hammack, 2009; Arnot & Mac an Ghaill, 2006). In the context of India, class and socio-economic status are important, but other identities are also important, such as gender, caste, region, and religion. Therefore, using social and cultural reproduction theory in the context of India requires adaptions to take these other important identities into consideration. Moreover, intersectionality and feminist theory stress the influence of multiple overlapping and often mutually reinforcing identities and exclusions. This understanding requires traditional social and cultural reproduction theory to be expanded to include other, non-class structures, values, and identities.

Mirza (2006) argues that every society has its own gender belief system and gender stereotypes, whether positive or negative. According to social and cultural reproduction theory, these beliefs and views are reflected and reproduced in the classroom (Arnot, 2002). For this reason, in order to work towards inclusive educational opportunities and better understand any social exclusion within the school system, the hidden curriculum must be examined from a gender perspective (Vendramin, 2006, Arnot, 2002).

Drawing from Lewin‘s (2007) zones of exclusion, unless children’s experiences in the classroom are addressed from a gender perspective, students may dropout (Zone 2), or fall into Zone 3 of exclusion, where they do not experience meaningful access and feel silently excluded in the classroom. The same is true for children of different classes, castes, ethnicities, and marginalized groups. Ramachandran and Naorem (2013) suggest that casteism and second-class treatment may occur for students accessing freeships. Education needs to be relevant to the needs of the learner in order to encourage them to think progressively, be creative, and feel compelled to enquire further about concepts of interest to them (Mirza, 2006).

However, discrimination and afforded opportunities within the classroom go further than keeping girls, boys, and children from different social groups in school. Speaking specifically regarding gender,

Mattu and Hussain (2003) argue that any progress made in recognizing women's rights as citizens, and mainstreaming females and other marginalized groups in economic, political, and social life depends on how that society defines and perceives that group, including the devaluation of femininities and the prioritization of masculinities. The same is true of other marginalized groups. Pandey (1996) writes: 'The quality of a nation depends on the quality of its citizens, and the quality of the citizens is determined to a large extent by their education' (p. 340). In other words, education could be considered 'the backbone' (Pandey, 1996, p. 340) of social development. Therefore, social and cultural reproduction theory can offer greater understanding of the intersectional nature of social class, gender, and race relations in society, as well as in schools (Arnot, 2002). Previous macro-level analysis of educational access in India and the RTE Act have not yet been able to produce such detailed analysis of access that focuses specifically on the most marginalized in society in an attempt to advocate for sociopolitical and structural change, as is key to a critical feminist approach (Butler, Carr, Toma, & Zimmer, 2013).

2.4.5 Hidden Curriculum

The hidden curriculum also plays a key role in providing meaningful access and has important implications for the presence of social exclusion within the classroom. Vendramin (2003) states that the hidden curriculum is knowledge or subject matter that is not purely academic, but rather, personal and social, while Kentli (2009) deems it the socialization process of schooling. Pandey (1996) expands on this idea by suggesting that curriculum is not only the effort of the school to reach desired in-school outcomes, but also seeks to bring about desired outcomes for out-of-school environments. Giroux and Penna (1979) describe the hidden curriculum as 'unstated norms, values, and beliefs that are transmitted to students through the underlying structure of meaning in both the formal content as well as the social relations of school and classroom' (p. 22). Hidden curriculum theorists tend to focus on the values and behaviors taught to students through the 'unwritten curriculum' (Kentli, 2009, p. 83), such as classroom rules, norms and practices. In other words, there is more being taught and learned in schools than that which is specified in teacher's manuals and in the formal curriculum (Durkheim, 1961; Kentli, 2009).

Power is central to conceptions of the hidden curriculum. Bowles and Gintis (1976) note that the values and culture of members of the middle- and upper class are dominant in (American) schools. In other words, the social inequality found in society is reproduced through the hidden curriculum (Kentli, 2009; Bowles & Gintis, 1976). Presenting a neo-Marxist argument, Giroux and Penna (1979) view schools as political institutions. Similarly, Apple (1990b) argues that issues within the hidden curriculum are structural, and theorizes that understanding hegemony and ideology are key to analyzing the knowledge being disseminated.

Schools are defined as social environments, reflecting the norms and stereotypes represented in wider society (Giroux & Penna, 1979). The institutional social exclusion Kabeer (2000) describes is reflected in school practice through the shared hegemony described by Apple (1990b). This relationship suggests that theoretical frameworks concerning experiences in school should focus not only on education objectives for students, but on the hidden curriculum, as it may lead to increased exclusion for certain groups within the classroom (Giroux & Penna, 1979; Lewin, 2007).

One weakness of conceptions of the hidden curriculum is the reliance on socialization theories, and their failure to view students as active agents in the learning process. According to the new sociology of children (Corsaro, 2011), children are not passive recipients of knowledge and values. Instead, students interact and engage with their learning as they develop and grow. Further analysis is needed to determine the true impact of the hidden curriculum and classroom practices on all aspects of children's lives, and researchers must avoid falling into a deterministic view of the socialization process (Corsaro, 2011). Nevertheless, an analysis of children's experiences dealing with unequal treatment and latent values is needed in order to better understand the contributing factors influencing meaningful access to education.

Chapter 3: Design and Methodology

3.1 Research Methodology

Primary analysis was performed on a subsample of original *Insights into Education* household survey data. The *Insights into Education* survey was developed by the wider research team to inform a critical examination of the implementation of the RTE Act, with specific attention on the evolving role of non-state private actors and questions of access for disadvantaged groups. This research objective complements other nodes of the wider project, which seek to provide detailed analysis on how the role of basic education has evolved in India, the roles of the state and non-state private actors, and the emergence and influence of 'new/non-traditional non-state private actors in education' (Srivastava, 2016). Partners at CORD India administered the household survey in 2015, producing a sample of 800 households.

The aim of the current MA study was to critically examine patterns of meaningful access to education within a subsample of this household survey data, with a specific focus on gender. First, the analysis examined correlational relationships between variables. In this phase the statistical analyses performed on SPSS software were largely descriptive, and served as a means of revealing general patterns of schooling access and schooling experiences. Exploratory data analysis (EDA) was used to achieve this research objective. Hartwig and Dearling (1979) define EDA as both an approach to data analysis and the perspective used for analysis. EDA 'seeks to maximize what is learned from the data' (p. 9), and therefore, relies on the principles of scepticism and openness. As outlined by Hartwig and Dearling (1979), these two principles, when applied to statistical analysis, 'imply a flexible, data-centred approach which is open to alterative models of relationships and alternative scales for expressing variables and which emphasizes visual representations of data and resistant statistics' (pp. 12-13). In other words, EDA seeks to summarize the primary characteristics of the sample population where a small amount of information is available, with the understanding that different research methods can then be used to study the same sample and garner further insight into issues and the testing of hypotheses.

When statistically significant correlations were found in the data, a second phase of analysis was undertaken to determine if a causal model of relationship could be established. Research methods literature makes it clear that standard statistical methods can easily be employed to determine whether or not an association exists between two variables, but analysis becomes more complex when seeking to determine a causal effect. Statistical correlation cannot be interpreted as a causal effect, as there are often many reasons why such an association occurred. Therefore, additional statistical techniques must be applied to advance the discussion beyond descriptive tests (correlations) to develop a cause-and-effect model (Schlotter, Schwerdt & Woessmann, 2010).

For the current study, econometric techniques, and specifically, logistic regressions, were used to test the validity and generalizability of potential causal variables. Econometrics has been defined as 'the study of the application of statistical methods to the analysis of economic phenomena' (Kennedy, 1998, p. 1). Recent literature has encouraged the expanded use of these techniques for studying other social phenomena beyond economics, including educational policies and practices (Schlotter et al., 2010). Feminist economists have also encouraged traditional econometrics to broaden its scope to encompass different types of primary data, including surveys (MacDonald, 1995; Nelson, 1995). The application of econometrics to other fields beyond economics is largely due to the way this approach is based on statistical methods, but adjusts models to take stochastic relationships[4] into consideration (Kennedy, 1998; Deaton, 1997).

The principal interest for using econometrics in this MA project is not to compare variables against each other, as feminist theory makes it clear that they are not mutually exclusive categories and interpretation must therefore take intersectionality and multiple exclusions into consideration. Instead, the current study seeks to examine *how certain factors influence the probability of phenomena occurring*, such as experiencing silent exclusion in school, or being aware of the free seat provision. This approach is complementary to qualitative literature, as it seeks to use statistics to provide further insight into

[4] Stochastic relationships are unpredictable and determined by the influence of random variables. They have a "random probability distribution or pattern that may be analysed statistically but may not be predicted precisely" (Oxford University Press, 2016).

previously identified factors which are thought to affect said phenomena, but for which statistical cause-and-effect models of relationship have not yet been established.

3.2 Sample and Data Collection

The study area for household data collection was one catchment area in the eastern part of Delhi.[5] The catchment area was specifically chosen by the research team to include heterogeneity of government and private sector provision, as well as diverse socio-economic residences. For the current MA study, the researcher did not know which catchment area or colonies were surveyed. This was part of the anonymization technique, and a requirement of the ethics application for this MA project. The research team in Delhi chose the geographical area for data collection. All data were anonymised before release for use in the current MA project, and no identifying characteristics of geographical location were provided beyond the classification categories outlined below.

Each catchment area in Delhi (also referred to as Municipal Corporation of Delhi [MCD] zones) is divided into wards, which in turn are composed of a number of colonies. Colonies are given up to 10 points by the MCD from a range of criteria depicting the socio-economic status of the area (i.e., physical and social infrastructure, rental value of land, how well the local roads are connected to main roads, etc.).

The wider research team used this MCD classification as a proxy for socioeconomic status of colonies. Specifically, two colonies were included in the chosen catchment area. One was composed of households that were relatively better off (Site A), and the other included a higher concentration of EWS households to provide a range of socioeconomic backgrounds (Site B). Table 7 outlines official classification distinctions between the two colonies where household survey data were collected.

[5] Catchment areas were determined as 8km radius in Delhi by the NCT Government rules.

Site A (relatively better off colony)	Site B (relatively worse-off colony)
Physical Infrastructure - Lanes are wide enough for a car to pass through and still leave space for people and smaller vehicles to pass at the same time. There may be cars parked on the road. - Drains are largely covered or there is underground drainage.	**Physical Infrastructure** - Lanes are narrow. There is enough space for two people to walk, but not enough space for a vehicle to pass. - There are open drains and an apparent lack of systematic garbage disposal.
Social Infrastructure - There may be parks with swings/slides, a proper path for people to walk, and grass is generally maintained. - There are government schools and proximity to private schools.	**Social Infrastructure** - Parks and government schools are not visible.
Economic status of residents - Houses are generally constructed on a plot size of 900-1200 square feet. Some houses also have space to park cars on their property. - Houses may have cars and/or air conditioners; front gates 7-8 feet high or more; and front entrances of two doors rather than a single door. - Houses are freshly painted. The materials used on the outside of the houses include tiles, fancy bricks, fibreglass, and stainless steel. - Most of the women wear gold and their clothes (i.e. type of sari, *salwar kameez*) reflect a certain level of social status. The men are also dressed in more formal clothes.	**Economic status of residents** - Houses are generally built on a plot size of 500-600 square feet. - There is no homogeneity in the exterior of houses; some have cemented walls and run down paint, while others are covered with tiles. Some houses have doors made of wood, while others have long pieces of cloth hanging in front of the house to act as a curtain. - Women are dressed more simply. Their saris look inexpensive and most do not normally wear gold.

Table 7. MCD distinctions between Site A type colonies and Site B type colonies in Delhi. Households from both colonies were surveyed for the current study.

For the wider research project, 400 households were surveyed in each colony. All households surveyed had at least one child between the ages of 4 and 14 years of age. For the purposes of data collection, households were operationalized to include 'all adults and children who eat meals that have been cooked together/in the same kitchen' (Insights into Education Survey, 2015, p. 3. See Appendix A). This is a commonly used definition for household data collection in India and elsewhere. Given this definition, some households had multiple sets of parents and children. Researchers requested to speak to the parent or guardian of the respective children in the household. The majority of respondents were female (mothers). All households included in the sample had at least one mother or father present to respond to the interview questions. Response rate data for the survey were not available at the time of this MA research project.

Data were collected between April and June 2015, and were entered, coded, and cleaned in September to October 2015. A subsample was randomly selected that same month by the research team in

Delhi for use in the current MA research. In this sense, the current project is very much a first look for potential patterns of meaningful access that may serve to inform the wider analysis. All data were coded and anonymised by the wider research team before they were released to the author for this MA thesis.

For the current MA research project, a single cross-sectional design was implemented. A subsample of 118 households was randomly selected from the wider dataset by the research team, based on availability of data at the time of selection. Within this subsample, 68 households were located in Site A (a relatively better-off mixed colony), while 50 households were located in Site B (a relatively worse-off mixed colony in the catchment area). There was no specific reason for having more households from Site A other than the order in which data were entered and available for this analysis. The total subsample yielded data on 283 children. A summary table of the subsample is found in Table 8. Further breakdown of the subsample of children and parents is provided in Chapter 4.

	Subsample Size	Mean number of people in household
Households	118	5.37
Total Children (Ages 0-18)	283	2.40
Elementary School-aged Children (Ages 6-14)	141	1.19
Parents	256	2.17

Table 8. Sample overview

3.3 Instrumentation

Even though the current MA study conducted analysis of original data, the survey instrument was not created for this specific MA thesis. Instead, the wider research team developed a questionnaire and granted permission for a subsample of the data collected by this survey tool to be used for the current MA analysis. Sections of the survey tool used for the current analysis can be found in Appendix A.

The instrument underwent extensive pre-testing and preparation by the wider project team. The survey was originally developed in English before being translated to Hindi. It was piloted in multiple wards and colonies to test the tool across a range of levels of socio-economic disadvantage, and was extensively revised after each pilot phase.

The survey tool collected a broad range of data, allowing the data collected to be used for a variety of unintended purposes, including for the current project. The tool was divided into four main sections:

1. Background Information and Socio-Economic Status (SES) of Household
2. Schooling Experiences and Histories
3. EWS Free Seats Provision (Private and KV Schools)
4. Household Facilities, Assets, and Multidimensional Poverty Index (MPI) Indicators

The survey design allowed researchers to collect a wide range of information pertaining to each household in a relatively short period of time. However, there could be a lack of content validity with the complex variable constructed in the current study, as the tool was constructed for the purposes of the wider project, and not specifically for the current MA research. Concepts included in the proposed study were operationalized in such a way as to account for this limitation. Of particular concern is the approach taken whereby households were asked to report candidly on sensitive matters, including monthly income and experiences with discrimination at school as marginalized groups. Reponses to these questions may not portray a full and accurate representation, as households may be hesitant to reveal experiences considered to be embarrassing or discriminatory.

Furthermore, survey data were collected through responses by parents or guardians (usually the mother), as this was the main aim of the wider research project. This approach was sufficient for much of the information on children's schooling histories and experiences applying for EWS free seats, however, respondents may not have been fully aware of what their children were experiencing at school. Children's rights literature stresses the importance of including children in research that applies to them (Pittaway, Bartolomei & Hugman, 2010; United Nations, 1989). While it is planned that subsequent phases of the wider research project are likely to involve children, descriptions of children's experiences obtained through the current survey tool and used in this MA thesis are largely based on the perception of the parent. These perceptions may not be an accurate representation, and errors may not be random. Despite these limitations, the survey tool covers a wide range of topics relating to children's schooling access and experiences. This provides ample data to perform initial exploratory data analysis and identify initial patterns, which in turn will help guide subsequent phases of the wider research project.

3.4 Method of Analysis

3.4.1 Dependent Variables

3.4.1.1 Patterns of Access

For the first research objective, indicators of access to school were analysed separately to determine whether or not children were enrolled in school, and if yes, which type of school was chosen. The main indicators were as follows:

Variable	Operational Definition
Schooling Status	a. *Enrolled*: School-aged children in Classes 1-8 (6-14 years of age, according to the RTE Act) who were currently enrolled in and attending a school. Children aged 4-5 enrolled in Class 1, or aged 15-16 enrolled in Class 8 were also included in the sample to take under- and over-age enrolment into consideration. b. *Dropped out*: School-aged children (6-14 years of age) who enrolled and started school, but stopped attending before completion. c. *Never enrolled*: Elementary school-aged children (6-14 years of age) who had never attended school.
School Management Type[6]	a. Any public school outside of Delhi b. Municipal Corporation of Delhi (MCD) c. *Sarvodaya Vidyalaya* (SV) d. *Kendriya Vidyalaya* (KV) e. Any private school outside of Delhi f. Private Aided g. Private Unaided Recognized h. Private Unaided Unrecognized
Class Enrolled	School class currently enrolled in, or the highest grade completed for dropouts (KG/Nursery - Class 9).
Attendance	How many days the child was absent from school in the last week. Regular attendance was operationalized in the survey instrument as being absent for one day or less during the past week. Reasons for irregular attendance could include the following factors: health problems; household chores; earning work; scared of teacher; fee issues; child not interested in what is being taught; holiday/school closure; went home to native place, or to attend a family event such as a marriage.

Table 9. Operationalization of variables of interest

Dropout rate was originally operationalized as the proportion of children who had dropped out of school each year in relation to total sample size. Current schooling status for each child, period attended (number of years), and class completed/enrolled would all have been used to indicate this variable. However, the data set did not include sufficient numbers of children who had dropped out to perform these analyses (n = 3).

[6] See Section 2.1.2 for additional information on each School Management Type.

3.4.1.2 Children's Experiences – Silent Exclusion

For the second research objective, the complex variable*, silent exclusion*, was created. Silent exclusion is a relatively new concept that remains difficult to operationalize and quantify. Some recent and important qualitative work has been done in the Indian context on detailing aspects of experienced exclusion within schools and classrooms (Ramachandran & Naorem, 2013). However, there has been limited effort to quantitatively apply this concept to an analysis of children's experiences. In other words, no previous attempts to create an index of silent exclusion to measure the concept or to perform regression analyses were found in the literature. Instead, when considered on a quantitative level, past research has focused on counting the occurrence of certain aspects of silent exclusion, such as over-age enrolment, scoring poorly on achievement tests, educational quality in the classroom, and infrequent attendance (Das, 2011). The current study attempts to advance the concept of silent exclusion by operationalizing the experiential component into a measureable index.

To do so, a composite variable was created to allow for multiple indicators to influence the total experience of silent exclusion. The current study considered aspects of silent exclusion that focus on leadership opportunities, discrimination, and/or social integration in the classroom. These dimensions were chosen because of their relevance to the concept of silent exclusion (Lewin, 2007), as well as the availability of data from the current survey tool. Silent exclusion of marginalized groups presents itself in many different forms, which are often deep and wide-ranging (PROBE Team, 2011; Lewin, 2007). Due to the complexity of the concept and the scope of the current MA study, analysis focuses on a few negative implications as an initial step to quantity the concept.

Silent exclusion was operationalized as outlined in Table 10. Seven questions from the household survey pertaining to children's experiences in school during 2014-2015 were selected for transformation into three composite indices (dimensions), and ultimately, into one composite variable – silent exclusion in the classroom. These seven indicators were also analysed separately for further insight into children's schooling experiences, and are as follows: *school assembly leadership opportunity*; *cleaning at school*;

physical hitting by teachers/school staff; *verbal insults/shaming by teaching/school staff*; *bullying by other children*; *happiness at school*; and *number of friends at school*.

A large number of schools were represented in surveyed households (52), and the small subsample size did not allow extensive analysis of school-specific patterns. In other words, some schools may use different means to determine which students (if any) may lead the school assembly, and who cleans the school under what circumstances. This possibility must be taken into consideration when analysing results. The appropriateness of these questions as accurate indicators is further discussed in Chapter 5.

