



# Unlocking Social Mobility

Evidence from a comparative study of rural government-schooled and urban private-schooled youth in India

Karta White Paper 2020





## UNLOCKING SOCIAL MOBILITY: EVIDENCE FROM A COMPARATIVE STUDY OF RURAL GOVERNMENT-SCHOOLED AND URBAN PRIVATE-SCHOOLED YOUTH IN INDIA

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This paper lays out The Karta Initiative's research findings from a 2019 study conducted in partnership with the market research firm, Nielsen. The study investigates and compares aspirations, attitudes, enabling infrastructure and barriers to opportunity for Indian rural youth (in a government school system) and Indian urban youth (in private schools).

Co-authored by The Karta Initiative and Nielsen.

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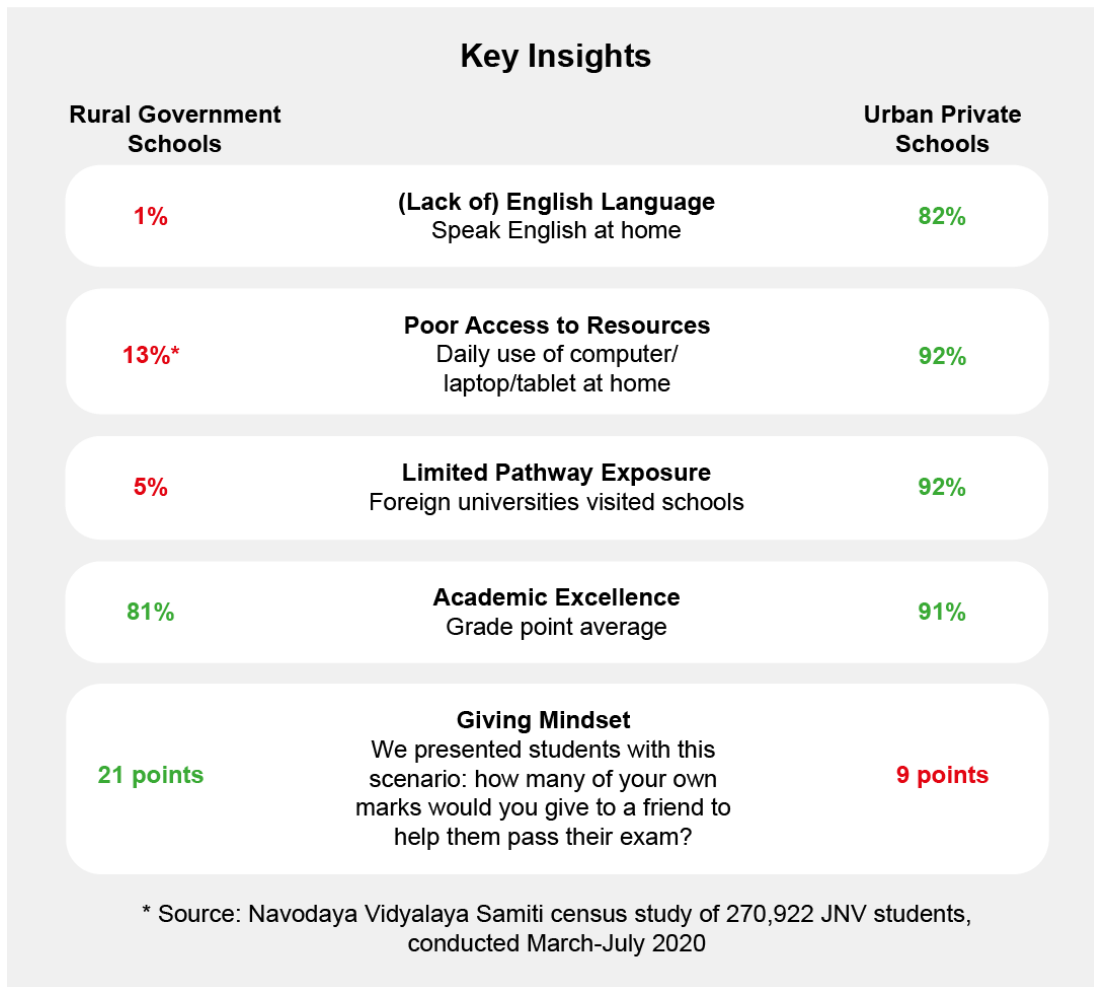
## WHITE PAPER AT A GLANCE

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Together with research partner Nielsen, we conducted a large-scale comparative study of students across India.