Concept	Dimensions	Indicators
Silent Exclusion in the Classroom	**Leadership Opportunities Given to Child**	1. Did your child lead the school assembly?
	Discrimination Against Child	2. Did your child do any of the cleaning in the school or school premises? 3. Was your child hit by the teacher/school staff? 4. Was your child verbally insulted or shamed by the teacher/school staff?
	Social Integration (Happiness of the Child)	5. Did your child complain of being bullied by other children? 6. Our child was very happy at this school. 7. Our child had a lot of friends at this school.

Table 10. Operationalization of silent exclusion composite variable

All seven indicators were recoded into two categories – *yes*, the child had experienced this in school, according to their parents, or *no*, the child had never experienced this in school, according to their parents. Any cases that responded '*I don't know*,' or '*neutral'* were removed from this part of the analysis. Indicators 2-5 were reverse coded from negatively- to positively-keyed items (i.e., questions on cleaning, being hit, verbally insulted, or bullied by other children). The scores for all seven indictors were then added to compute the new variable, *level of silent exclusion experienced*. Silent exclusion scores could range from 7 to 14. This scale was recoded to range from 0 to 7 for ease of analysis. For this new variable, a low score indicated that respondents reported little to no exclusion felt by their children in the classroom, while a high value indicated that respondents reported their children frequently feeling excluded in the classroom.

3.4.1.3 The RTE Act Free Seat Provision

Lastly, EWS freeship application was analysed at the household level and operationalized as being aware of and having applied to a free seat (in either private or KV schools) in the past. EWS freeship admission was operationalized as households with one or more children admitted under the EWS freeship provision. All indicators used were from Section 3 of the survey tool (included in Appendix A). The following indicators were analysed separately to understand patterns of access to free seats: awareness of the free seat reservation; eligibility for admission under the EWS free seat provision; application attempts for those who were aware and eligible for a free seat, and acceptance to a free seat. Due to the small sample size of KV applicants, Question 8a in Section 3B of the survey tool was recoded for the current analysis into the new variable: total number of EWS applications (KV + private schools). Similarly, the second part of Question 8a in Section 3B of the survey tool was recoded into the new variable: total number of successful EWS applications (KV + private schools). For children who were accepted for a freeship, additional indicators pertaining to both positive and negative experiences once admitted were used to determine patterns of exclusion experienced in the classroom. Descriptive results for all EWS freeship variables can be found in Section 4.4.

3.4.2 Independent Variables

All data were examined using the following four independent variables for each child: *sex*, *income band level, caste/community*, and *religion,* and the control variable of *geographical region of residence* (urban region in the NCT of Delhi, India). These four independent variables were chosen to represent the intersectionality of exclusion and marginalization in Indian society (Jackson, 1999; Little; 2010; McCall, 2005).

Specifically, income level was chosen as an independent variable of interest to provide a preliminary review of socio-economic patterns in relation to meaningful access. Respondents were asked to report their average household monthly income. Within the subsample, 108 out of 118 households

reported their income (Figure 2). Households that did not know or would not tell their monthly income were omitted from the parts of the analysis focused on household income level.

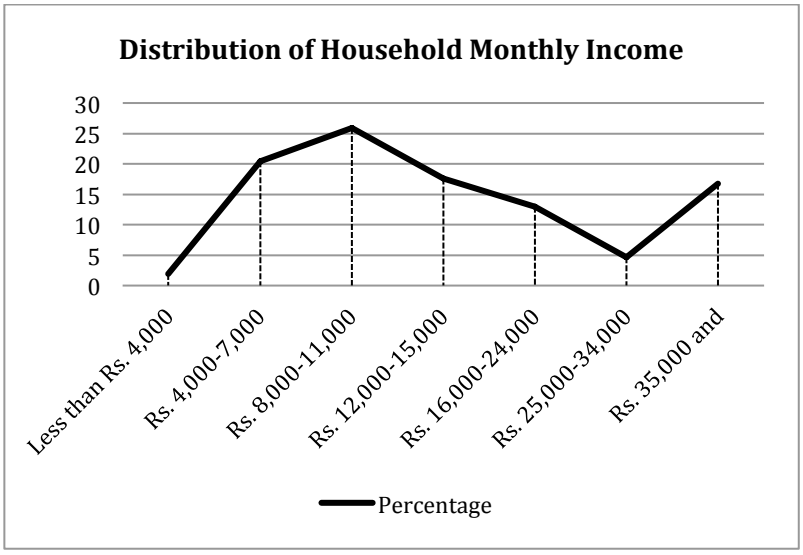

Figure 2. Distribution of household monthly income (*n* = 108)

To analyse the independent variable, *income level,* the total monthly income of households was categorized into three income bands according to the RTE Act freeship criteria in Delhi (Table 11).

Household Income	Band Definition	*n*	%
Band 1	Well within or under income criterion for EWS (Rs. 7,000/month or less)	24	22.2
Band 2	On the cusp of EWS freeship income criteria (Rs. 8,000-11,000/months)	28	25.9
Band 3	Above EWS freeship income criteria (Rs. 12,000/month and above)	56	51.9

Table 11. Household income level A – all households (*n* = 108)

Field researchers collecting this data for the wider project were asked at the end of each interview to judge whether or not they felt the family had greatly underreported their income. This judgement was based on observations obtained during the home visit, as well as household responses to other questions regarding household assets. 16.7% of the 108 households were noted as possibly underreporting their monthly income according to the researchers (*n* = 18), while 79% were thought to not be underreporting their income level (*n* = 86).

To take this additional data into consideration, analyses involving household income were run twice throughout the current study – once with all 108 households reporting income, and once with only the 86 households thought not to be underreporting their income. To simplify reporting, analysis in this

study that was run using the full sample of 108 households is referred to as '*income level A*,' and the second, probably more reliable, subset of households reporting income is referred to as '*income level B*.' Comparisons were made for noticeable differences between these two levels of analysis. Table 12 outlines the income band levels for only those families who were not suspected of greatly underreporting income, i.e., those thought to be more reliable (income level B).

Household Income	Band Definition	*n*	Percentage
Band 1	Well within or under income criterion for EWS (Rs. 7,000/month or less)	21	24.4
Band 2	On the cusp of EWS freeship income criteria (Rs. 8,000-11,000/months)	21	24.4
Band 3	Above EWS freeship income criteria (Rs. 12,000/month and above)	44	51.1

Table 12. Household income level B - households noted as not greatly underreporting income (*n* = 86)

This added level of reliability is important to note, as using income level as a measure of socio-economic status has limitations. Income is often over- or underreported for various reasons, and many households do not know how much they make on a monthly basis. Given the scope and timing of the current study, data on other more comprehensive measures of socio-economic status, such as asset ranking and Multidimensional Poverty Index (MPI) indicators were not available. The larger study will be examining both asset rankings and MPI indicators, as well as comparing them to reported income and expenditure. This, however, is beyond the scope of the current project, which serves as a preliminary study of the data set. Therefore, despite its limitations, income was chosen as the indicator of socio-economic status due to the availability of the data.

3.4.3 Statistical Methods

The primary method of statistical analysis used in this study was descriptive statistics. All statistical analyses were performed using IBM SPSS Statistics, version 23 for Macintosh. Distributions were displayed and any notable patterns were identified and discussed. As exploratory data analysis was the approach taken, descriptive statistical methods were used to summarize the primary characteristics of the subsample where a small amount of information was available. This was done with the understanding

that various other research methods could then be used to study a similar sample and triangulate the findings noted to produce robust conclusions and garner deeper insight.

For inferential statistical measures, chi-square tests of independence were used frequently throughout the analysis. This was the appropriate choice as the four independent variables of interest are discrete, mutually exclusive categorical variables. Therefore, a nonparametric test was required. Chi-square tests analyse what is actually observed compared to what is expected by chance (Salkind, 2011). In other words, this test reveals if a sample is equally distributed or not, as would be expected by chance. Alpha levels of .05 and .01 were used for all analyses.

Lastly, binomial logistic (logit) and multinomial logit regression models were used to take the analysis a step further to determine causal effects. Similar to the reasoning behind the use of chi-square tests, these econometric techniques are the appropriate choice when examining binary dependent variables. Furthermore, these models were the appropriate choice for the current MA research, as they can be performed on relatively small sample sizes, while still producing meaningful conclusions (Bergtold, Yeager & Featherstone, 2011).

The logit model presents the probability that an event will occur if certain characteristics are present (Kennedy, 1998). This estimation uses maximum likelihood to examine categorical variables that cannot be analysed using traditional linear regression models (Kennedy, 1998). When the dependent variable being studied consists of two categories, a binomial logit model is employed; however, when the dependent variable consists of three or more categories, a multinomial logit model must be employed to account for all possible outcomes.

Hosmer and Lemeshow goodness-of-fit tests were used as a post-estimation test to determine if the models found were adequate for explaining a cause-and-effect relationship, as well as to ensure there was not an omitted variable bias. The logit model used in the current analysis is as described below:

$$Y = \Phi Z + \varepsilon_i$$

Whereas, Φ is the estimated coefficient and Z is a vector of independent variables of interest (sex, caste/community, religion, household income level, and/or school management type). $\mathcal{E}_i$ is the error term. The value of the coefficient (Φ) is reported, but it is important to note that this value does not represent the size or strength of effect. Instead, the current study focuses solely on the direction of the coefficient. When the estimated coefficient is positive, the presence of the characteristic is assumed to have a positive effect on the phenomenon. In other words, the presence of this characteristic increases the probability that the independent variable will occur. Conversely, when the estimated coefficient is negative, the presence of this characteristic decreases the likelihood that the independent variable will occur.

3.4.4 Null Hypotheses

As outlined in Section 1.2, the primary null hypotheses for the first research objective were as follows:

a) Access to all school types in the public and private sectors is just as likely for girls, those from lower-income households, those from scheduled castes/tribal communities, and those from minority religions, as it is for boys, those from higher income households, those from non-scheduled castes/non-tribal communities, and those from the majority religion[7].

b) The occurrence of applications for and uptake to freeships for boys, children from higher income, non-scheduled caste/non-tribal community, and the majority religious groups is the same as for girls, children from lower income, scheduled caste/tribal community, and minority religious groups.

The following primary null hypotheses were examined under the second research objective:

a) Children of all backgrounds have meaningful experiences in school. There is no gender- or social-based discrimination or silent exclusion for any particular groups of children in the classroom.

b) Children who attend public schools experience much the same treatment as those who attend private schools, with no, or limited experiences of social exclusion in either sector. Students accessing freeships in private schools are treated in the same manner as those who pay fees to attend the same school.

c) Students of all backgrounds attend school regularly in both the private and public sector. Furthermore, if a student is not attending regularly, reasons for doing so are the same (or similar) for boys and girls, as well as for those from different social backgrounds.

[7] In this context, 'minority religion' refers to any religion other than Hinduism. The 'majority religion' refers to Hinduism.

3.5 Ethics Statement

The broader research project was granted ethical clearance by the University of Ottawa's Research Ethics Board. A separate ethics approval for this MA research was also granted. A subsample of anonymised data was accessed from a secure site for this MA research. The researcher signed a confidentiality form as part of the approved ethics protocol for the wider project, and was only granted access to the above-described subset of the database. All project data for the MA research project will be kept secure for five years after the project has been completed, at which time it will be securely destroyed.

As this MA project did not involve any contact with human participants, many potential ethical and logistical issues were mitigated as part of the research design. Care was taken to treat the data in a balanced and impartial way. No identifying data or information was provided to the researcher as part of this MA research. Furthermore, no attempts to identify individual respondents or households were made. As such, the research does not pose any direct risks or disadvantages for individual respondents or their household.

Chapter 4: Results and Analysis

4.1 Sample

The purpose of this study was to ascertain patterns of schooling access, and understand children's schooling experiences. Sections 4.1.1 and 4.1.2 provide an overview of children and parents in the sample. For the purposes of this study, 'children' refers to those below the age of 18. This sample generated data on 283 children. From this sample, further data on a subsample of elementary school-aged children (aged 4-14) were collected (n = 167), which inform the bulk of the analysis from Section 4.2 onwards.[8]

4.1.1 Sample Demographics - Children

Table 13 presents descriptive statistics on the total sample of children (n = 283). The composition was as follows: 51.9% male and 48.1% female. Of the total sample, 90.8% were identified as Hindu, and 3.9% were Sikh. Christian, Muslim, and 'other' religions each represented a small portion of the sample (2.1%, 1.8%, and 1.4%, respectively). These frequencies reflect the pattern of religious demographics reported in Delhi, with Hindu being the majority religion in the state (Government of India, 2011). For most of the current analysis, religion was recoded into two categories: the majority religion (Hindu), and all minority religions (Sikh, Christian, Muslim, other) as on their own, the sample sizes of each minority religion were too small.

Frequencies of caste and community association in the current dataset also reflected wider patterns in Delhi, according to 2011 census data (Government of India, 2011). The majority of children were identified as belonging to a general caste/community (62.5%); 17% were identified as belonging to other backward class groups (OBC), 18% to a scheduled caste (SC), and only 1.4% to a scheduled tribe (ST). For the purpose of this analysis, SC, ST, and OBC were grouped together into one category, as on their own, the sample sizes for each category were too small. Together, these three groups of interest

[8] While the RTE Act is primarily focused on children between 6 and 14, data were collected on children from 4 years old to account for those accessing preschool/kindergarten classes in private schools (also eligible for freeships), and in the case of early (underage) enrolment.

represented 36.7% of children in the sample (n = 103). All distributions found in Table 13 and 14 remain largely consistent for the subsample of school-aged children that informs the bulk of the analysis.

Demographic Variable of Children	*n*	%
Sex		
Male	147	51.9
Female	136	48.1
Total	283	100.0
Religion		
Majority (Hindu)	257	90.8
Minority	26	9.2
Christian	6	2.1
Muslim	5	1.8
Sikh	11	3.9
Other	4	1.4
Total	283	100.0
Caste		
Scheduled Caste or Scheduled Tribe	55	19.4
Other Backward Class	48	17.0
General	177	62.5
Would not say	1	0.4
Missing	2	0.7
Total	283	100.0
Income Level A (All)		
Band 1 (Well within or under EWS Criteria)	62	23.5
Band 2 (On the cusp of EWS criteria)	74	28.0
Band 3 (Above EWS criteria)	128	48.5
Total	264	100.0
Income Level B (Household subsample thought not to have underreported income)		
Band 1 (Well within or under EWS Criteria)	54	24.8
Band 2 (On the cusp of EWS criteria)	58	26.6
Band 3 (Above EWS criteria)	106	48.6
Total	218	100.0

Table 13. Descriptive statistics: Children

Religion		Caste/Community			
		SC/ST	OBC	General	Total
Hindu (Majority Religion)	Male	27	23	84	134
	Female	24	20	78	122
	Total	51	43	162	256
All Others (Minority Religions)	Male	1	3	6	10
	Female	3	2	9	14
	Total	4	5	15	24
Total	Male	28	26	90	144
	Female	27	22	87	136
	Total	55	48	177	280

Table 14. Cross tabulations on three independent variables (sex, caste/community, and religion)

Table 15 displays chi-square tests between all households (Income Level A) and the other three independent variables - sex, religion, and caste/community. No significant relationships were found between caste/community and income level, X^2 (2, n = 261) = .192, p = .908, or between sex and income level, X^2 (2, n = 264) = .299, p = .861. Instead, children were distributed almost evenly between these

demographics and income levels. Chi-square analysis could not be performed between child's religion and income level, as the number of children identified with a minority religion was below five for Band 1.

	Income Band 1	Income Band 2	Income Band 3	X^2	*p*
Sex				**(2) = 0.299**	**.861**
Male (*n* = 140)	31 (22%)	40 (29%)	69 (49%)		
Female (*n* = 124)	31 (25%)	34 (27%)	59 (48%)		
Caste/Community				**(2) = .192**	**.908**
SC/ST/OBC (*n* = 100)	25 (25%)	26 (26%)	49 (49%)		
General (*n* = 161)	37 (23%)	45 (28%)	79 (49%)		
Religion				***n/a***	***n/a***
Hindu (Majority, *n* = 239)	59 (25%)	68 (28%)	112 (47%)		
All others (Minority, *n* = 25)	3 (9%)	6 (24%)	16 (64%)		

Table 15. Chi-square tests - Income band level A (all households) and independent variables. Percentages are row percentages.

When the same chi-square analyses were run using income level B (the possibly more reliable subsample of households who did not under-report income), distributions only changed slightly (Table 16).

	Income Band 1	Income Band 2	Income Band 3	X^2	*p*
Sex				**(2) = .004**	**.998**
Male (*n* = 121)	30 (25%)	32 (26%)	59 (49%)		
Female (*n* = 97)	24 (25%)	26 (27%)	47 (48%)		
Caste/Community				**(2) = .215**	**.898**
SC/ST/OBC (*n* = 94)	25 (27%)	24 (26%)	45 (48%)		
General (*n* = 121)	29 (24%)	31 (26%)	61 (50%)		
Religion				***n/a***	***n/a***
Hindu (Majority, *n* = 197)	51 (26%)	54 (27%)	92 (47%)		
All others (Minority, *n* = 21)	3 (14%)	4 (19%)	14 (67%)		

Table 16. Chi-square tests - Income band level B (subsample thought not to have underreported income) and independent variables. Percentages are row percentages.

Overall, the mean age of all children was 9.03 years (Figure 3), while the mean age of the subsample of school-aged children (ages 6-14) was 9.58 years (Figure 4). Normal distribution curves were plotted in Figures 3 and 4 for comparison purposes.

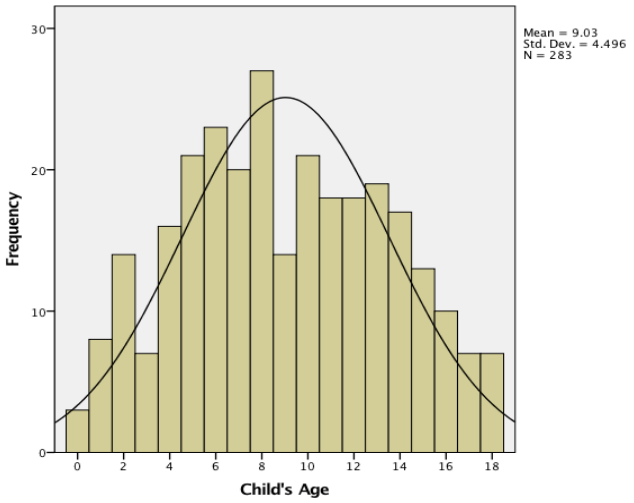

Figure 3. Children's age (total sample) – frequencies

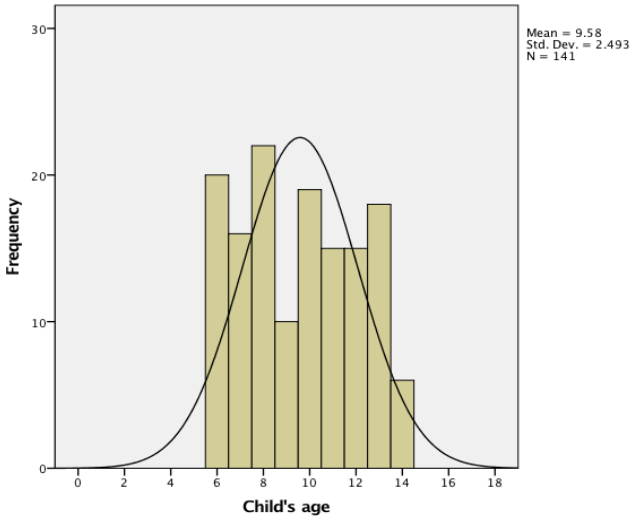

Figure 4. Children's age (subsample of school aged children) – frequencies

In the sample of all children, the vast majority were currently enrolled in school. Only one child was reported as having dropped out (Zone 2 of Lewin's zones of exclusion), and one was identified as having never been enrolled (Zone 1). This finding is encouraging and consistent with past reports on dropout rates in Delhi, which suggest overall rates in the state to be low compared to rates across the country (Government of India, 2008). However, the current findings for this specific geographical region within Delhi are even more encouraging than the government state-wide data reporting a drop-out ratio of

5.9 for Classes 1-5, and 22.9 for Classes 1-10 in 2010-2011 (Government of NCT of Delhi, 2014). Further intended analysis of 'drop out' and 'never enrolled' children, as it pertains to Lewin's Zones 1 and 2 of exclusion were not conducted owing to the extremely small number of children falling in these categories in the sample.

4.1.2 Sample Demographics – Parents

Within the 118 households surveyed, 351 adults over the age of 18 were counted, of whom 256 were identified as the mother or father of a child in the sample. This number of parents may include guardians or stepparents but the data did not specify as such. The remaining 95 non-parents were a mix of grandparents, older siblings, and other family members. Due to the scope of this study, analysis on the rest of the household focused on the parents of children included in the sample, as it has been shown that parent's level of education strongly correlates with child's education, including educational decisions made on behalf of their children (Ermisch & Pronzato, 2010)**.** All households had at least one mother or father present. Information on marital status, type of work, and educational attainment of each parent in the household was reviewed (Table 17). Data on the four main independent variables of interest were also reviewed for the sample of parents (sex, religion, caste/community, and income level).

Gender representation in the sample of parents was almost even, with 127 males (49.6%), and 129 females (50.4%). The overwhelming proportion of parents were currently married (n = 251, 98.0%). A much smaller proportion were widowed (n = 4, 1.6%) or unmarried (n = 1, 0.4%). 53.7% of parents reported themselves to be engaged in paid employment, while 44.3% reported being engaged in household work only. All of those engaged in household work only were female. All fathers indicated being engaged in paid employment, while only 12.4% of mothers reported the same (Table 18).

Demographic Variable of Parents	*n*	%
Sex		
Male	127	49.6
Female	129	50.4
Total	256	100.0
Religion		
Majority (Hindu)	230	89.8
Minority	26	10.2
Christian	6	2.3
Muslim	4	1.6
Sikh	12	4.7
Other	4	1.6
Total	256	100.0
Caste		
Scheduled Caste or Scheduled Tribe	35	13.8
Other Backward Class	42	16.6
General	174	68.8
Would not say	2	0.8
Total	253	100.0
Income Level A (All)		
Band 1 (Well within or under EWS Criteria)	48	18.8
Band 2 (On the cusp of EWS criteria)	58	22.7
Band 3 (Above EWS criteria)	130	50.8
Total	236	100.0
Income Level B (Subsample whose households are thought not to have underreported income)		
Band 1 (Well within or under EWS Criteria)	42	22.2
Band 2 (On the cusp of EWS criteria)	42	22.2
Band 3 (Above EWS criteria)	105	55.6
Total	189	100.0
Marital Status		
Currently Married	251	98.0
Widowed	4	1.6
Unmarried	1	0.4
Total	256	100.0
Type of Work		
Only Household Work	113	44.3
Looking for work/unemployed/retired	5	2.0
Total Paid Employment:	137	53.7
Private Job	54	21.1
Self Employed (Petty trade/auto drivers/not employing others)	50	19.6
Own Business (employs others)	15	5.9
Skilled work	7	2.7
Domestic (driver/maids)	5	2.0
Government Job	3	1.2
Home-based work (piece rate work)	2	0.8
Unskilled work (mazdoori, cycle rickshaw driver)	1	0.4
Total	255	100.0

Table 17. Descriptive statistics: Parents

	Fathers (*n* = 121)	**Mothers (*n* = 129)**
Engaged in Paid Employment	121 (100%)	16 (12.4%)
Engaged in Household Work Only	-	113 (87.6%)

Table 18. Number of fathers and mothers engaged in paid or household work. Percentages are column percentages.

The highest level of education completed varied greatly between parents in different households. Overall, the sample was relatively well educated with 35.5% of parents having completed some secondary

education (class 9-12), and 24.2% of parents having completed undergraduate studies. The distribution of all parents among levels of education completed is presented in Figure 5.

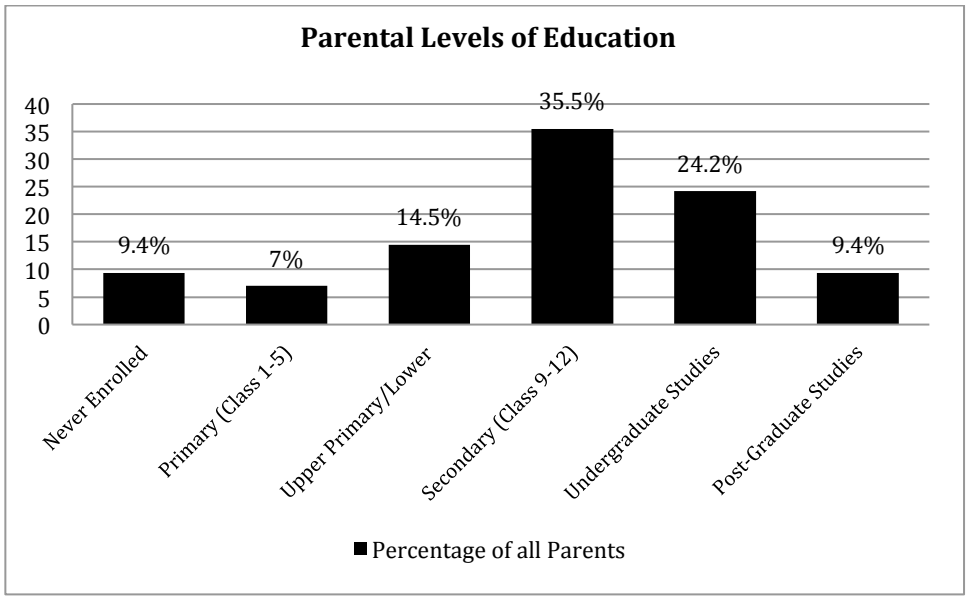

Figure 5. Parental education completed (*n* = 256)

Chi-square tests were performed to determine if any relationship existed between parental sex and education. No significant relationship was found for this sample of parents, with both mothers and fathers completing similar levels of education, X^2 (5, *n* = 256) = 3.917, p = .561 (Figure 6). This is an unexpected finding, as past reports reveal mothers in India traditionally completing lower levels of education compared to fathers (IIPS & Macro International, 2007). The high rates of parental education found in this sample may be due to the geographical area being an urban location, as well as the fact that one neighbourhood surveyed was noted to be relatively better off in terms of socio-economic status.

This encouraging finding that many children in the sample had fathers and mothers completing relatively higher levels of education may contribute to the overall high rates of school attendance and enrolment found in the current sample. It may also have important implications for choice of school, and thus, for reducing the gap between female and male enrolment in all levels of education for the current generation of students.

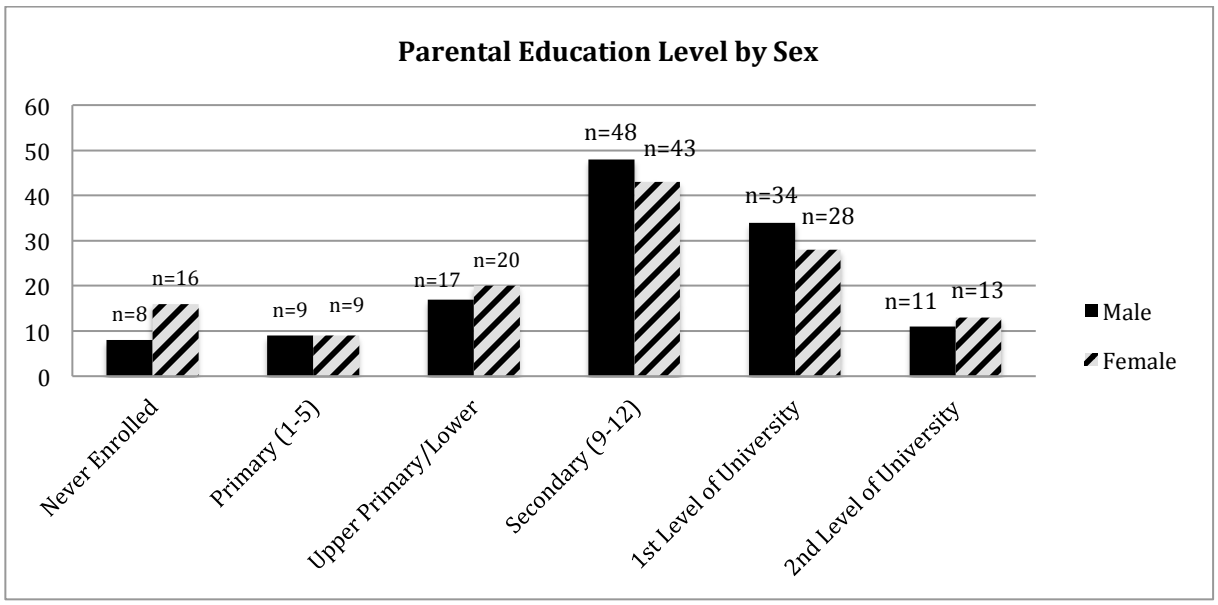

Figure 6. Parental education by sex: Number of males and females that had completed each level of education (n = 265)

A significant relationship was found at the .001 confidence level between parent's caste/community and level of education, X^2 (6, n = 251) = 28.431, p < .001. To determine this, parental level of education was recoded into four categories: never enrolled, some elementary (classes 1-8), some secondary (classes 9-12), or some university (including both levels). Looking at basic education, 20% of parents from a SC or ST had never enrolled in school, compared to 14% of parents from an OBC, and only 6% from a general caste (Table 19). The largest proportion of parents identifying with a general caste had completed some university education (41%), while the largest proportion of parents from a SC/ST had only completed some elementary education (43%). Furthermore, the largest group of parents identifying as OBC had completed some secondary education (45%). This pattern is expected (Rhines Cheney et al., 2005; Khan & Sabharwal, 2012) and is identified by the shaded cells in Table 19, which represent the largest percentage of parents in each caste/community.

	SC/ST (n = 35)	**OBC (n = 42)**	**General (n = 174)**
Never Enrolled	7 (20%)	6 (14%)	10 (6%)
Elementary (Class 1-8)	15 (43%)	8 (19%)	30 (17%)
Secondary (Class 9-12)	8 (23%)	19 (45%)	62 (36%)
Some University	5 (14%)	9 (21%)	72 (41%)

Table 19. Parental education and caste/community. Percentages are column percentages.

The distribution of parents' level of education in relation to their religion is presented in Table 20. Statistical analysis could not be performed due to the small sample size of parents identifying with a minority religion (Christianity, Muslim, Sikh, other), even when the variable was recoded into two categories: majority and minority religions. All those identifying as Sikh had completed at least secondary education, while the majority of parents identifying as Christian had only completed upper primary/lower secondary (66.7%). Parents identifying as Hindu were more dispersed throughout all levels of education. However, this was the only group who also had a proportion never enrolled in education (10.0%). Those identifying as Muslim, or 'other' were not included in this analysis due to the small sample size for both of these groups. These distributions are consistent with previous research into enrolment ratios across religious groups in Delhi (Khan & Sabharwal, 2012).

	Christian (*n* = 6)	**Hindu (*n* = 230)**	**Sikh (*n* = 12)**
Never Enrolled	-	10.0%	-
Primary (Class 1-5)	-	7.0%	-
Upper Primary/Lower Secondary (Class 6-8)	66.7%	13.9%	-
Secondary (Class 9-12)	16.7%	33.0%	91.7%
1st Level of University (Bachelor's)	-	26.1%	8.3%
2nd Level of University (Master's and above)	16.7%	10.0%	-

Table 20. Parental education by religious affiliation. Percentages are column percentages.

Lastly, a chi-square analysis was completed for income level A (all households), and parent's level of education. For the current analysis, the category 'never enrolled' was combined with 'elementary,' due to the small number of parents who had never enrolled in school. A significant relationship at the .001 level was found, X^2 (4, n = 236) = 36.371, p < .001. The distribution for the sample is displayed in Table 21.

Only 20% of parents from the highest income band (Band 3) reported their highest level of education as elementary education, while the majority of parents from Band 1 (60%) and 40% of parents from Band 2 had only elementary education. An interesting pattern is evident, where the majority of parents in Band 1 only had elementary education (60%), the majority in Band 2 had some secondary education (43%), and close to the majority of parents in Band 3 had completed some university education (43%). This pattern is identified by the shaded cells in Table 21, which represent the largest percentage of

parents in each income band. From these distributions, it can be concluded that parental education level and income are related, as expected.

	Income Band 1 (*n* = 48)	Income Band 2 (*n* = 58)	Income Band 3 (*n* = 130)
Never Enrolled or Some Elementary (Class 1-8)	29 (60%)	23 (40%)	26 (20%)
Some Secondary (Class 9-12)	14 (29%)	25 (43%)	48 (37%)
Some University	5 (10%)	10 (17%)	56 (43%)

Table 21. Parental education and income band level. Percentages are column percentages.

4.2 Patterns of Schooling Access

4.2.1 Current Class Enrollment

The analysis extracted data on children currently enrolled in elementary school aged 4-14.[9] Field data were collected on a maximum of two children per household, providing a subsample of 167 children. Within this subsample, children were distributed between kindergarten to Class 9 as shown in Figure 7. [10]

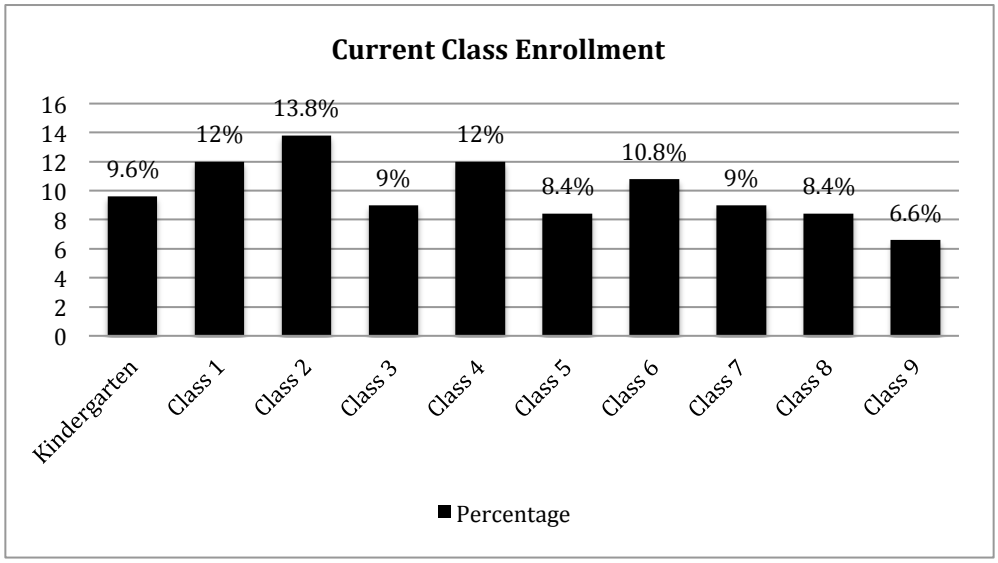

Figure 7. Children's current class enrolment – Percentage of subsample (*n* = 167)

Of interest is the apparent tapering off of enrolment in higher classes noticeable in Figure 7. Within the sample, 13.8% of children were enrolled in Class 2, however only 8.4% were enrolled in Class 8, and even fewer were enrolled in Class 9. This may be a random finding caused by the age distribution

[9] The parameters of the RTE Act include children aged 6-14; however children aged 4 and 5 were included in the present study to take early enrollment into consideration.

[10] The parameters of primary education according to the RTE Act include classes 1-8. Kindergarten and Class 9 were included in portions of the current analysis to take early and under enrollment into account, given the children's age range of 4-14 years of age.

of the current sample. However, past research has revealed this to be a common pattern throughout India, where enrolment in Classes 1-2 is high, then tapers off as children reach upper primary and secondary levels (DISE, 2007; DISE, 2013; IIPS & Macro International, 2007). These reports suggest that even though overall enrolment has increased throughout the city, inconsistencies between lower primary and upper primary enrolment remains a concern. This may be due to Lewin's Zone 2 of exclusion, where children enrol but dropout before completing the elementary school cycle. The current finding reiterates this trend.

It is also possible that high enrolments found in Class 2 and Class 4 in the current sample may be due to repetitions, whereby a student repeats the same class again after failure at first attempt. This possible explanation raises concerns within the context of the RTE Act, as Section 16 of the Act mandates, 'No child admitted in a school shall be held back in any class or expelled from school till the completion of elementary education' (Government of India, 2009, Section 16). It is also important to note that the tapering off of enrolment after Class 5 may reflect pre-RTE Act enrolment patterns, as the Act came into effect only five years before the current data were collected.

Determining the distribution of class enrolment has important implications for age-grade distributions. An ongoing concern is the difficulties that are present when children attend a class that does not correspond with their age. This discrepancy has the potential to negatively affect that child's learning, cognitive development, and motivation to learn (Lewin, 2007). Additionally, the older the child, the greater the chance of them dropping out if not enrolled in the right class (Zones 2 and 3) (Lewin 2007). Table 22 presents the age-grade distribution for the subsample of currently enrolled elementary school-aged children aged 4-14.

The dark shaded cells indicate the age intended to correspond with each grade, according to the RTE Act. Under the RTE Act, the minimum age for admittance to Class 1 is 6 years old (Government of India, 2009). Given that children's birthdays differ, it is natural for children to be a year older or younger than the 'correct' age for each grade. These children are identified by the lightly shaded cells in Table 22. Children who are more than a year over or under the intended age per grade are considered age-

inappropriate for level of enrolment. In the current sample, 20 out of 166 children were reported as being more than one year over or under the intended age for their grade. This represents 12% of the sample. Of this, 6.6% of the subsample were over-aged for current class enrolled, and 5.4% were under-aged. This finding is similar to that of the District Information System for Education (DISE), which reported 7.9% of students over-aged at the primary school level in Delhi (Mehta, 2008).

		Class Enrolled										
		KG	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**Total**
Child's	**4**	9	3									**12**
Age	**5**	6	7	1								**14**
	6	1	7	10	2							**20**
	7		2	6	6	1		1				**16**
	8		1	5	5	10			1			**22**
	9			1	1	3	5					**10**
	10				1	3	7	8				**19**
	11							6	7	1		**14**
	12					2	1	1	6	4		**14**
	13					1	1	2	1	8	6	**19**
	14									1	5	**6**
Total		**16**	**20**	**23**	**15**	**20**	**14**	**18**	**15**	**14**	**11**	**166**
% Under-age		--	15%	4.3%	13%	5%	--	5.5%	6.7%	7.1%	--	
% Over-age		--	5%	4.3%	6.7%	15%	14%	11%	--	--	--	

Table 22. Age-grade distribution cross tabulations

4.2.2 Attendance

When asked how many days their children were absent from school the previous week, respondents reported that 59.9% of children in the subsample were absent for more than one day. The most commonly reported reason for these absences was a holiday or school closure (45.5%). Other reasons reported are outlined in Table 23, but none represent a large portion of the sample. Caution must be given when reviewing this attendance data, as the primary reason for children not attending was out of the household's control (school closure/holiday). It is unclear if school closures were a planned part of the calendar year, or whether they were a reflection of the quality of provision in the area as being unreliable. When data were collected, the school year has just started, and in certain instances, schools may have been experiencing a temporary school closure at the beginning of the admissions period.

Why did the child miss more than one day of school last week?	Number of children missed school because of this reason, as reported by parents (*n*)	%
Holiday/School Closure	76	45.5%
Health Problems	14	8.4%
Went home to native place/family event	8	4.8%
Household Chores	3	1.8%
Other	3	2.1%
Not interested in what is being taught	2	1.2%

Table 23. Reasons why children missed more than one day of school in the past week

To determine the average absenteeism rate per day for this sample, the number of children who had missed more than one day of school in the previous week for any reason other than a holiday or school closure were divided by the total sample (30/167). This was then divided by the number of school days in a week (5) to produce an absenteeism rate of 3.6% per day. Conversely, this indicates an average attendance rate of 96.4% per day for children in the sample. In other words, overall attendance rate is high for the current sample of children. This finding supports previous research suggesting that Delhi ranks high in comparison to other Indian states in terms of elementary attendance rate. According to Tsujita (2009), attendance rates were 90.3% in Delhi for the 2004-2005 school year, which was considerably higher than the national trend of 83% (IIPS & Macro International, 2007; Tsujita, 2009). Even when this national rate is disaggregated between urban and rural areas, the current finding is higher than reported rates for urban areas across the country (88%) (IIPS & Macro International, 2007). The current finding of a 96.4% attendance rate is particularly high compared to Bihar, where only 53% of students were present in school in 2006, and Madhya Pradesh and Rajasthan, each of which reported an attendance rate of 75% in 2006 (PROBE Team, 2011, p. 35).