The study investigated and compared aspirations, attitudes, enabling infrastructure and barriers to opportunity for Indian rural youth (in a government school system) and Indian urban youth (in private schools).

Our findings are clear: significant disadvantages arise from '*accident of birth*', including exposure to higher education, English language competency, household amenities, and access to technology, with striking differences in co-operation and altruism.



## KARTA STATEMENT

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The Karta Initiative is a movement, advancing global social mobility through inclusive action, research and partnerships to eradicate the chasm between the “unreachable” and the “unimaginable”. Accident of birth limits young people’s ambitions, aspirations, opportunities, and ultimately outcomes; these limitations are even more pronounced in emerging and developing economies. We aim to disrupt this status quo, to broaden and diversify the marketplace for opportunity - inclusively, sustainably and at scale.

This White Paper summarises the research findings of our 2019 Social Mobility Study. The Study investigates aspirations, attitudes, enabling infrastructure and barriers to opportunity for rural and urban youth from India. The findings point to disadvantages and differences arising from “accident of birth”, manifested through educational beliefs, exposure to higher education, English language competency, household amenities, and access to technology. These findings constitute significant inequalities and disadvantages, substantiated by Karta’s direct “in-field” experience working with rural youth in India, and now further exacerbated by the current Covid-19 pandemic. The White Paper illuminates striking prosocial attitudes of co-operation and altruism, significantly higher in rural youth. At Karta, these attitudes are in daily evidence through the mindset and behaviours of Karta’s Catalyst Scholars and Members.

The Study’s sobering research findings underscore the *raison d’être* of our Movement. Through Karta's Access Programme we were able to demonstrate significant improvement in 21st century skills, English language, awareness of opportunities to meet aspirations of academically brilliant rural youth. We also found that social mobility could be accelerated when responsibility, effort, engagement and readiness to adapt is borne by youth and by opportunity-providers (employers and educational institutions).

In summary, our movement’s ability to impact global social mobility at scale relies on mission-aligned individuals and organisations from disparate sectors, socioeconomic constituencies and geographies, working together to make the world more peaceful, more equal and more prosperous. Today at Karta, we have reason to be optimistic: we see the world of opportunity running hand in hand, learning with Karta – adjusting behaviours and assumptions, adapting mindsets, and innovating approaches – resulting in truly heterogeneous participation. This is wonderfully exemplified by the mission-aligned individuals, organisations, and partnerships making our research and practice possible, rigorous, and impactful.

We invite you to join our Movement. The time could not be more pressing to accelerate social mobility together! We look forward to hearing from you.

Ranjita Rajan

**Trustee, The Karta Initiative**

Manjula Rao

**Director, The Karta Initiative India Foundation**

## PARTNER STATEMENTS

विश्वजीत कुमार सिंह, भा. व. से.

आयुक्त

**BISHWAJIT KUMAR SINGH, IFoS  
COMMISSIONER**



नवोदय विद्यालय समिति  
**Navodaya Vidyalaya Samiti**

मानव संसाधन विकास मंत्रालय  
Ministry of Human Resource Development  
भारत सरकार / Government of India  
(स्कूल शिक्षा और साक्षरता विभाग)

(Department of School Education & Literacy)

F. 12-44/2017-NVS(Acad)

Navodaya Vidyalayas are coeducational residential schools set up by Navodaya Vidyalaya Samiti under Ministry of Human Resource Development for providing quality Modern Education free of cost to the talented children predominantly from Rural area. The demography of the students covers the most deserving talented kids from the humble strata of socio-economic background.

Academic experiences provided for over 7 years prepares them to shape their future career. Thanks to commitment of talented teachers in the system, which now stands as the single largest group of quality school education in the country. Not only performance of the students in the Board examinations, competitive examinations and selections in various recruitments are brilliant, but also their social commitment is par excellence. While I am writing this I am informed of the supreme sacrifice of an alumni of a JNV, a super specialist in medicine, who died while in service at National Health Systems Resource Centre. Many have

joined the social sector to lend their bit of service to the society.