Multiple factors could explain this unexpected high attendance rate, including the geographical location of the current sample, as states in India differ greatly in terms of quality and coverage of education available. Beyond state differences, urban areas in general have a higher attendance rate than rural areas where access to school is more challenging, and there are additional push and pull factors influencing children's ability to attend regularly (Khan & Sabharwal, 2012). Even when these factors are taken into consideration, it is an encouraging finding that attendance is high and does not appear to be a persisting issue for children in this region. Further analyses on patterns of absenteeism (Zone 3 of

exclusion) were not performed for the current study due to the paucity of data available given the presence of school closures during the period of data collection, and the otherwise low rate of absenteeism in the region.

4.2.3 Current School Management Type

Table 24 shows current enrolment by school management type for the subsample of elementary school-aged children (ages 4-14) currently enrolled in Class 1-8. Children enrolled in nursery, kindergarten, or Class 9 were temporarily removed from the analysis to focus on the parameters provided in the RTE Act (Classes 1-8). This revised subsample produced information on a total of 139 children.

Six different school management types were represented in the sample, with the greatest percentage of children enrolled in private unaided recognized schools (47.5%). This is an unexpected finding, as past reports showed the majority of children attending Delhi Department of Education government schools (SV) (Noronha & Srivastava, 2013). There are other school management types in Delhi but they were not being accessed by children in the subsample. Most notable is that *kendriya vidyalaya* (KV) schools were not accessed by the subsample of children in this MA study, as they are also mandated by Delhi to provide free seats under provisions in the RTE Act and there were KV school located in the catchment area sampled.

School Management of Current School (Children Aged 4-14, Class 1-8)	***n***	**%**
All Government Schools Outside of Delhi	1	0.7
MCD	16	11.5
SV	43	30.9
All Private Schools Outside of Delhi	3	2.2
Private Aided	3	2.2
Private Unaided Recognized	66	47.5
Private Unaided Unrecognized	7	5.0
Total	139	100.0

Table 24. School management type of current school

The distribution of children between school management type and class enrolled is presented in Table 25. Of interest is the observation that 60.5% of children attending government-managed SV schools were enrolled in upper primary classes (Class 6-8), while 77.7% of children attending privately managed unaided recognized schools were enrolled in lower primary classes (Class 1-5). This finding is consistent

with past reports, which reveal the proportion of children accessing private schools is highest in lower primary, and decreases at a steady rate over primary and secondary levels thereafter (Noronha & Srivastava, 2013). As Noronha and Srivastava (2013) report, 'As class levels increase, so does access in government schools' (p. 22). This pattern will be discussed further in Chapter 5, as it has important implications for India's RTE Act and the ability of private schools to provide consistent, quality education for all children.

	Class Enrolled								
School Management Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
All Govt. Schools Outside Delhi	-	-	-	-	-	-	-	1	1
MCD	2	5	1	5	2	1	-	-	16
SV	2	2	5	2	6	11	8	7	43
All Private Schools Outside Delhi	-	2	-	1	-	-	-	-	3
Private Aided	-	-	-	2	-	1	-	-	3
Private Unaided Recognized	12	13	8	9	6	5	7	6	66
Private Unaided Unrecognized	4	1	1	1	-	-	-	-	7
Total	20	23	15	20	14	18	15	14	139

Table 25. Cross tabulation of children's enrolment by class and school management type of current school

Nonparametric analyses were run to determine the relationship between current school management type and the four independent variables of interest (sex, caste/community, religion, and income level). Due to the paucity of data, analysis was narrowed to the three most common management types in the sample – MCD, SV, and private unaided recognized.[11]

Although most school management types represented in the sample fall under two broad categories – privately managed or publicly managed schools – the variations between school management types within each of these two categories is too diverse to group them together for meaningful analysis. For example, public schools managed by the local municipal body (MCD schools) have different practices, strengths, and challenges compared to public SV schools managed by the Government of Delhi, which have Classes 1 through 12. Furthermore, private aided schools receive a large subsidy from the state, and have different requirements for the implementation of the RTE Act and the provision of free seats than private unaided schools (Srivastava & Noronha, forthcoming). Therefore, in order to represent different management types as accurately as possible, school management types were not grouped and analysis was limited to the three management types that represented 89.8% of children in the sample –

[11] See Section 2.1.2 for an overview of the different school management types found in Delhi.

MCD, SV, and private unaided recognized. Together, these three management types provide insight for the current study into both private and public provisions of elementary education.

4.2.3.1 Causal Factors – School Management Type

A multinomial logit regression using child's sex, caste/community, and household income as independent variables was performed to ascertain the presence of confounding variables and if any of the variables of interest affected household decisions of school management type.

Religion was not included due to the small number of respondents identifying with a minority religion. According to this sample, no Muslim children were attending private unaided (recognized or unrecognized) or private aided schools, and Christian children only attended private unaided unrecognized schools. Upon further review, however, this captured information from only one or two households identifying with each religion. Even when the religion variable was recoded to compare the majority religion, Hindu, with all other minority religions, correlations could not be performed. Based on observation the distribution between religious affiliation and the three most common management types is relatively even.

The dependent variable in this analysis is current school management type, coded so that 0 = private unaided recognized schools (the reference category), 1 = MCD school, and 2 = SV schools. A statistically significant probability model was found, $\chi^2(6) = 55.626$, $p < .001$ (Table 26). The model explained 39.1% (Nagelkerke R^2) of the variance in school management type choice and correctly classified 62.8% of cases.

According to this model, it is more likely that children will attend an MCD school rather than a private unaided recognized school if they are from a SC/ST/OBC group than if they are from a general caste. Children are also more likely to attend an MCD school if they have lower household income, than if they are in income Band 3. In other words, the coefficient for caste/community is positive, with a .001 significance level, and the coefficient for income is negative, with a .001 significance level. Similarly, children from a SC/ST/OBC group as compared to those from a general caste, and children from lower-

income households as compared to high-income households, are more likely to attend an SV school than a private unaided recognized school (positive coefficient with a significance level of .001 for caste/community, and negative coefficient with a significance level of .001 for income band level).

Predictor	*MCD*			*SV*		
	B	***SE***	***Exp(B)***	***B***	***SE***	***Exp(B)***
Sex	-.532	.654	.587	-.255	.433	.775
Caste/Community	1.974**	.680	7.197	1.474***	.450	4.366
Income Band Level	-2.169***	.473	.114	-1.299***	.293	.273

Table 26. Results of the logit model with children's characteristics and school management type
Note: The reference category for the dependent variable is private unaided recognized schools. The reference categories for the independent variables (predictors) are male (sex); SC/ST/OBC (caste/community), and Band 3 (income).
*$p < .05$. ** $p < .01$. ***$p < .001$.

The Hosmer and Lemeshow goodness-of-fit test was used to determine if the predicted frequency and the observed frequency match closely. This test determines if the logit model appears to be a good fit. To determine this, a Pearson chi-square test is computed using the observed and predicted frequencies. The more closely the frequencies match, the larger the Hosmer and Lemeshow's p-value, and the better the fit. In other words, a non-statistically significant (> .05 p-value) is desirable for this goodness-of-fit test (IDRE UCLA, 2016). For the current logit model, this test was not significant (.633), and therefore, the model appears to be a good fit.

A chi-square test of independence revealed that the majority of those belonging to a general caste attended private unaided recognized schools (67%), while the greatest portion of those belonging to an SC, ST, or OBC attended SVs (49%), X^2 (2, n = 124) = 17.317, $p < .001$. Not surprisingly, only those belonging to a general caste attended schools outside of Delhi (either publically or privately managed), even though their families lived in the study site within Delhi.

Interestingly, child's sex was not found to have a significant effect on school management choice. Instead, both males and females were noted to be attending both government managed (SV, MCD) and privately managed schools (private unaided recognized).

The finding that the majority of children in Band 3 attended privately managed schools (private unaided recognized) (75%) was expected, while the majority of children in Band 1 attended state-managed schools (SV) (55%). Even though some reports suggest an increase in economically

disadvantaged households accessing private schools across India (Tooley, 2004; Tooley & Dixon, 2003), the majority of the studies find that private schools remain inaccessible for 'the vast majority of poor parents' (Watkins, 2004, p. 8; PROBE Team, 1999). Therefore, the current observation supports the conclusion found in previous research that private schools are inaccessible for the most disadvantaged households.

What is new with the current observation is that there is not a large portion of children in lower-income bands accessing private unaided recognized schools, as would be expected under the new provisions of the RTE Act. Private schools are given more prominence in Section 12(1)(c) of the RTE Act as a means to provide universal quality elementary education. This provision attempts to alleviate barriers of admission to private schools for socially and economically disadvantaged children. Therefore, under this provision, one would anticipate a larger percentage of children in Band 1 accessing privately provided education.

Household survey data collected in Delhi in 2011 by the research team in a previous project (Noronha & Srivastava, 2013) used asset rankings to identify that only 10% of households ranking as 'very poor' were accessing private schools, compared to 40% of those considered 'average'. Results for households considered 'better off' were not included due to the limited number of respondents falling into this category. Presumably, a similar pattern to that found for Band 3 households in the current study would be evident if such data were available. Therefore, the current statistic that only 14% of children from Band 1 were accessing private unaided recognized schools compared to the 75% of children in Band 3, does not suggest notable progress to reduce the gap during the first five years of the RTE Act.

4.3 Silent Exclusion

For the second research objective, the created composite variable, *silent exclusion*, was developed as outlined in Section 3.4.1.2. This research objective examines Zone 3 of exclusion, children enrolled in elementary school but at risk of dropping out because of varying factors. Parents were asked questions pertaining to children's experiences at school in relation to the previous school year (2014-2015), as a

new school year had recently started at the time of data collection. All students in Classes 1-8 during the 2014-2015 school year, regardless of age, were included for this review. Any children attending nursery, kindergarten, or grades above 8 in the previous year were omitted from this section of the analysis. This produced a subsample of 131 children.

This subsample was created specifically for the purpose of this 2014-2015 school year analysis, and included revised demographics – school management, class, child's age, sex, caste/community, religion, and household income level – followed by reported school experiences in 2014-2015. To develop this data set, one year was subtracted from the current class and age reported for each child (in 2015-2016) in order to accurately depict the demographics relating to reported schooling experiences in the previous year (2014-2015). Schooling histories were reviewed for students who had spent less than one year at their current school, indicating a change had occurred between the previous and current school years. The survey question, *'Did the child change schools between 2014-2015 and 2015-2016?'* was filled in by the interviewer based on the respondents' recount of schooling histories. This response was crosschecked with parent's reports of school changes and history for the current analysis. Based on this revised list, 11 children between classes 1-8 had changed schools between 2014-2015 and 2015-2016 (8.4% of subsample). For these children, the school management type coded for the purposes of silent exclusion analysis was their previous school management type (2014-2015), not the current classification (2015-2016). All of these data were obtained through the schooling history section of the survey tool.

The demographics of this subsample of children are found in Table 27. It is unclear why the gap between males and females widened in comparison to the full subsample, but it may be due to the reduction in the sample size.

Demographic Variable of Children	*n*	% of subsample (*n* = 131)
Sex		
Male	74	56.5
Female	57	43.5
Total	131	100.0
Religion		
Hindu	120	91.6
All other religions (Muslim, Christian, Sikh, Other)	11	8.4
Total	131	100.0
Caste/Community		
Scheduled Caste or Scheduled Tribe	22	16.8
Other Backward Class	25	19.1
General	82	62.6
Missing	2	1.5
Total	131	100.0
Income Level A (All)		
Band 1 (Well within or under EWS Criteria)	29	22.1
Band 2 (On the cusp of EWS criteria)	34	26.0
Band 3 (Above EWS criteria)	59	45.0
Missing	9	6.9
Total	131	100.0
Income Level B (Subsample whose households are thought not to have underreported income)		
Band 1 (Well within or under EWS Criteria)	27	26.7
Band 2 (On the cusp of EWS criteria)	24	23.8
Band 3 (Above EWS criteria)	47	46.5
Missing	3	3.0
Total	101	100.0
School Management Type (2014-2015)		
All govt. schools outside Delhi	1	.8
MCD	19	14.5
SV	39	29.8
All private schools outside Delhi	4	3.1
Private Aided	3	46.6
Private Unaided Recognized	61	2.3
Private Unaided Unrecognized	4	3.1
Total	131	100.0
Class Enrolled (2014-2015)		
Class 1	23	17.6
Class 2	15	11.5
Class 3	20	15.3
Class 4	14	10.7
Class 5	18	13.7
Class 6	15	11.5
Class 7	14	10.7
Class 8	11	8.4
Missing	1	.8
Total	131	100.0

Table 27. Subsample of children for silent exclusion analysis

Within this analysis there were 19 missing values, indicating children whose parents either responded with 'I don't know,' or 'neutral,' or did not respond at all to one of the questions used to compute the silent exclusion variable. This left a subsample size of 112 children. The distribution of

silent exclusion experienced by this subsample of children is found in Figure 8 (n = 112; M = 0.946; SD = 0.938).

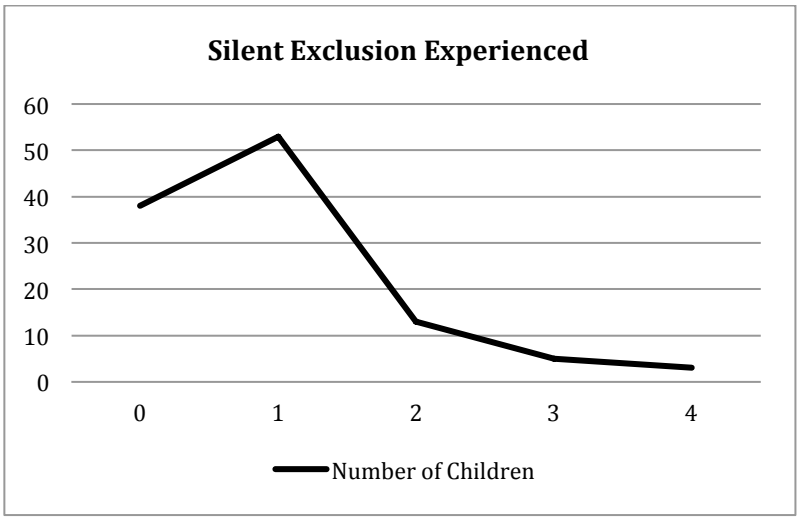

Figure 8. Silent exclusion distribution: Number of children experiencing exclusion in the classroom, as reported by their parents (n = 112)

For the purposes of this study, silent exclusion scores were recoded and interpreted as follows:

0-1 = Experienced little to no exclusion (0)
2-4 = Experienced occasional, or medium exclusion (1)
5-7 = Experienced reoccurring, or a high level of exclusion (2)

According to this measure, 91 children in the subsample were reported as having experienced little to no exclusion in the classroom (81.3%), and no children were reported as experiencing high levels of reoccurring exclusion, according to their parents (Figure 9). This is an encouraging finding.

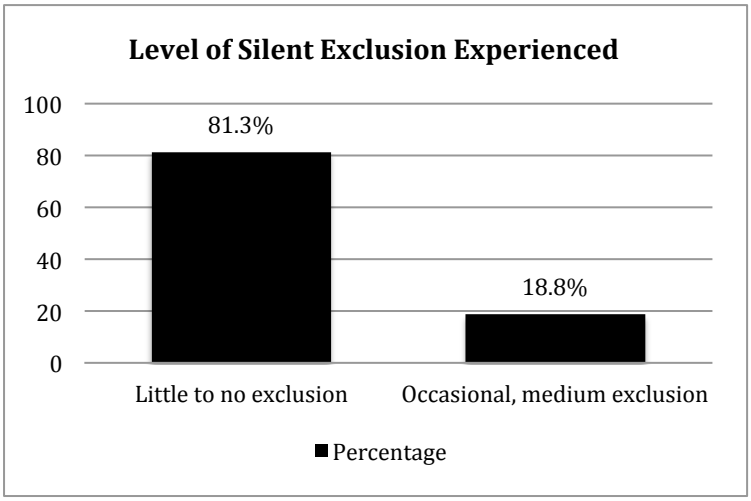

Figure 9. Reports of silent exclusion experienced by children in the classroom (n = 112)

A binomial logit regression was performed to ascertain the presence of confounding variables and if any of the variables of interest affected the probability of children experiencing silent exclusion in the classroom. Household income and religion were not included in this test due to the small number of respondents in certain categories. By observation, it is interesting to note that a greater percentage of children in income Band 2 were reported as experiencing silent exclusion (31.0%), compared to their counterparts in Bands 1 and 3 (11.5% and 16.7%, respectively). This is an unexpected finding, as past research indicates children from the lowest-income households are more likely to experience disadvantages at school, including explicit discrimination and reduced opportunities (Lewin, 2007; Ramachandran, 2009).

Using child's sex, caste/community, and school management type as independent variables, a statistically significant probability model was not found, $\chi^2(3) = 2.316$, $p = .510$ (Table 28). In other words, the model did not reveal child's sex, caste/community, or school management type to be factors influencing children's experience of silent exclusion, as reported by parents.

The current model only explained 4.4% (Nagelkerke R^2) of the variance in silent exclusion experienced, which does not indicate strong relationship between the predictors and the prediction. However, the model did correctly classified 82.8% of cases and the Hosmer and Lemeshow goodness-of-fit test was not significant (.489), which is the desirable outcome for this goodness-of-fit test. Therefore, the model, or lack thereof, appears to be generalizable.

Predictor	*B*	*SE*	*Exp(B)*
Sex	.894	.634	2.445
School Management Type	-.038	.624	1.039
Caste/Community	-.195	.650	.823

Table 28. Results of the logit model with children's characteristics and reported silent exclusion
Note: The reference categories for the independent variables (predictors) are male (sex); private unaided recognized (school management type), and general (caste/community).
*$p < .05$. ** $p < .01$. ***$p < .001$.

Children from a ST, SC, or OBC were only marginally reported as experiencing higher rates of silent exclusion, X^2 (1, $n = 110$) = 1.694, $p = .193$. This is a surprising result, as previous studies paint a much bleaker picture of the lack of inclusion and opportunity across the country for those belonging to marginalized castes/communities (Ramachandan & Naorem, 2013).

Similarly, no statistically significant relationship was found between school management type (MCD, SV, private unaided recognized), and level of silent exclusion reported, X^2 (2, n = 104) = 1.913, p = .384. This is also an unexpected finding, as it is a widely held belief in India that private schools are of better quality compared to publicly managed schools, and thus, students attending them should receive better/more attention than those attending publicly managed schools (PROBE Team, 2011; Watkins, 2004). Instead, according to this finding, levels of silent exclusion are consistent between the three main management types within Delhi, no matter their association as publicly or privately managed institutions. A slightly higher level of silent exclusion was reported for those attending MCD schools, but this finding was not significant[12].

The current logit model suggests sex is not a significant contributor when considered as intersecting with other characteristics. However, a significant relationship at the .05 level was found when a chi-square test of relationship was performed between child's sex and level of reported silent exclusion, X^2 (1, n = 112) = 5.317, $p < .05$. This discrepancy in results may be due to the current sample being unrepresentative (further tests on the full sample need to be conducted). Therefore, child's sex and level of reported silent exclusion have a strong relationship yet this relationship is not generalizable to be a determinant of silent exclusion within the current sample. It may also indicate that that these two variables are correlated (chi-square), but do not directly affect one another (logit probability model). These possibilities can be explored in further analysis with the full sample.