Being the chief executive officer of the organization I always dreamt of global opportunities for such children who despite their economic and social disadvantage continue to perform well and carry the social commitment.

It has been a privilege and delight to initiate what is now a 4 year long Navodaya Vidyalaya Samiti collaboration with Karta. Together we have proven something in strategic exposures in 21st century skills, digital literacy and strong bond of values.

Through this high quality research, Karta has shown a strong commitment to our students and to social mobility. The findings highlight the immense untapped potential of our young students, and the urgency of action to level the playing field of access to opportunity. I am grateful for the impactful role Karta has played and hope that the group will continue to work for our students and society.

  
(Bishwajit Kumar Singh)



*“Our student and staff engagement in this high-quality research project exemplify the Cathedralite commitment to integrity, courage, respect, empathy and citizenship. Accordingly, we are delighted to partner in advancing Karta’s research and in playing our part to improve social mobility for young people, locally and globally.”*

**Meera Isaacs, Dean, [The Cathedral and John Connon School, Mumbai](#)**



*'At B. D. Somani, we see our students as dynamic, caring and productive members of a democratic and interdependent society. Our delight in joining hands with the Karta Initiative’s research is an extension of our focus on nurturing global citizens of the 21st century, mindful of their role in their communities and the world, and keen to actively contribute to both.'*

**Dr Geoffrey Fisher, Head of School, [B.D. Somani International School](#)**



*“At Welham we believe in peace, in fair play, in service, and in "choosing the right" path however arduous it might be. Partnering with the Karta Initiative is a natural extension of the Welham Spirit: to contribute, as individuals and as an institution, to a more inclusive, more equal, more diverse, and more peaceful world.”*

**Padmini Sambasivam, Principal, [The Welham Girls School](#)**

**TATA TRUSTS**



The Tata Trusts aims to enable "Authentic Learning for All" and strives relentlessly towards the twin goals of Quality and Equity in Education. By incubating The Karta Initiative in India, we are levelling the playing field by empowering young people to access opportunities through information, exposure, inspiration and development of 21st century skills while simultaneously engaging with the market for opportunity.

We believe that all young people, irrespective of accident of birth, deserve to experience high-quality, authentic, real-world, active learning experiences and support systems that inform their decisions, improve their life outcomes and develop them into productive, thriving and well-rounded 21st century citizens. Karta's White Paper is a timely illumination of the disparities, the challenges, the latent opportunities, and therefore the urgency of our joint mission.

**Satyajit Salian, Head of Education, Tata Trusts**



## KARTA WHITE PAPER: SEPTEMBER 2020

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*This paper lays out The Karta Initiative’s research findings from a 2019 study conducted in partnership with the market research firm, Nielsen. The study investigates and compares aspirations, attitudes, enabling infrastructure and barriers to opportunity for Indian rural youth (in a government school system) and Indian urban youth (in private schools).*

### 1. INTRODUCTION

Karta’s mission is driven by the hypothesis that potential resides everywhere, but opportunity does not. In line with this mission, Karta aims to transform the educational, professional, and ultimately life outcomes of students from low income backgrounds in developing and emerging countries, starting with India. The Initiative is a social mobility movement committed to rectifying inequality in access to opportunity for youth in the world’s “bottom billion”. Having demonstrated proof of concept, Karta’s work seeks to provide a model to inspire similar systemic change in other relevant emerging economies.

Karta’s foundational study serves to investigate the landscape in which it is currently working by understanding the educational beliefs, aspirations, and barriers faced by individuals in relation to their socioeconomic position. This study was designed to yield rich insights to contextualise existing national and global data on the reciprocal relationship between income and educational opportunities, shape Karta’s social mobility approach, and begin to evaluate the impact that Karta has had on the communities it is currently positioned within, a necessary step for future scale-up.