Surprisingly, more boys were reported as having experienced occasional or medium exclusion compared to girls within the current sample. The vast majority of girls (90.4%) were reported as experiencing little to no exclusion (Table 29). Contrary to initial assumptions, this finding does not seem to be due to the fact that boys are more likely to be beaten than girls, but instead, is related more to leadership opportunities (see Sections 4.3.1 to 4.3.3 below). This finding is different than findings of

[12] 33.3% of children attending an MCD school were reported as experiencing medium, occasional exclusion, as compared to 18.9% and 17.3% of their counterparts attending SV or private unaided recognized schools, respectively.

other studies on gender and exclusion in India which focus on the difficulties girls experience in accessing and feeling welcome at schools across the country (Bandyopadhyay & Subrahmanian, 2008; Little, 2010).

Level of Silent Exclusion	Male Children (*n* = 60)	Female Children (*n* = 52)
Little to no exclusion	44 (73.3%)	47 (90.4%)
Occasional, or medium exclusion	16 (26.7%)	5 (9.6%)

Table 29. Chi-square relationship between child's sex and reported level of silent exclusion at school
Percentages are column percentages.

To further inform the current analysis of silent exclusion, each indicator used to create the composite variable, *silent exclusion*, was analysed separately in an attempt to identify if the majority of exclusion being reported was due to a lack of leadership opportunities, explicit displays of discrimination, or a lack of social integration at school.

4.3.1 Leadership Opportunities

To measure leadership opportunities, the most appropriate indicator included in the survey tool was: '*Did your child lead the school assembly?'* Any households that responded, 'I don't know' were temporarily removed. Results are found in Figure 10. The majority of children (52.8%) had never led the school assembly, while 26.8% were reported as having led often.

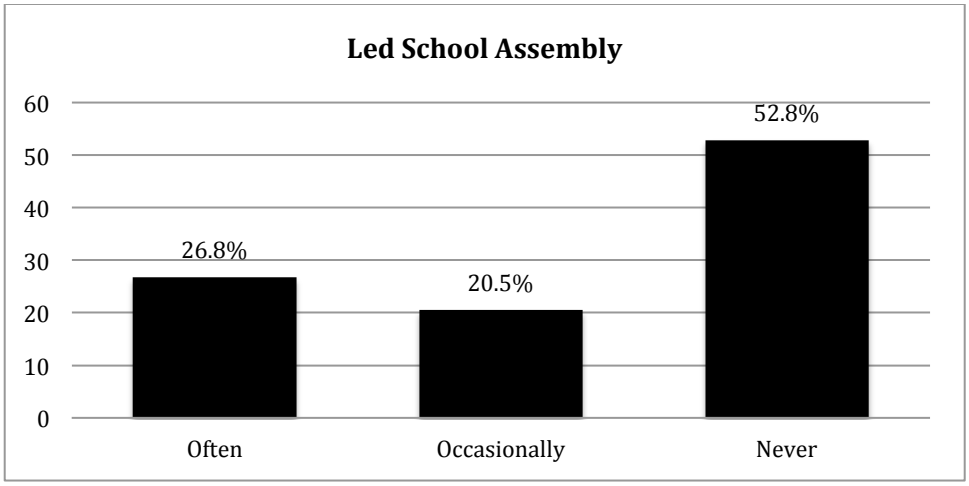

Figure 10. Proportion of children receiving opportunities to lead at school, as reported by parents (*n* = 127)

The dependent variable was recoded into two categories: '*yes, my child has led the school assembly'* (0) (either often or occasionally), or '*no, my child has never led the school assembly'* (1). A binomial logit regression using child's sex, caste/community, household income, and school management type as independent variables was performed to ascertain if any of the variables of interest affected the

probability of being afforded the opportunity to lead their school assembly. A statistically significant probability model was found, $\chi^2(4) = 33.934$, $p < .001$ (Table 30). This model explained 42.3% (Nagelkerke R^2) of the variance in opportunity to lead the school assembly, which indicates a moderately strong relationship between the predictors and the prediction. The model correctly classified 73.0% of cases. The Hosmer and Lemeshow goodness-of-fit test was not significant (.405), and therefore, the model appears to be a good fit. This desirable outcome of non-significance for the goodness-of-fit test indicates that the model's prediction does not significantly differ from that which is observed.

Predictor	*B*	*SE*	*Exp(B)*
Sex	-2.677***	.703	.069
School Management Type	-1.642*	.731	.194
Income Band Level	-.724*	.383	.485
Caste/Community	-.377	.595	.686

Table 30. Results of the logit model with children's characteristics and opportunity to lead the school assembly
Note: The reference categories for the independent variables (predictors) are male (sex); SV (school management type), SC/ST/OBC (caste/community, and Band 1 (income).
*$p < .05$. ** $p < .01$. ***$p < .001$.

Child's sex, household income, and school management type were all determined to influence the occurrence of school assembly leadership. Boys were 6.9 times less likely to be given the opportunity to lead the school assembly than girls (the coefficient for sex was negative, with a .001 significance level). In other words, girls were more likely to be given the opportunity to lead a school assembly in comparison to boys X^2 (2, $n = 127$) = 11.672, $p < .001$. This is an unexpected result, but reiterates previous findings in this report, which indicate that boys were reported as having experienced more silent exclusion, including having less opportunity to lead, than girls.

Similarly, children in private unaided recognized schools were 19.4 times more likely to lead the assembly than students in SV schools (the coefficient was negative with a .01 significance level). The third most common school type in the sample, MCD schools, were omitted from this portion of the analysis due to the small number of children enrolled in this type who had been given an opportunity to lead the school assembly. Lastly, children from higher-income houses (Band 3) were 48.5 times more likely to be afforded an opportunity to lead compared to children in lower income houses (.05 significant level). A chi-square test of independence revealed that 64.3% of the children in Band 3 (well above EWS

income criteria) had led an assembly in the last year, compared to 24.1% and 24.2% in Band 1 and Band 2, respectively, who had done so X^2 (2, n = 118) = 19.272, $p < .001$.

The logit model did not reveal caste/community to be a factor influencing children's opportunity to lead the school assembly. However, when a chi-square test of independence was performed, a statistically significant relationship was found between child's caste/community and opportunity to lead the school assembly. 53.8% of children identifying with a general caste had led the school assembly in the past year, compared to only 35.6% of children from a SC/ST/OBC, X^2 (1, n = 125) = 3.826, $p < .05$ (Table 31).

Had led the school assembly	SC/ST/OBC (n = 45)	General (n = 80)
Yes	16 (35.6%)	43 (53.8%)
No	29 (64.4%)	37 (46.3%)

Table 31. Chi-square relationship between child's caste/community and leadership opportunities at school
Percentages are column percentages.

4.3.2 Discrimination

To analyse level of discrimination, three questions were chosen which indicate denigration of the children by the school management type. First, parents were asked if their child did any of the cleaning in the school or school premises. Any cases that responded, 'I don't know' were temporarily removed. The caste system historically forced the marginalized community of Dalits to perform tasks considered degrading, such as cleaning and other menial work (IDSN, n.d.; Noronha & Srivastava, 2012). Even though such caste-based discrimination is no longer legally permitted, and is addressed in Section 9(c) of the RTE Act, previous research indicates that deeply engrained hierarchal social segregation is still present in schools across India (Ramachandran & Naorem, 2013).

In the current sample, the vast majority (92.8%) of children were reported as never having done any cleaning in school/on school premises; 5.6% were reported as having occasionally cleaned; and only 1.6% of children were reported as often being required to clean. Due to the small sample size of those who were reported to have cleaned often or occasionally, the question was recoded for further analysis into two categories — children who had not cleaned in the past year, and those who had (often or occasionally). Figure 11 shows this distribution.

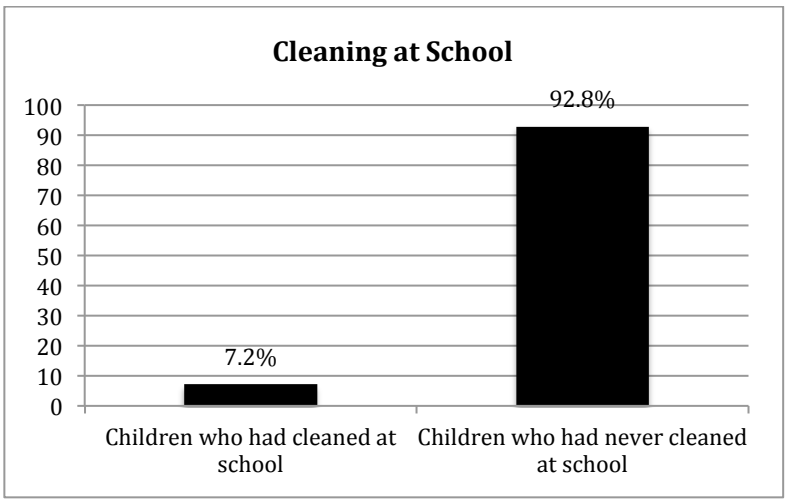

Figure 11. Percentage of children who were reported as never having cleaned at school vs. those who had (*n* = 125)

Parents were also asked if their child had been hit or verbally insulted/shamed by the teacher/school staff during the previous school year (2014-2015). A similar pattern to that of cleaning occurred for both of these questions. The vast majority of children were reported as never having been physically hit by a teacher or school staff (93.1%), and even more were reported never to have been verbally insulted or shamed by a teacher or school staff (97.7%). While this is certainly encouraging, the potential for unreliability is noted, as the subject matter is sensitive and children may not have fully confided in their parents if they were discriminated against at school. Triangulation of methods is required for future research to draw more robust conclusions from this initial finding on discrimination within the classroom.

Similar to the question of cleaning at school, both indicators were recoded into two categories – those who were reported to have experienced that form of discrimination in the previous school year, and those who had not. The distributions of children in these binary categories for each of the three discrimination indicators are found in Table 32.

	Yes (1)	No (2)
1. Did your child do any of the cleaning in the school or school premises?	7.2%	92.8%
2. Was your child hit by the teacher/school staff?	6.9%	93.1%
3. Was your child verbally insulted or shamed by the teacher/school staff?	2.3%	97.7%

Table 32. Children's experience of discrimination at school (*n* = 124)

The three indicators pertaining to discrimination at school were reverse coded from negatively- to positively-keyed items, and computed to form the new variable, '*level of discrimination reported,'* by adding the scores reported. The original questions were asked using a three-point Likert scale. Due to the small sample indicating often or occasionally having these experiences, the indicators were recoded into a two-point scale (yes or no). Therefore, computed discrimination scores could range from 3 to 6. These values were recoded as 0 to 3 to simplify scales used for analysis. For the new computed variable, a low value indicated little to no discrimination, while a high value indicated respondents reported their child frequently felt discriminated against in the classroom. The distribution for the current subsample of children is found in Figure 12 (n = 124*;* M = 0.169*;* SD = 0.489).

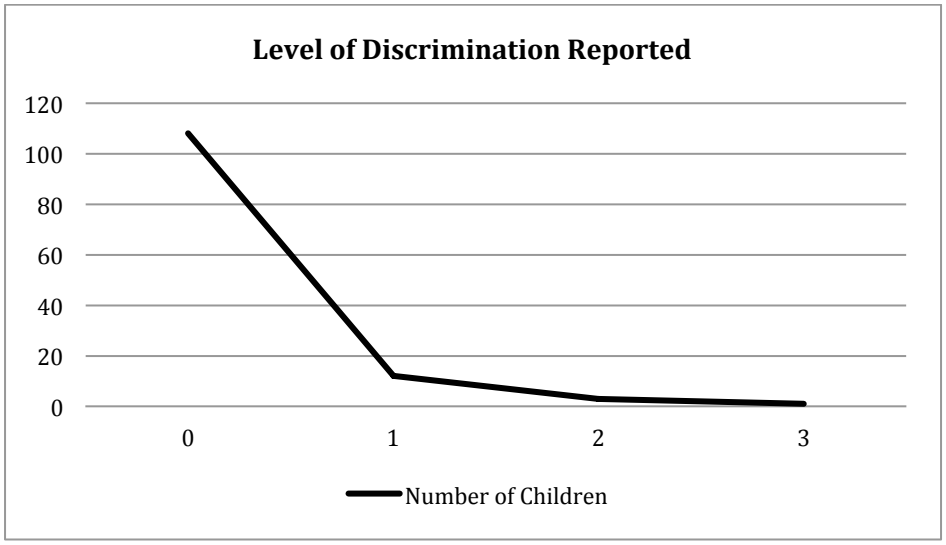

Figure 12. Number of children experiencing discrimination in the classroom (n = 124)

For the purpose of this study, discrimination scores were recoded and interpreted as follows:

0-1 = Experienced little to no discrimination
2-3 = Experienced reoccurring discrimination

According to this measure, 95.2% of children in the subsample of school-aged children were reported as experiencing little to no discrimination in the classroom. Only 3.2% of children were reported to have experienced some form of discrimination in the classroom. Further analysis to determine the relationship between experiencing discrimination at school and children's demographics was not performed, owing to

the small number of children experiencing explicit displays of discrimination at school. This is an encouraging finding.

4.3.3 Social Integration/Happiness

The third dimension, social integration/happiness, was computed in a similar manner. Three indicators of interest were examined: *'Did your child complain of being bullied by other children?*'; *'Our child was very happy at this school'*; and '*Our child had a lot of friends at this school'*. All households that responded, 'I don't know' or 'neutral' were temporarily omitted for this portion of the analysis.

Overall, parents in this subsample reported positive experiences of their child's social integration and happiness at school. The vast majority of children (92.3%) were reported as never having complained of being bullied by other children during the past year; 92.3% were reported to have had a lot of friends at school; and 88.5% of children were reported to be happy at school.

Parents reported that 6.2% of children occasionally complained of being bullied, while only 1.5% often complained of being bullied by other children (Figure 13). Similarly, only 4.6% of children were reported as not having 'a lot of friends at this school'. Using the same approach, 9.2% of children were reported as not being happy at school. This number could be interpreted as somewhat high, given the low levels of reported discrimination in the children's sample, and the otherwise high level of reported social integration (Table 33).

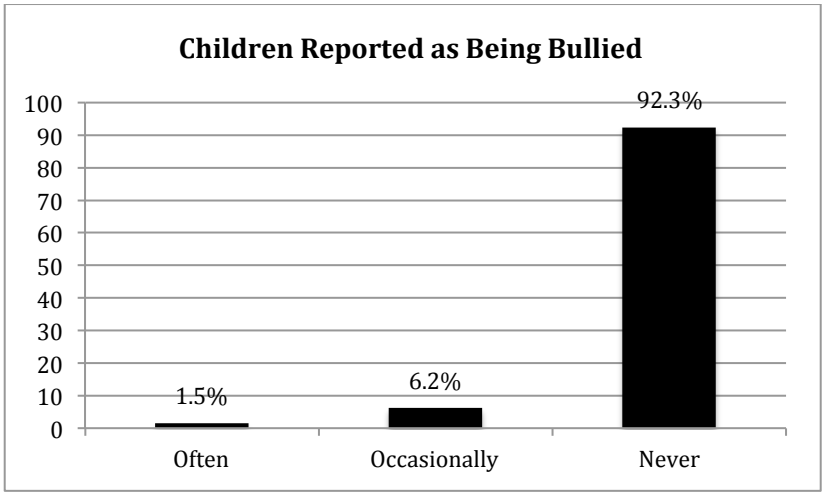

Figure 13. Percentage of children who complained of being bullied by other children as reported by parents (n = 130)

	Agree	Neutral	Disagree
1. Our child had a lot of friends at this school.	92.3%	3.1%	4.6%
2. Our child was very happy at this school.	88.5%	2.3%	9.2%

Table 33. Children's reported experience of social integration/happiness at school (*n* = 122)

A distinction should be made between the reported happiness of children at a school and the presence of social exclusion within a classroom. The measure of meaningful access goes beyond the simplistic measure of a child's physical access to school, and instead seeks to determine the experiences of children in the classroom and at school (Jansen, 2009). Given the positive finding that the majority of children had not been reported to be physically or verbally discriminated against at school during the previous year, it is not surprising that according to their parents, the majority of children were also reported as being happy and having a lot of friends at school. However, a child may be happy at an educational institution, yet remain marginalized if participation opportunities are not provided to them.

To further analyse social integration, a similar computation was performed to that of discrimination. The question concerning bullying was recoded into two categories: had experienced some level of bullying in the past year (*often* + *occasionally*), and had not experienced any bullying in the past year (*never*). This question was then reverse-coded from a negatively- to positively-keyed items. The following two questions were originally asked on a three-point Likert scale (*agree, neutral, disagree*). These questions were recoded into two categories — *yes* (*agree*) and *no* (*disagree*). '*Neutral*' responses were omitted from the present analysis to simplify the dataset and more clearly define the presence of social integration in the classroom. These questions were both originally positively-keys items, and therefore, no reverse coding was required. Table 34 displays frequencies for all three recoded social integration questions.

	Yes	No
1. Had the child complained of being bullied by other children?	7.6%	91.6%
2. Did the child have a lot of friends at school?	4.6%	91.6%
3. Was the child happy at school?	9.1%	88.5%

Table 34. Children's reported experience of social integration/happiness at school (*n* = 122)

These three indicators were then computed to form the new variable, '*social integration,'* by adding the scores reported. As these three indicators were measured using a two-point scale (yes or no),

the resulting created social integration scores could range from 3 to 6. These values were recoded as 0 to 3 to simplify the scales used for analysis. A low score indicated a low level of social integration and a high level of silent exclusion. The distribution for the current subsample of elementary school-aged children is shown in Figure 14 (n = 122*;* M = 2.77*;* SD = 0.53). This reveals that the vast majority of children were reported as experiencing high levels of social integration, and thus, low levels of silent exclusion along this dimension.

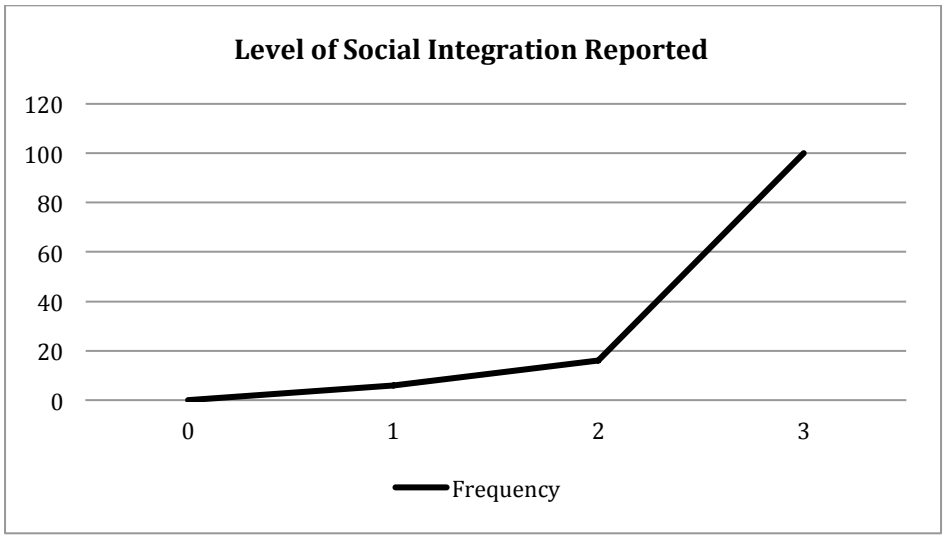

Figure 14. Number of children experiencing social integration and happiness in the classroom (n = 122)

For the purpose of the current analysis, social integration scores were recoded and interpreted similarly to those for discrimination:

0-1 = Experienced little social integration, and reoccurring silent exclusion
2-3 = Experienced high amounts of social integration, and little to no silent exclusion

According to this measure, 88.5% of children in the subsample of school-aged children were reported as experiencing high amounts of social integration at school. Only 4.6% of children experienced low levels of social integration in the classroom, according to their parents. Further analysis to determine the relationship between experiencing a low level of social integration at school and children's demographics were not performed, owing to the small number of children reported as experiencing social exclusion and unhappiness at school. This is an encouraging finding.

4.4 The RTE Act's Free Seat Provision

4.4.1 Patterns in Access to EWS Free Seats

4.4.1.1 Awareness

Lastly, parents with a child aged 4 to 10 were further interviewed regarding their knowledge, eligibility, and experiences applying for admission under Section 12(1)(c) of the RTE Act, the free seats provision. Children as young as 4 years old were included to obtain the largest possible sample of EWS free seat recipients, as freeships can be instituted in private unaided schools that have pre-primary sections. In this sense, children may be accessing a freeship before they reach the minimum enrolment age in Class 1 for elementary school (6 years). Children as old as 10 years of age were included to capture all children who enrolled in elementary education in the five years since the RTE Act was implemented, and thus, may have had the opportunity to be admitted under the free seats provision. This age range produced a subsample of 99 households.

Only 39 out of these 99 respondents (39.4%) reported being aware of the free seats reservation in private schools under the RTE Act. Even fewer respondents (9.1%) were aware of the free seats provision in central government schools (KVs). Most households who knew about the free seats provision obtained this information through neighbours, relatives, or friends (74.4%). Newspapers and television were the second most important sources of information, with 20.5% of households aware of free seats reservation reporting they obtained this information from a newspaper or the television. For the purpose of this study, the analysis focused on awareness of free seats provision in private schools, given the small sample size aware of free seat reservation in central government KV schools.

Using chi-square tests of independence, no significant relationship was found between the household's awareness of free seats and their caste, X^2 (1, n = 98) = .105, p = .746. A chi-square test was also performed between the household's religion and awareness of free seats; however, the results of this test were inconclusive given the small sample size of households identifying as Christian, Muslim, and Sikh.

There was, however, a significant relationship between household income level A (all households) and awareness of the free seats provision, X^2 (2, n = 89) = 8.59, p < .05. Only 27.3% of households whose incomes were well within or under the EWS income criteria (Band 1) knew about the free seats provision in private schools. Similarly, only 21.7% of those who were on the cusp of eligibility (Band 2) were aware of the provision. The greatest awareness of the free seats provision was found within Band 3, i.e., those who reported income well above the EWS income criteria. In Band 3, 54.5% of households reported being aware of the provision (Table 35).

Are you aware of the free seats provision in Private Schools?	**Income Band 1 (*n* = 22)**	**Income Band 2 (*n* = 23)**	**Income Band 3 (*n* = 44)**
Yes	6 (27%)	5 (22%)	24 (55%)
No	16 (73%)	18 (78%)	20 (45%)

Table 35. Household income level A (all households) and awareness of free seat provision
Percentages are column percentages.

This finding identifies a concerning gap in the provision of EWS free seats, i.e., public awareness. It is not surprising that households with higher incomes were more aware of the new free seats provision. However, enforcing legislation specifically designed to benefit disadvantaged households will remain a challenge if the intended beneficiaries are not even aware the provision exists.

Of the 39 households aware of the free seats provision in private schools, 26 respondents identified their household as being eligible to apply for admission through freeships (66.7%), while 11 said they were ineligible, and 2 were unsure. The vast majority of households eligible to apply for a free seat indicated that they were eligible under the 'economically weaker section' criteria (96.2%). Only one household reported being eligible to apply under the 'scheduled caste/scheduled tribe' criteria. When analyses were run to compare this reported eligibility to reported household income levels (using the probably more reliable subsample of income level B), the majority of households who claimed to be eligible under EWS criteria actually fell under Band 3, and had reported incomes above the EWS criteria (57.9%). Only 21.1% of households aware of the provision and who reported being eligible under EWS criteria actually reported income well within the EWS income levels (Band 1) (Figure 15).

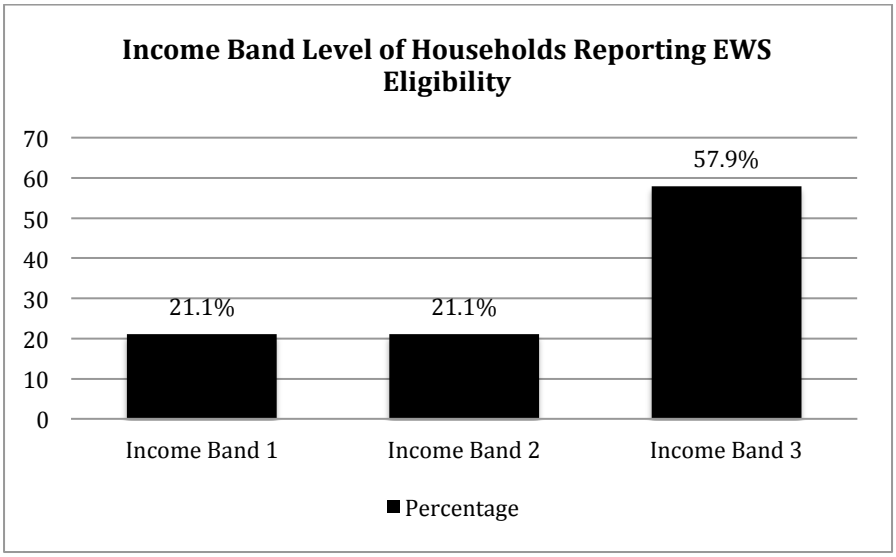

Figure 15. Income band level of households reporting EWS eligibility using data obtained from the probably more reliable subsample of households (income level B) (n = 26)

The presence of this discrepancy and what it means for the success of the RTE Act free seats provision is important, and will be further discussed in Chapter 5.

4.4.1.2 Admission

Out of the 26 households claiming to be eligible, 17 had applied for a free seat in either a private or KV school at least once (65.4%). The most frequently reported reason for not applying was not being sure if they were eligible, followed by not having the necessary time or money to try, and not having documentary evidence of eligibility. Gender parity within this application process was almost met, with 52.9% of households applying for free admission for boys, and 47.1% seeking admission for girls. This was determined based on the list parents provided outlining each child and year for which they submitted an EWS freeship application.

Together, the 17 households who had previously applied for a free seat submitted 81 applications, with 36 of those reported as being successful (44.44%, M = 2.25, SD = 3.02). This suggests a success rate of 44.4% for free seat applications within the sample. The mean number of applications submitted for a free seat in any school in this sample was 4.76 (SD = 3.44, *Range = 11.0*). Data were not available to

provide insight on why so many applications were submitted by 17 households. This pattern may be caused by the number of children in the household, past unsuccessful attempts, or repeated applications.

Overall, only 12 households (11.11% of total sample) were successful in being admitted to at least one free seat in either a private school or a KV, while the remaining four households that had applied (3.7%) were not successful in being accepted to either. All four unsuccessful households felt that the reason they were unable to get a free seat was because their name was not selected in the lottery. All four households indicated that they would not try to reapply again next year. The demographic breakdown of households who were successful is found in Table 36. This analysis is limited to the household level, as data linking successful applicants to enrolled children's sex, age, etc., were not available.

	***n* (Households)**	**%**
Religion		
Hindu	11	91.7
Muslim	1	8.3
Total	12	100.0
Caste		
Scheduled Caste	3	25.0
Other Backward Class	4	33.3
General	5	41.7
Total	12	100.0
Income Level A		
Band 1 (Below EWS Criteria)	3	25.0
Band 2 (On the cusp of EWS criteria)	3	25.0
Band 3 (Above EWS criteria)	6	50.0
Total	12	100.0

Table 36. Households successful in being admitted to a free seat

4.4.2 Successful EWS Freeship Applicants – Understanding Children's Experiences

Due to the small sample size of respondents who had been admitted to school under the free seat provision, data on children's schooling experiences could not provide robust conclusions. Instead, exploratory descriptive analysis was performed to identify any existing patterns in an attempt to inform and guide future research.

Anticipated concerns over segregation within the classroom for those admitted under the free seat provision included the possible requirement for children to attend a separate shift, be part of a separate class, or wear a separate uniform. Households reported that none of the above occurred for their children once admitted to school through a freeship. Three respondents did report that the school held special

meetings with the principal, teachers, or other parents once their child was admitted. The data do not indicate, however, the nature of these meetings, and thus, this special treatment may be a positive initiative for students and parents entering a new school under the free seat provision. The data on this were inconclusive. Even though no negative separate treatment was reported, households identified a range of other challenges being present once their child was admitted under the freeship provision (Table 37).

Challenges	Number of respondents who reported experiencing this challenge	% of all respondents accepted for a freeship (*n* = 12)
Financial pressure because of cost of books/uniforms/stationary	4	33.3%
Forced to spend additional money on private tuition	3	25.0%
Felt pressure to spend more money on the child's clothes	2	16.7%
Child found academic standards high	1	8.3%
Find it difficult to help the child with homework	1	8.3%

Table 37. Challenges once admitted to a free seat

It is interesting to note that the top three challenges faced by households accessing education through a free seat were financial challenges or pressures. In other words, a 'free seat' is not actually 'free'. This finding is consistent with a recent education expenditure analysis focused on Delhi (Srivastava and Noronha, forthcoming), which found that "children in 'free' private school seats incurred the second highest costs of accessing schooling after full-fee paying students in relatively high-fee private schools" (Srivastava & Noronha, forthcoming, p. 1). This finding also supports global research into free education policies, which identify tuition fees as only one of the 'out-of-pocket costs' required for children to attend school (UNESCO, 2015). Beyond tuition, many households bear the cost of books, meals, exam and other school fees, uniforms, and transportation. In India, it has been shown that these out-of-pocket costs required by private schools are higher than similar costs required by government schools (Desai et al., 2008; Härmä & Rose, 2012). Evidently, tuition cost is only part of the barrier experienced by disadvantaged households seeking to access quality education. This important finding will be further discussed in Chapter 5.

Households did not identify any relational challenges once their children were admitted to a free seat (i.e. the child found it difficult to make friends, or the teachers and other parents were not friendly).

This is an encouraging finding; however it should be noted that the ability of these findings to produce reliable conclusions is unclear, as respondents may not be aware of the challenges their children faced at school once admitted if the child chose not to share that information with their parents. Furthermore, respondents may have been hesitant to admit these experiences to researchers, as it could be considered sensitive and personal information.

When asked about the positive aspects of being admitted through the free seat provision, households who were successful in having one or more children admitted under the provision shared a common sentiment that through the free seat provision, they can now access private schools that would have otherwise been out of their reach. Similarly, households also indicated that now they can access a school of good reputation and quality. No household felt that admission into a private school under the free seat provision meant that their child's future would be secure (Table 38).

Positive Aspects	Number of respondents who reported this aspect as part of their experience	% of all respondents accepted for a freeship (n = 12)
Can access a private school which is otherwise out of their reach	8	66.7%
Can access a private school of good reputation and quality	7	58.3%
Our child's future will be secure	0	0.0%

Table 38. Positive aspects of being admitted to a free seat

The current findings reveal persistent challenges and gaps in providing universal quality education to all children through Section 12(1)(c) of the RTE Act. For the most part, these findings are consistent with previous reviews of the Act and will be discussed in greater detail in Chapter 5.

Chapter 5: Mind the Gap – Discussion on Meaningful Access and the RTE Act

The concept of meaningful access makes it clear that indicators used to measure quality education for all must be expanded to incorporate more qualitative experiences of schooling in addition to those that are more easily counted. Enrolment and physical access to education may be considered the first problems to address; however, Lewin's (2007) model of silent exclusion suggests that research into schooling access must advance beyond these initial questions to address the problems of keeping children in school, and ensuring they receive quality education once enrolled. The current MA study found that some progress has been made in ensuring meaningful access for all children; however, gaps remain for the most marginalized in Delhi.

It is important to situate the current discussion in the fact that this MA study was intended to be an initial review of patterns of access in two colonies, prior to the research team running analysis on the wider dataset. Therefore, the subsample used in this thesis research was relatively small and not necessarily representative of the full sample, or of Delhi as a whole. Results are preliminary and must be further verified within the wider dataset.

5.1 Patterns of Access

The current findings revealed that the vast majority of children in the sample were enrolled in school (98.1%), and average reported elementary attendance rates were high (96.4% per day). Both of these are encouraging findings and may be influenced by the geographical area of study (urban, relatively well educated state with a relatively high GSDP). Parents' educational attainment has also been shown to influence their children's enrolment and attendance patterns (Hanuskek & Wößmann, 2007). Therefore, enrolment and attendance patterns may be partially attributed to the relatively educated sample of parents surveyed.

Deeper analysis into patterns of access revealed that 12% of the current sub-sample of children were considered to be age inappropriate for their level of enrolment (either under- or over-enrolled). Additionally, an uneven distribution of enrolment in each class was evident as class levels increased. This

is most likely due to the age distribution of children in the subsample, as data on enrolment and schooling experiences were only collected for two children from each household for this section of the analysis. These data did not show drop out in the subsample. Analysis of the full dataset should examine class enrolment distributions with the full sample of children. If the pattern persists it may be an indication of a number of issues, including disregard for Section 16 of the RTE Act which mandates that children shall not be held back in any class. It may also be a reflection of when the RTE Act was implemented, as fewer children were enrolled after Class 5 in the current subsample, which corresponds with the year the RTE Act came into effect. This may be an encouraging commentary on the impact the RTE has had on increasing overall enrolment rates, although current data are inconclusive on this.

In the current subsample, a particularly noticeable gap in the distribution of number of children enrolled was found between Class 8 and Class 9 (i.e., the transition between elementary and secondary school). Again, in the current subsample this may be caused by children's age distribution. Further analysis of the schooling histories for every child in the household is needed to confirm. One could explore whether this gap reflects Zone 4 of Lewin's (2007) zones of exclusion: students who complete elementary school cycle but are excluded from secondary. The current study focused on elementary education, and additional research on the transition into secondary school is needed in the context of the RTE Act.

These patterns of enrolment are not surprising results, as similar patterns have been shown in previous studies involving similar samples (Mehta, 2008; Noronha & Srivastava, 2013). Nonetheless, their presence is important to note as evidence that physical access may be the first barrier to address when considering a child's right to quality education, but fully capturing this question requires consideration of additional indicators beyond simple enrolment figures and attendance rates, as suggested in Zones 2-6 of exclusion (Lewin, 2007).

The first null hypothesis that access to all school types in the public and private sectors is just as likely for those from scheduled castes/tribal communities or lower income households as it is for those from non-scheduled castes/non-tribal communities or higher income households was rejected. Instead,

results reveal patterns of schooling access disproportionately benefiting those from general castes/tribes and those from higher income households. In other words, private schools remain inaccessible for the most disadvantaged households. It is interesting that no statistically significant relationship was found between children's sex and school management type, and therefore, the null hypothesis that access to all school types in the public and private sector is just as likely for girls as it is for boys was accepted.

Social reproductive theories of education and the intersectional nature of marginalization must be considered when reviewing these findings. Stromquist (1990) theorizes that 'educational access and attainment of women is shaped by cultural and socioeconomic forces' (p. 138). However, some theorists have suggested that school systems may discriminate against women less than wider society does (Rosemberg, 1987). The current finding that both boys and girls are accessing all school management types supports the latter theory, as gender and other social-based discrimination persists within wider Indian society (UNDP, 2013).

Multiple explanations have been put forth to explain noted discrepancies between discrimination within the education sector as compared to society at large. The majority of these explanations stem from the school of social and cultural reproduction theory and suggest education systems function to advance the needs of social classes and other non-marginalized groups in society. Bowman and Anderson (1980), for example, theorize that household perceptions of the importance of educating both boys and girls is not only influenced by understandings of the child's inherent right to education, regardless of gender, but also by numerous other considerations influenced by societal norms, such as of how educating daughters may help with acquisition of a 'better' husband, or how educating boys may financially benefit the family when they are able to acquire higher paying jobs.

It is necessary to expand these explanations beyond a neo-Marxist discussion of class and social reproduction to consider the intersectional nature of marginalization. When reviewed from a feminist perspective, the findings of the current MA study suggest there is limited evidence to support neither the prominence given to private schools in the Section 12(1)(c) of the RTE Act, nor the provision's 'targeting' marginalized groups as an effective strategy of increasing inclusion in the education sector.

Instead, private schools remained inaccessible for the most disadvantaged households in this study. The finding that gender parity between school management types was almost met is encouraging. However, this achievement cannot be fully attributed to the RTE Act's strategy, because the eligibility criteria for free seats in Delhi did not include gender. Further analysis to study child's sex in relation to caste/community, or household income levels, and school management type accessed could not be performed due to the small sample size.

In order for education to be a vehicle of change, individuals must not only be enrolled, but they must be recognized and provided the necessary opportunities required for personal growth and learning. In some cases, access to a privately managed school may not be the solution if children are not receiving equal opportunities to learn once enrolled (i.e., inclusion is not inherently good, as suggested by Jackson (1999)). In other words, despite a lack of relationship found between child's sex and enrolment in school management type in the current study, we cannot conclude that this pattern is indicative of a resolution of problems at the root of marginalization and exclusion.

Conversely, Bowman and Anderson (1980) suggest that improved participation in education by both sexes may be considered 'an indicator of changing attitudes and expectations about life patterns of each sex, often signalling deep societal changes' (p.15). This may be considered an oversimplified or romanticised theory of education; however, despite the long road ahead for addressing long-standing exclusion of marginalized groups in society, Bowman and Anderson remind us that any progress made in reducing gaps in educational access is significant. Therefore, the encouraging findings regarding access in the current MA study should not be overlooked. It is hoped that the wider project will use these preliminary findings during analysis of the full dataset to produce more robust conclusions with a larger sample size.

5.2 Silent Exclusion

In terms of children's schooling experiences, the results found in this analysis are encouraging, yet surprising. Using the constructed variable, *silent exclusion in the classroom,* 81.3% of children in the

subsample were reported as having experienced little to no exclusion during the past year, and no children were reported as experiencing recurring exclusion.

Overall, the two null hypotheses stating that: (a) children of all backgrounds have meaningful experiences in school, and (b) there is no social-based exclusion for any particular group of children in the classroom were accepted for the current sample. The one exception to this was for child's sex. In this case, the specific null hypothesis that there is no gender-based silent exclusion present in the classroom was rejected. Surprisingly, more boys were reported as having experienced occasional/medium exclusion than girls. The vast majority of girls (90.4%) were reported as experiencing little to no exclusion. This correlation was statistically significant; however a strong causal model could not be established between the two variables. This finding is different from qualitative studies on gender and education exclusion in India, which focus attention on the difficulties of girls' experiences in accessing schooling (Bandyopadhyay & Subrahmanian, 2008; Little, 2010).

Children belonging to SC, ST, or OBC groups and lower-income bands were reported to experience only marginally higher rates of silent exclusion, and no significant relationships were found. These, too, are surprising preliminary results as existing literature and current news reports present a much bleaker picture of inclusion opportunities for children from these social groups (Ramachandran & Naorem, 2013).

Lastly, a slightly higher level of silent exclusion was reported for those attending MCD government schools, but this finding was not statistically significant. Therefore, no relationship was found between school management type and level of reported silent exclusion. Instead, results suggest that children's experiences at privately managed schools in this catchment area may be more similar to those attending government-managed schools than previously thought, with limited experiences of silent exclusion being reported in both sectors.

When each indicator used in the composite variable was analysed separately, traditionally explicit displays of exclusion (i.e., reported discrimination and unhappiness), were reported never to have occurred for the majority of children. The lack of explicit displays of discrimination reported at school is

particularly encouraging in light of reports of previously frequent and explicit acts of discrimination in the classroom throughout the country (PROBE Team, 1999).