#### 1.1 Background

Economic growth relies on the “richness of human capital”<sup>1</sup> - a well-educated, well-exposed, socio-economically heterogeneous leadership across all sectors, in all communities, societies, countries, and the world at large. However, low social mobility and lack of educational opportunities constitute arguably the biggest social challenge of the present age. There is resounding evidence showing income inequalities not only limit opportunities for social mobility but also overall economic growth. Studies conducted by the Organisation for Economic Co-operation and Development (OECD)<sup>2</sup> indicate that wide differentials in income and wealth within societies reduce investment in education and skills among lower income populations. A lack of human capital investment in disadvantaged youth exacerbates the concept of “sticky floors”, referring to young people from low-income backgrounds being restricted from upward

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<sup>1</sup> Academic literature (e.g. Mankiw, Romer, and Weil, 1992) reveals cross-country income disparities arise from differences in human capital, that worker productivity relies on aggregate skill level (Lucas, 1988) and that societies with more skilled workers generate more ideas and grow faster (Romer, 1990). In a study of 103 countries, Acemoglu and Angrist (2000) reveal a strong correlation between output per worker and average years of schooling. This inequity has not commanded large-scale attention to-date due to the pronounced development community focus on primary education enrolment through the MDGs (Millennium Development Goals). As leverage from education is significant, addressing this gap as the SDGs (Sustainable Development Goals) 2 replace the MDGs would yield considerable opportunities for individuals, communities, businesses, governments, and institutions.

<sup>2</sup> OECD (2015), *In It Together: Why Less Inequality Benefits All*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264235120-en>

mobility; only one in ten children of low-educated parents attend post-secondary education in comparison to two-thirds of those with high-educated parents.<sup>3</sup>

Higher education is a key driver of economic mobility; obtaining a four-year post-secondary degree promotes upward mobility and prevents downward mobility.<sup>4</sup> Further, higher education can act as a 'leveller' for those coming from varying socioeconomic backgrounds (*Figure 1*). The increase in social mobility is even more profound when individuals attend elite institutions, yet low-income students have increasingly less access to top colleges.<sup>5</sup>

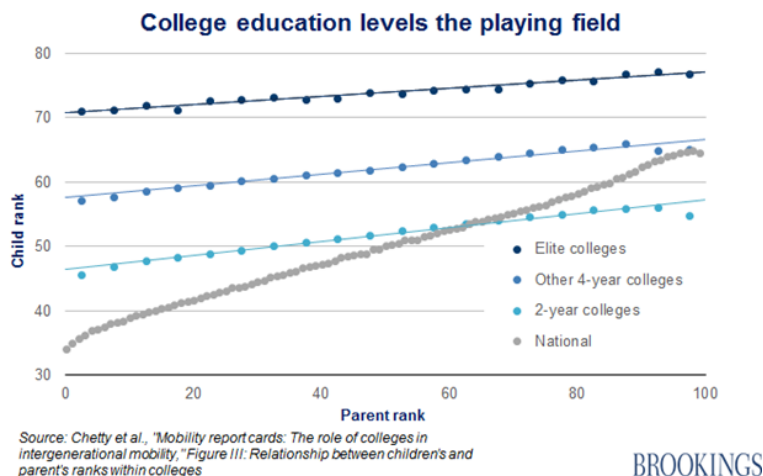


Figure 1

With a widening income gap between the richest and poorest in society, students from urban private schools are overwhelmingly exposed to high quality opportunities right from early childhood whether this be parents reading to them, trips to museums, or extra after school tuition. Their impoverished counterparts face lower quality education at school and are often first generation learners. In emerging and developing economies, this inequality is even more sharply pronounced and the barriers low-income students face to higher education stunt their economic mobility, perpetuating a cycle of increasing social inequalities.

The benefit in overturning unequal socioeconomic access to the highest quality educational opportunities is considerable, both to the individual and to society at large: first, it builds meritocratic capacity with relevant, high-quality skills, driving leadership, competitiveness, economic growth, and development, in an increasingly knowledge-based global economy and second, it stimulates a more discerning, open-minded, and equitable marketplace for opportunity.

<sup>3</sup> OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, <https://doi.org/10.1787/9789264301085-en>