While it is encouraging that explicit discrimination and social segregation were not the norm among this sample of children, the fact that leadership opportunities were also not the norm raises questions regarding the institution of child-centered pedagogy as mandated by the Act (Section 29, Government of India, 2009). In fact, a causal model of relationship was found, suggesting that a child's sex, household income level, and school management type may be determinants of leadership opportunities at school (See Section 4.3.1). This finding has important implications when considering Zone 3 of Lewin's model of silent exclusion. The model suggests that some children may be enrolled, but not being given the opportunities needed to learn, grow, and develop to their full extent. Therefore, the social-based patterns found in the provision of such opportunities are concerning and may lead to an increased risk of feeling 'less than,' or discriminated against (Zone 3), which in turn, may increase a child's risk of falling into Zone 2 of exclusion and dropping out (Bhan & Rodricks, 2012; Lewis & Lockheed, 2008; Ramachandran & Naorem, 2013).

A potentially confounding issue regarding the current silent exclusion analysis is that these data were reported by parents instead of children, and not observed. Therefore, it may be that numbers reported are a lower estimate of actual occurrences of classroom discrimination. This was a limitation of the survey method used, as data collection from parents was the main strategy for the wider research project. This approach was necessary to increase validity of responses regarding children's schooling histories and household experiences applying for freeships. However, parents may not be fully aware of their children's schooling experiences. Therefore, the preliminary results reported in this MA project will be used to inform subsequent phases of the wider project in which in-depth qualitative methods with households and children will be employed to perform a finer-grained analysis regarding children's experiences.

Underreporting may also be common when researching experiences of marginalization or discrimination, especially when children are involved, and if experiences are deemed to be embarrassing

or belittling. This has been shown in other studies that suggest children may not feel comfortable disclosing the truth of discriminatory classroom experiences to parents or researchers (Harcourt & Sargeant, 2011; Crivello, Camfield, & Woodhead, 2009). Harcourt and Sargeant (2011) suggest that when doing research with children, 'it is highly possible that the way children experience childhood, and how adults…perceive it to be experienced, may often result in a disjunction between the actual and the predicted' (p. 421). In the same vein, parents who may be positioned in a place of disadvantage may not classify the experiences of their children as discriminatory, or they may feel shame at the prospect of admitting to a researcher that their child faced discrimination. In these senses, the subjectivity of social exclusion and gendered experiences must be taken into consideration, as we consider the weight given to the opinions and perspectives of those we do research with (Jackson, 1999).

Additionally, a large number of schools were represented in the sample (52). However, for this preliminary analysis, the relatively small sample size of households accessing these schools did not allow analysis of school-specific patterns. For example, some schools may have used different methods to determine who (if any students) lead the school assembly, and what school cleaning practices are. Case studies of specific schools within each management type may be a good approach for future studies to take this issue into consideration.

Lastly, the indicators used to compute the new variable, 'silent exclusion,' were chosen as a first attempt to quantify the presence of silent exclusion in the classroom based on their availability within the data set. There is room for improvement with regards to these indicators, the computed index, and the weight given to each indicator within the computation. For example, future studies may consider weighting indicators used in the computation based on if they are experiences of 'neglect' (i.e. lack of leadership opportunities), or 'abuse' (i.e. being hit by a teacher), or other similar criteria. Silent exclusion is a complex concept that encompasses many different dimensions. The current MA study focused on three of these dimensions – leadership opportunities, discrimination, and social integration. The hope is that broader methodological discussions in this area ensue as a result of the current MA project and of the wider study.

Despite these limitations, preliminary findings on silent exclusion are encouraging, and will serve to interrogate the larger dataset and the wider project more thoroughly. If these patterns hold, they suggest that progress may have been made to minimize explicit displays of social exclusion in elementary schools in Delhi. That being said, the impact of the RTE Act in improving meaningful access for children remains to be seen, as four main issues with the free seat provision emerged in the analysis, outlined in Section 5.3 below.

5.3 Barriers to EWS Free Seat Provision

5.3.1 Awareness

First, analysis revealed that public awareness of the free seats provision is low overall. Only 39.4% of households reported knowing about the provision in private schools. Within that group, the greatest awareness was within households that reported incomes well above EWS income criterion. A probability model confirmed that households with lower income (Band 1) were 3.2 times less likely to be aware of the provision than higher-income houses (Band 3). In other words, the intended beneficiaries of the provision were neither aware it exists, nor of how it may assist them in accessing schools that would otherwise be beyond their means. This is not a surprising finding, as public awareness of new social provisions and services is an ongoing struggle for many development programs. Public awareness must be a priority for education stakeholders in Delhi in order for the RTE Act to reach those who have the greatest need for assistance. Otherwise, the gap between directives and practice will remain wide, and the provision will not be implemented or enforced as intended.

5.3.2 Beneficiaries – Intended versus in Reality

The second issue that emerged is that the free seat provision may not be benefiting the most disadvantaged. The majority of households who were successful in securing a free seat in ether a private school or a KV had reported incomes above the EWS freeship income criterion (Band 3), and thus, were technically not eligible according to state-level guidelines. Furthermore, discrepancy was noted between households reporting eligibility for admission under the EWS criteria, and reported incomes. The majority

of households who claimed to be eligible for a free seat under the EWS income criterion had reported income in Band 3 (well above the EWS criteria) (57.9%). Additionally, the majority of households who were successful in having a child accepted for a freeship had reported income in Band 3, belonged to a general caste, and/or identified with the majority religion, Hindu. These findings suggest that currently in Delhi, the free seat provision is not benefitting the most marginalized in the community. Similar findings have been reported in other initial studies (Indus Action, 2014; Noronha & Srivastava, 2013).

One potential factor contributing to this discrepancy is that local schools are not properly implementing the provision as directed by the state, and more widely, by the Central Government of India. Instead, local school management may be accepting relatively better-off households for free seats, and consequently, widening the social gap. Emerging literature on the RTE Act identifies non-compliance by private schools, and 'bureaucratic delays' (Srivastava & Noronha, forthcoming, p. 6) as serious barriers to the full implementation of the free seats provision (Srivastava & Noronha, forthcoming; Mehendale, et al., 2015; Sarangapani, et al., 2014).

Non-compliance by schools at the local level is not a new phenomenon in India. Prior to the RTE Act, it was noted that 'a widespread *laissez-faire* attitude to enact and uphold [free education] provisions in government and private sectors…was known to exist' (Srivastava & Noronha, forthcoming, p. 6; Juneja, 2005; Srivastava & Noronha, 2014a; Tilak, 1996a; 1996b). In the context of the RTE Act, Srivastava and Noronha (forthcoming) used qualitative household interview data to identify specific examples of private schools disregarding both the RTE Act and the *2011 Delhi Free Seats Order.* Examples included schools demanding 'donations' or other fees for admission (contrary to Section 13(1) of the RTE Act), and schools demanding specific documents for admission (contrary to *2011 Delhi Free Seats Order).* Undoubtedly, only the relatively better-off households were willing and able to pay these additional demands.

In other words, the gap between national education policies and local practice is influenced by many factors, including India's decentralized governance model for education, the variety of school management types and stakeholders present at the local level, regional unwillingness, and constraints

faced by local stakeholders (Srivastava & Noronha, 2014a). Together, these characteristics create a complex environment in which to pass a piece of legislation at the national level that is then monitored at the state level, and implemented by local stakeholders (i.e., private school managers, and local school boards).

Furthermore, legal measures alone have inherent limits for addressing deeply engrained social norms, such as social exclusion. India has a long history of attempting to bring about social change with laws, only to have traditional norms prevail. *The Dowry Prohibition Act, 1961* (Government of India, 1961), and the *Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989* (Government of India, 1989), are examples of such laws that remain largely ineffective due to deeply embedded social norms. The RTE Act may be another example of this, whereby portions of the law run contrary to social norms, and therefore, may remain unimplemented unless a social movement pushes for deeper change.

In the current study, the noted discrepancy between respondents who reported being eligible, and those who are actually eligible according to EWS criteria may also be influenced by a general lack of understanding surrounding EWS criteria. This possibility is evident by a lack of public awareness of the provision (as outlined in Section 5.3.1). Lastly, the discrepancy may be a result of survey tool limitations and reliability of data pertaining to household income. It is possible that households over-reported their income to appear better off in front of the researcher. The researchers who collected the data were asked to indicate if they felt underreporting of income occurred, but the same was not done for suspected over-reporting of income. Over-reported income could create a discrepancy between reported eligibility and actual eligibility under the EWS criteria. A comparison with MPI indicators in the wider project will be interesting in this regard, and may shed more light on initial findings.

Determining the extent to which each of these factors influence the noted gaps in provision is beyond the scope of the current MA project. Future research should examine the question of why these discrepancies are present, and what can be done to improve the reach of the RTE free seats provision to households who would benefit from it the most.

5.3.3 Low Success Rate for Applicants

A third area of concern related to the free seats provision is the low success rate reported for EWS applications. Within the total subsample used for analysis, only 12 households were successful in securing a free seat in either a private school or a KV (11.11%). The mean number of applications submitted by a household for a free seat in any school was 4.76, with an overall success rate of 44.44%. This low rate could be considered worrying, given the relatively small number of households attempting to access free seats in the region, according to the current subsample. When the large number of private schools in the area is taken into consideration, one would expect to also find a large number of students accessing freeships, as 25% of all seats in the private sector are mandated to be reserved under this provision. The small number of households in the current sample who applied, and the even lower success rate is therefore further evidence to suggest that schools at the local level are not implementing Section 12(1)(c) as legislated, and informal norms in enabling freeship admission persist. Questions arise surrounding the application process and how accessible it is for households. If success rates are low, the motivation for households to commit to a long and difficult application process will also be low, and some families may be deterred from trying.

5.3.4 Persistent Financial Challenges

Lastly, financial challenges or pressures emerged in the data as the greatest on-going challenge for households who successfully secured a free seat. One third of all respondents whose children were accepted for a freeship reported feeling pressure because of the cost of books/uniforms/stationary, etc., while 25% reported being forced to spend additional money on private tuition. An additional 16.7% stated they felt pressure to spend extra money on their child's clothes. As noted in Section 4.4.2, these findings indicates that 'free seats' are not, in reality, 'free.' Instead, tuition is only one part of the cost of education imposed on households.

Srivastava and Noronha (forthcoming) report that out-of-pocket expenditure for households accessing freeships includes books, private tuition and uniforms, and that in their sample of respondents,

no freeship students were exempt from additional schooling costs. Furthermore, students accessing freeships were reported as incurring substantial transportation costs, as schools were far from their homes, and instead, located in 'desirable' areas (Srivastava & Noronha, forthcoming). These additional costs have important implications for households considering applying for a freeship. To that end, a per child annual average household elementary education expenditure was computed for children accessing different school management types in Delhi, and found that the average cost of attending private school through a freeship was Rs. 13,304 (Srivastava & Noronha, forthcoming). This was more than the cost reported for accessing lower-fee private schools on a full-fee basis (Rs. 9,660), as well as the cost of attending a government-managed school (Rs. 1,533). Only households accessing higher-fee private schools on a full-fee basis were recorded as spending more on education than those accessing a free seat (Rs. 28,198) (Srivastava & Noronha, forthcoming).

The current MA findings support the conclusion that perhaps a more accurate classification of Section 12(1)(c) would be 'reduced rate seats,' rather than free seats, as all households continue to incur schooling costs, no matter the school management type. This reality affects the most disadvantaged households' desire and ability to pursue freeships for their children. In other words, private schools may continue to be inaccessible for the most disadvantaged households even with the help of the free seat provision.

5.4 The RTE Act and Education as a Vehicle for Change in India

It remains to be seen how socioeconomic characteristics affect a child's success in being accepted for a freeship, as well as their experience of silent exclusion in the classroom once accepted through a freeship. No statistically significant relationships on the matter were found in the current study. This is in large part due to the small sample size of households who had applied for admission through a free seat, as well as the lack of available data on specific children who were successfully admitted under a freeship.

The current analysis did note that, as class levels increased, so did enrolment in government managed schools. This trend has also been identified in previous studies in the area (Noronha &

Srivastava, 2013). It speaks to challenges associated with giving prominence to private schools, and the RTE Act's reliance on the free seat provision as a means to improve meaningful access. Questions arise concerning why children change schools, particularly when moving from privately managed to government-managed sectors. This trend may be related to persistent financial burdens on households accessing privately managed schools, even through a freeship, as noted in Section 5.3.4, but may also be attributed to multiple other factors, including, but not limited to, children's experiences in the classroom.

Initial reviews of the RTE Act raise concerns regarding the Act's ability to create change in a country where deeply embedded social hierarchies and marginalization have historically been influential in all aspects of society, including the education sector (Noronha & Srivastava, 2013; Indus Action, 2014; IDRC Foundation, 2013; Mukerji & Walton, 2012; Sadgaopal, 2010). The current study provides further evidence to support these concerns. One aspect of this is Section 12(1)(c)'s reliance on 'targeting' specific marginalized groups for freeships and inclusion in privately managed schools. As has been outlined throughout the current MA study, the 'targeting' approach is not only largely ineffective, but also fails to recognize marginalized groups as their own powerful social communities who may not wish to be 'included' in the simplistic, binary sense of the word (Kabeer, 1996; Bradsaw, et al., 2013, Chant, 2006; Jackson, 1999).

When considering education as a vehicle of change, and not simply a reproductive function of social and cultural norms, it has been argued that education policies should not be expected to be the primary tool for mitigating or reversing marginalization and other social issues (Haseler, 1977). Haseler (1977) argues that social issues are rooted in other areas, and because the education sector did not cause these issues, education policies cannot be the sole tool used to reverse them. In other words, while education may help promote social change, it is important to remember that marginalization is influenced by a wide variety of other sectors, values, and norms. To that end, education policies may be ineffective sources of change when presented without regard for the influence other factors have on perpetuating cycles of marginalization.

It is important to note that Haseler is speaking to a very different educational context than Delhi (inner city London). Nonetheless, the current study's findings provide support for the perspective that education policies and inclusive legislation are important, but on their own are largely ineffective for creating social change. As Jackson (2003) suggests, 'changing gender cultures is a long-term process and not immediately tractable to government policies and project' (p. 476). As the current study reveals, India's RTE Act, though widely applauded and ground-breaking in many of its considerations of equality and quality education, may currently have limited reach and influence. Instead, the national directive may be considered one important factor for achieving meaningful access for all children, but other key factors are also necessary to address at the local, social, and political levels.

5.5 Limitations and Considerations for Future Research

Firstly, given India's diversity, the current analysis attempted not to over-generalize, even though it was difficult to find sources specific to Delhi. It is important to note that patterns will differ between this region and rural areas, urban areas in other states, and different areas within Delhi. Care was taken to mitigate this limitation by having direct and consistent correspondence with the research team in Delhi. Working with this team mitigated many other potential barriers to completing this research.

Future research should expand the geographical area of focus and perform similar analyses in other Indian states. Patterns of enrolment and silent exclusion in the current sample may be largely attributed to the region of focus (urban, National Capital Territory of Delhi), and the socio-economic status of those surveyed. If similar analyses are expanded to other states and regions, comparisons could be made between rural and urban patterns of meaningful access, as well as between state directives and implementation of the RTE Act.

Secondly, Lewin's (2007) zones of exclusion were used extensively throughout this analysis. This model refers to access to education as a whole, and does not apply it to specific school management types, or discussions of privatization within the education sector. Future research should expand on this model to take different sectors of educational provision into consideration. In this vein, children may be enrolled

in and attending a low quality school in one sector, but consider themselves to be in Zone 1 of exclusion in relation a better quality school they desire in another sector. This expanded application of Lewin's zones of exclusion was beyond the scope of the current project, but should be used in future research to reflect the complexity of India's education system and feminist theories of multiplicity of exclusions (Jackson, 1999).

Thirdly, as noted, data were collected through responses by parents or guardians. While subsequent phases of the wider research project are likely to involve children, descriptions of children's experiences used in this MA thesis are based on the perception of the parent, which may not fully portray an accurate representation for reasons mentioned in Section 5.2. Article 12 of the UNCRC, '*The Right of the Child to be Heard'* emphases an ethical and moral imperative for children to be included in any research that affects them (United Nations, 1989). According to Article 12, any child capable of forming their own views has a right to express those views concerning all issues that affect them. Future research should therefore engage with the children themselves for technical and ethical reasons; to hear firsthand accounts of what happens in the classroom, and to give the children an opportunity to have their voices heard on the topic. Future research may also advance this inquiry by engaging local schools on their knowledge of the RTE Act, and its provisions for inclusive classroom practices (Section 29, Government of India, 2009) to gain a better understanding of the RTE Act's influence on social inclusion within the classroom.

Limitations related to the construction of the complex variable, *silent exclusion,* have been noted above. Future research should build on this initial attempt to quantify the concept and use it to further advance the concept of meaningful access, and specifically, children's experiences at school.

Lastly, the conclusions noted in this MA analysis should be considered preliminary results, and must be validated by analysis of the full dataset. The small sample size was a limitation of the current study as it limited analysis, and may not be fully generalizable. Despite this limitation, the current preliminary analysis provides an initial review of patterns, and will serve to inform the wider project's analysis of the complete dataset.

Chapter 6: Conclusion

Although significant inequality persists within Indian society (UNDP, 2013), impressive gains have recently been made in expanding access to elementary school for all children. In the past 12 years, net enrolment figures have risen by 12% (World Bank, 2016), and the vast majority of elementary school aged children are reported as attending classes. The current study attempted to dig deeper into these seemingly impressive indicators of educational access from a critical feminist perspective to determine if patterns of meaningful access differed for children from different socio-economic backgrounds when the definition of access is expanded to consider children's experiences once enrolled and attending school.

Many existing studies employing quantitative methods to examine access limit analysis to enrolment numbers and an overview of education participation by particular groups. This study is, to the best of the researcher's knowledge, the earliest attempt at operationalizing and analyzing patterns of meaningful access using econometric modeling in the context of India's *Right of Children to Free and Compulsory Education Act, 2009*. In this way, the findings presented in this MA study are very much an initial review of patterns of access in Delhi under the RTE Act.

The preliminary results presented here are part of the first phase of a mixed methods analysis employed in the wider research project to examine patterns of access, school choice, and household and children's schooling experiences. Preliminary patterns noted in this analysis will inform analysis of the full household data set. Once the full round of household data are analysed, the wider project will seek to further interrogate these patterns through qualitative methods, such as in-depth household interviews and participatory research with children. Therefore, educational stakeholders in India, including students, school administration, government officials, teachers, international academics and policymakers, as well as the survey participants and their children will have the potential to be informed of and benefit from the findings of the current study.

In the same vein, this research has the potential to add to and advance the dialogue surrounding how to make primary education more inclusive in India, especially for marginalized groups. The argument is that in order to fully analyze education progress in wake of the RTE Act, education research

must advance beyond focusing on physical access, and explore indicators of *meaningful access*. The current study was interested specifically in advancing discussion on the experiential side of meaningful access, and in particular, patterns of silent exclusion experienced by children in the classroom. Children's experience at school is one specific aspect of meaningful access, but is an important aspect to consider from a critical feminist perspective, which posits that individuals may experience simultaneous inclusion and exclusion in social systems. Therefore, the second research objective of this study rested on the construction of the quantitative variable, '*silent exclusion'*, as a composite drawn from the literature on children's schooling experiences and previous primary qualitative research on the issues with a similar population (Noronha & Srivastava, 2013). Silent exclusion was operationalized to consider indicators related to leadership opportunities, discrimination, and social integration in the classroom. These dimensions were chosen as an initial step to quantify the concept because of their relevance to the concept of silent exclusion as well as the availability of data from the survey tool.

The current study of meaningful access in Delhi is timely, as it has been six years since the implementation of RTE Act. As the first legally binding education framework in India to support inclusive education, this legislation received much applause in its early stages of implementation. In principle, the RTE Act guarantees inclusive education to all school types, including both government and private sectors of provision. However, concern has been raised by early reviews as to its effectiveness for creating equal opportunities for children, regardless of socio-economic background. Of particular interest for the current study was Section 12(1)(c), the 'free' seats provision. This provision speaks to India's focus on the privatization of education in an effort to provide quality educational opportunities for all.

In an effort to ascertain preliminary patterns of schooling access in the context of the RTE Act, and better understand children's schooling experiences from a social exclusion perspective, the following research questions were addressed:

1. Who went to which type of school at the elementary level? Were there different patterns of access between children of different groups (sex, income level, caste/community, and religion) within and across government and private school types?

2. Were children from a particular gender, income level, caste/community, or religion more likely to (a) apply for freeships, and (b) be accepted in free seats?

3. Was there a correlation between sex or other background characteristics (household income level, caste/community, religion) and children's experience of silent exclusion in the classroom?

4. Overall, did students of different social backgrounds experience more silent exclusion in public or private schools?

5. Did children from certain backgrounds (sex, income level, caste/community, religion) attend school less regularly than their peers from other social groups?

6. Did the reasons for irregular school attendance differ between boys and girls? Between school management types? Between social groups?

Overall, initial results were encouraging. Enrolment and attendance rates in the catchment area were high, and echoed impressive gains being made in these indicators across the country. This suggests a lack of children experiencing Zones 1 and 2 of exclusion (Lewin, 2007). However, when a deeper review of indicators of access was taken, it was found that access to schools in the private sector disproportionately benefited children belonging to higher caste/community groups compared to those belonging to a SC, ST, or OBC. Furthermore, 12% of the current sample was considered to be age inappropriate for their level of enrolment (either under- or over-enrolled). Surprisingly, an equal number of boys and girls were accessing schools in the private sector, and no significant relationship was found between child's sex and school management type.

Reported experiences of silent exclusion at school (Zone 3) were low overall, and the majority of children were reported as not having experienced explicit displays of discrimination and social segregation at school during the previous school year. However, less explicit experiences of exclusion were noted, such as a lack of leadership opportunities for children belonging to lower-income households, scheduled caste/tribe groups, and children attending government-managed schools.

Current findings reveal gaps in the provision of EWS freeships, as well as persisting challenges for households accessing education through a freeship. Four specific areas of concern emerged in the analysis: (a) public awareness; (b) reaching intended beneficiaries; (c) application success rate; and (d)

continuing financial challenges for successful households. These findings call into question the prominence given to private schools in India as a means to provide quality education for all.

This MA study applied a critical feminist perspective to quantitative research by attempting to elevate the voices and experiences of the most marginalized and those who are often silenced or ignored (Potts & Brown, 2005). Rather than attempting to uncover one objective 'truth' regarding the state of meaningful access and inequality within Delhi's education system, this research attempted to garner a deeper understanding of children's subjective experiences by elevating the voices of those who face challenges accessing quality education.

The current study was limited in its ability to fully achieve this goal, as parents reported children's experiences, rather than the children themselves. Future research should expand on initial patterns of inequality and triangulate methods to shed additional light on children's experiences in school in the context of the RTE Act.

Future quantitative research could develop a tool explicitly focusing on silent exclusion in schools, or revise the current one to collect data on additional indicators of silent exclusion in the classroom. The choice of additional indicators may be reviewed based on cultural perceptions of classroom experiences, and indicators may be weighted differently within the computation. In this sense, there is value in using a quantitative approach to disaggregating data by sex and other demographic characteristics as a means for garnering insight into cause-and-effect relationships. Data on marks and completion rates could also be collected and analysed for discrepancies between groups of children.

To triangulate these findings, participatory action research is a valuable tool to hear directly from children regarding their experiences and could provide very useful data. Qualitative methods may be well positioned to glean deeper insight into the cultural perceptions of what happens in the classroom, and what is considered 'normal' versus 'discrimination' or 'abuse' at school. Additional components of meaningful access beyond the experiential aspect should also be explored from a gender perspective. These components may include students' learning outcomes (skills), the learning of values and skills, progression through grades, and transition to secondary school.

Overall, future research questions should focus on developing a deeper understanding of any patterns of inequality that exist between groups of children accessing elementary schooling in Delhi, in an effort to fully realize the right to education for all children. Within Delhi, particular attention to the experiences of children accepted for free seats under the RTE Act in needed. For example, are there gendered or other socio-economic-based discrepancies in local schools' decision-making process for freeship admission? Are the most marginalized in society truly benefiting from this provision? What do children themselves say about their experiences in primary school, particularly those who have been accepted for a free seat?

The RTE Act emphasizes the need to reduce inequality in both access to and experience within elementary school. However, it was found that access to different school types, particularly in the private sector, continue to be affected by income and social background. This begs the question, would public expenditure on education be better spent improving the quality of publicly managed schools, rather than subsidizing the cost of private schools? According to the current findings, publicly-managed schools continued to be accessed by the most disadvantaged in the community, while freeships were only secured by a few, relatively better-off children.

It remains to be seen if all stakeholders involved in the provision of elementary education in Delhi are meeting their obligations, under the RTE Act. As the United Nations' Committee on Economic, Social and Cultural Rights has emphasized:

> Critically, rights and obligations demand accountability: unless supported by a system of accountability, they can become no more than window dressing. Accordingly, the human rights approach to poverty emphasizes obligations and required that all duty-holders, including States and international organization, are held to account for their conduct in relation to international human rights law (UN, 2001, paragraph 14).

Questions pertaining to the provision of the RTE Act persist, including if a gender mainstreaming perspective is included that adequately takes intersectionality and multiple exclusions into consideration for realizing children's right to education. As with most public policy debates, gaps between the directives as written and as practised may impede the RTE Act's ability to address deeply embedded social exclusion within the community.

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Appendix A. Extracted Items from Insights into Education Household Survey

Appendix A reproduces only those questions extracted from the full *Insights into Education* household survey that were used for analysis in this MA study.

Section 1: Background Information and SES of Household

1A. General Details (Respondent)

Gender

Male	1	
Female	2	
Other	3	_____

Religion

Christian	1	
Hindu	2	
Muslim	3	
Sikh	4	
Other	5	
No religion	6	_____

Caste/Community

ST	1	
SC	2	
OBC	3	
General	4	
No caste	5	
Would not say	6	_____

CHART A: Details of All Children in the Household 18 years and below

Note to Investigator:

Please note that a household includes all adults and children who eat meals that have been cooked together/in the same kitchen.

Start with the youngest child of the respondent and move upwards. Then list children in the household who are not the respondent's own children. Also include any child for whom this family are guardians.

**Playschool refers to a private preschool with only pre-primary grades (Nursery/KG).*

For all children who are in an anganwadi/playschool or Never Enrolled in school, skip A.4 to A.7, and code as NA later.

A.5 Please note name of school and colony very carefully. Parents may not be clear.

A.7 If respondent knows only whether the school is government or private, code 1 for government and 2 for private, and add other details later.

***Delhi Admin (DA) schools refer to government schools without a primary section, i.e. schools with only classes 6-8, 6-10, or 6-12.*

Sarvodaya schools (SV) are composite DA schools with classes 1-12.

Codes	**A.3 Schooling status**	**A.7. School Management**
	Enrolled= 1; Dropout= 2; In anganwadi/*playschool=3; Never enrolled= 4; Enrolled in higher education=5	MCD=1.1; **Delhi Admin (DA)=1.2; **Sarvodaya (SV)= 1.3; Kendriya (KV)=1.4; Other Govt Schools=1.5; Private Unaided Recognised=2.1; Private Aided= 2.2; Private Unaided Unrecognised=2.3; Madrasa= 3; Other 4; All Government Schools Outside Delhi= 1.0; All Private Schools Outside Delhi= 2.0; Generic Govt schools in Delhi 1.6; Generic Private Schools in Delhi 2.4

No.	A.0 Name	A.1 Sex M=1; F= 2	A.2 Age (yrs)	A.3 Schooling status	A.4 Class currently enrolled (highest grade completed for dropouts)	A.5 Name of school attended, and colony where situated (school last attended for dropouts) *(note if child is studying through Open School or through correspondence)*	A.6 School Code *(001 to 240 from Master School List)*	A.7. School management of current school (school last attended for dropouts) *(Double-check aided schools list in East Delhi to ensure they haven't been coded as unaided schools)*	A.8 Mother's Name	A.9 Serial no. of mother from Chart B	A.10 Serial no. of father from Chart B

Chart B: Education and Employment Characteristics of All Adults (above 18 years) in the Household

Note to Investigator:

Note that a household includes all adults and children who eat meals that have been cooked together/in the same kitchen.

**B.6 To note if the individual gets regular monthly wages, works part-time or full time, if self-employed whether or not employs others, if on daily wages whether skilled or unskilled. Also note if the person is doing multiple types of work.*

***B.7 Code after interview based on details of main type of work provided in B.6.*

B.1 Relation to the respondent	**B.4 Marital status**	**B.5 Education completed**		**B.7 Type of Work**	
Self 1 Spouse 2 Son 3 Daughter 4 Other 5	Currently married 1 Divorced/separated 2 Widowed 3 Unmarried 4 Any other 5	Never enrolled Classes 1-12 ITI / Tech diploma Graduate Post graduate& above	0 1-12 13 14 15	Government job 1 Private job 2 Domestics (drivers/maids) 3 Own business (employs others) 4 Self-employed (petty trade/auto drivers/ not employing others) 5 Home-based work (piece rate work) 6	Skilled work / mistri 7 Unskilled work (mazdoori, cycle rickshaw driver etc.) 8 Looking for work/ unemployed / retired 9 Student (full time) 10 Apprentice/skill training 11 Only household work 12

Serial no.	B.0 Name	B.1 Relation to respon-dent	B.2 Sex Male= 1; Female= 2; Other=3	B.3 Age (yrs)	B.4 Marital status	B.5 Education completed	*B.6 Details of work	**B.7 Type of work

Chart C: Details on Schools Ever Attended (Children ages 3-14)

Please tell us about every school your child .....has ever attended. Start with the school that the child is currently attending.

*(Note: *Delhi Admin (DA) schools refer to government schools without a primary section, i.e. schools with only grades 6-8, 6-10, or 6-12. Sarvodaya Vidyalayas (SV) are composite DA schools running from Class 1-12.)*

Codes	**C.2 Schooling Status** Enrolled= 1; Dropout= 2	**C.6 School Management** MCD=1.1; *Delhi Admin (DA)=1.2; *Sarvodaya (SV)=1.3; Kendriya (KV)=1. 4; Private Unaided Recognised=2.1; Private Aided= 2.2; Private Unaided Unrecognised=2.3; Madrasa= 3; Other 4; All government schools outside Delhi= 1.0;All private schools outside Delhi = 2.0; Generic govt schools in Delhi 1.6; Generic private schools in Delhi 2.4	**C.8 and C.9 Class** Nursery=N; KG=0; Class 1=1; Class 2=2; Class 3=3...

C.0 Child's Name	C.1 Sr. No. (from Chart A)		C.2 Schooling Status		C.3 Class Enrolled (Class in which Dropped Out)	

C.4 Name of School and Colony (starting with current school / last school for dropouts)	C.5 School code*(From school list)*	C.6 School manage-ment	C.7 Distance from home (km) *(Code 0 if <1 km)*	C.8 Class in which enrolled in this school	C.9 Highest class completed in this school	C.10 No. of years in school

(Note: Please write NA for C.8, C.9 and C.10 for playschools.

C10. No. of years includes nursery/playschool/KG where this exists in a formal school.

Section 2: Schooling Experiences and Histories

Note to interviewer: Section 2 is to be completed for the respondent's children (and those who are under the guardianship of the respondent) aged 4-14 ever-enrolled in elementary education. This also includes children who have dropped out from Classes 1-8). If the respondent has more than two ever-enrolled children/wards in the 4-14 age group, please select the youngest and eldest of these, whether enrolled or dropouts. Note that any enrolled child who is selected must have been enrolled in Class 8 or below in 2014-15. Section 2 should be asked separately for each of the selected children. Start with the youngest child.

1. Table 1A. School Movement

(*Note to interviewer: Based on Chart C above, code Table 1A.)*

Child moved from:	*Tick as appropriate*	*Number of times*	*If there has been no change, skip to Q3.*
Government to government			
Government to private			
Private to government			
Private to private			

Note. If there is a separate junior and senior branch in the SAME school, this should NOT be coded as school movement.

(*Note to interviewer: Based on Chart C above, please answer Q2 below. The respondent need not be asked again.)*

2. Did this child change schools between 2014-2015 and 2015-2016?

Yes	1	
No	2	_____

2B. Attendance and Drop Out

Note to Investigator: For drop-out children ask only Q21 and proceed to Section 2C.

1. *(For enrolled child only)* How many days was your child absent from school last week?

One day or less	1		*Skip to Q20*
More than one day	2	_____	*Go to Q19*

2. *(If the child missed more than one day of school)* Why? *(Write NA if the child did not miss more than one day of school).*

	Tick options cited
Health problems	
Household chores	
Earning work	
Scared of teacher	
Not interested in what is being taught	
Fee issues	
Holiday/school closure	
Went home to native place/attend a family event such as marriage	
Other (note)	

3. *(For dropout child only)* Why did the child drop out of school? *(Note relevant details. Code later.)*

_____

	Tick options cited
Could not understand teacher/ subjects taught	
Beaten by teacher	
Bullied by other children	
Not interested in studies	
Lack of appropriate facilities for child with disability or other special needs	
Could not afford fees	
Needed to earn	
Needed to do household work (looking after younger siblings etc.)	
Long-term illness	
Other friends dropped out	
Dropped out after completing highest class in current school	
Specific issues affecting girls(marriage prospects / lack of safety / lack of toilets) Give details.	
Other, give details	

2E. Schooling Experiences (2014-2015)

Note to Interviewer: All questions in Section 2E are for the academic year that just finished (2014-2015). Do not ask for any child who dropped out before April 2014.

Keeping the school attended in 2014-2015 ['NAME OF SCHOOL'.....] in mind, and the child ....., please consider the following statements. *(Read every statement and each of the choices.)*

	Agree (1)	Neutral (2)	Disagree (3)	Don't Know (4)
1. Our child was very happy at this school.				
2. Our child had a lot of friends at this school.				

Please answer the following questions about your child's experiences at this school (in 2014-2015). *(Read every statement and each of the choices.)*

	Often (1)	Occasionally (2)	Never (3)	Don't Know (4)
3. Did your child lead the school assembly?				
4. Did your child do any of the cleaning in the school or school premises?				
5. Was your child hit by the teacher/school staff?				
6. Was your child verbally insulted or shamed by the teacher/school staff?				
7. Did your child complain of being bullied by other children?				

8. How many times did you meet the principal in last year (i.e. 2014-2015)? _____
   Note: If 'never', enter '0' and skip to Q45.

9. Why did you meet the principal?

	Tick all options cited
Called for PTA/SMC meetings	
Called in because the child was in trouble/discipline	
To discuss fees	
To discuss attendance	
To discuss academic progress	
Met during admission	
To collect money for scholarships / books / uniforms, etc.	
Other, specify	

10. How many times did you meet the class-teacher in last year (i.e. 2014-2015)? _____
   Note: If 'never, enter '0' and skip to Q46.

11. Why did you meet the teacher?

	Tick all options cited
Called for PTA/SMC meetings	
Called in because the child was in trouble/discipline	
To discuss fees	
To discuss attendance	
To discuss academic progress	
To collect money for scholarships/uniforms/books, etc.	
Other, specify	

Section 3: EWS Free Seats Provision (Private and KV Schools)

This section should be asked to all respondents with a child aged 4 to10, or who are acting as guardians to a child in this age group.

3A. EWS General Awareness

1. Are you aware of the free seats reservation under RTE in:

	Yes (1)/No (2)		
Private schools	_____	*If yes, ask Q2 and Q3*	*If no to both options, skip to Section 4*
Kendriya Vidyalaya	_____	*If yes, ask Q2 andQ3*	

2. *(If yes to any option in Q1 above)*Where did you get this information from?

	Tick all options cited
Neighbours/relatives/friends	
NGO	
Principal/Teachers from schools	
Children	
Newspaper, TV	
Employer	
Other, specify	

3. (*If yes to any option in Q1 above*) Are you are eligible to apply for admission under the EWS free seats provision to private schools / Kendriya Vidyalayas?

Yes	1		*Proceed to Q4*
No	2		*Skip to Section 4*
Don't know	3	_____	*Skip to Section 3B*

4. *(If yes, Q3)* What criteria are you eligible under?

SC/ST	1	
EWS	2	
Other, specify	3	_____

Section 3B. EWS Applications (for those who are aware and eligible)

Note to Interviewer: This section should only be asked to respondents who completed Section 3A.

5. Have you ever applied for an EWS freeship in a private school or in a Kendriya Vidyalaya?

Yes	1		*If yes, go to Q8.*
No	2	_____	*If no, ask Q6-Q7, and go to Section 4.*

6. *(If no, Q5)* Why did you not apply?

	Tick options cited
Could not fill application forms	
Do not have documentary evidence for eligibility	
Do not have time or money to try	
Didn't know anyone at the school / anyone of influence	
Missed the date / Didn't know the date	
Unsure if we were eligible	
Not interested	
Other, specify	

7. *(If no, Q5)* Will you try next year?

Yes	1		*Once complete, go to Section 4*
No	2	_____	

8. *(If yes to Q5)*Please give us the details for every private or KV school you ever applied to for an EWS freeship.

Name of the Child	Serial no. (from Chart A)	Name of the School and Colony	School Code	Year applied	If successful Yes=1, No=2

8a. Code based on Q8 above.

	KV	Private schools
Number of EWS applications		
Successful EWS applications		

Section 3C. Unsuccessful EWS Freeship Applicants

Note to Investigator: This section is only for parents who tried to gain admission under EWS freeship but failed.

Serial Number of Any Child for whom EWS Applications Have Been Unsuccessful

9. Why do you think you were unable to get a free seat under the EWS freeship provision?

(Note response below and then code)

.....

.....

	Tick options cited
Didn't have anyone to guide us	
Didn't know anyone in the school / anyone with influence	
Did not have appropriate documents	
Did not meet neighbourhood criteria required	
Name not selected in lottery	
Could not pay donation asked for	
Other, specify	

10. Will you try again next year?

Yes	1		*If yes, go to Q15, and then Section 4*
No	2	_____	*If no, skip to Section 4*

11. *(If yes Q14)* Will you do it any differently?

Yes	1		*If yes, go to Q16, and then Section 4*
No	2	_____	*If no, skipto Section 4.*

Section 3D. Successful EWS Freeship Applicants

Note to Investigator
This section is only for households with one or more children admitted under the EWS freeship provision.

Serial Number of Any Child for whom EWS Applications Have Been Successful

12. Once your children were admitted to the school through the EWS freeship, did any of the following occur?

	Yes (1), No (2), Don't Know (3)
a. Children attended a separate shift	
b. Children were part of a separate class	
c. Children wore a separate uniform	
d. Children were given separate training	
e. School held special meetings with principal, teachers, or other parents	

13. Did you face any challenges once your child was admitted in the EWS quota?

	Tick options cited
Child finds the academic standard high	
Find it difficult to help the child with homework	
Forced to spend on private tuition	
Financial pressure because of cost of books / uniforms / stationery	
Child has found it difficult to make friends	
Other parents are not friendly	
Feel pressure to dress and talk differently	
Feel pressure to spend more money on the child's clothes	
Teachers are not very friendly	
Other (note)	

14. What are the positive aspects of being admitted through the EWS freeship?

	Tick as appropriate.
Can access a private school which is otherwise out of our reach	
Can access a school of good reputation and quality	
Our child's future will be secure	
Other, specify	

Please note separately what options are going into "Other"

Section 4. Household Facilities, Assets, and MPI Indicators

Note to Interviewer: This section is for all households.
Note that a household includes all adults and children who eat meals that have been cooked together/in the same kitchen.

5. Total monthly income of the household*(Code Q23 based on Q22)*

Less than Rs. 4,000	1	
Rs. 4,000-7,000	2	
Rs. 8,000-11,000	3	
Rs. 12,000-15,000	4	
Rs. 16,000-24000	5	
Rs 25000-34000	6	
Rs 35000 and above	7	
Don't know / wouldn't tell	8	_____

4B. Financial Vulnerability

6. Researcher notes family has significantly underreported income

Yes	1	
No	2	_____

Note. Based on school fees reported, assets observed, and/or earnings from occupation reported.