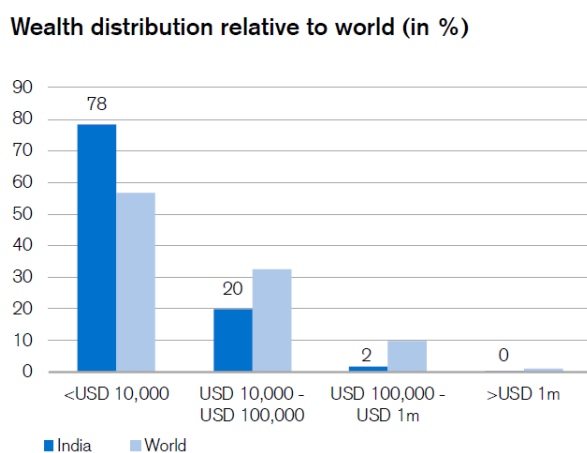
<sup>4</sup> The PEW Charitable Trusts (2012): Urahn Susan K., Currier Erin, Elliott Diana, Wechsler Lauren, Wilson Denise, Colbert Daniel: "Pursuing the American Dream, Economic Mobility Across Generations", July 2012. [https://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic\\_mobility/pursuingamericandreampdf.pdf](https://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobility/pursuingamericandreampdf.pdf)

<sup>5</sup> NBER (2017) Raj Chetty, John N. Friedman, Emmanuel Saez, Nicholas Turner, and Danny Yagan: *Mobility Report Cards: The Role of Colleges in Intergenerational Mobility*, NBER Working Paper No. 23618, July 2017, JEL No. J0

This is the opportunity that Karta seeks to catalyse. To achieve this, the Initiative is focused on disrupting the social mobility barriers that prevent access to world-leading educational and professional opportunities for socially disadvantaged youth.

## 1.2 Context

The first developing and emerging country Karta has positioned itself within is India. India’s wealth inequality is on the rise.<sup>6</sup> In 2019, the total wealth of India increased by US\$151 billion (INR 10,591 billion) and while the wealth of the top 1% increased by 39%, the wealth of the bottom 50% only increased by 3%.<sup>7</sup> Today, India’s top 10% of the population holds 77.4% of the total national wealth and the bottom 60% owns 4.8% of the national wealth (*Figure 2*). To put it more starkly: the wealth of India’s 9 richest billionaires is equivalent to the wealth of the bottom 50% of the population – a staggering 689 million citizens.



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

*Figure 2*

In India, secondary schooling is largely divided into private (or fee paying) schools and government schools, each consisting of different tiers. One type of top tier government schooling is run by the Navodaya Vidyalaya Samiti (NVS), an autonomous organisation under the Ministry of Human Resource Development in the Government of India, which serves to provide quality education to talented students in rural India through its residential schools, Jawahar Navodaya Vidyalayas (JNVs). JNVs provide quality education to talented youth from India’s rural areas, without regard to their families’ socioeconomic condition. These fully residential and co-educational schools envision nurturing youth from rural areas with a special talent and provide opportunities to them to progress at a faster pace. This education is not equivalent to the best private school systems in the country.<sup>8</sup> It does, however, provide an opportunity for youth to receive rigorous learning, they otherwise would not have been afforded. There are 635 JNVs

<sup>6</sup> *The Davos report 2019 “Public Good or Private Wealth, Oxfam, 2019* ([https://www.oxfamindia.org/sites/default/files/Davos-India\\_Supplement.pdf](https://www.oxfamindia.org/sites/default/files/Davos-India_Supplement.pdf))

<sup>7</sup> *Estimated from the data available in the Global Wealth Report 2018, Credit Suisse, available on* <https://www.credit-suisse.com/corporate/en/articles/news-and-expertise/global-wealth-report-2018-usand-china-in-the-lead-201810.html>

<sup>8</sup> *See Navodaya Vidyalaya Samiti website: <https://navodaya.gov.in>*

across India catering to 280,000+ secondary school students; one school in each district of the States and Union Territories of India (excluding Tamil Nadu).

### **1.3 The Karta Initiative: A social mobility movement**

Established in 2016, Karta is a social mobility mission to transform the futures of bright low-income students from developing and emerging economies. Karta straddles education and livelihood interventions by creating a new and meritorious talent pipeline. The Initiative also builds and leverages collaborations with world-leading universities, employers, higher education access programmes, and financial instruments, all underpinned by values of social justice, pluralism, and service to one's community, to address inequality where it is most pronounced, and maintains a growing multiple-stakeholder scholarship fund. Karta has partnered with The Tata Trusts and the JNV schooling system for four years now to improve access to world-class educational and employment opportunities for talented youth from low-income backgrounds through activities in select JNV schools in India, referred to as Karta impact schools. The organisation aims to expand its geographical reach in the future.

## **2. RESEARCH OBJECTIVES AND HYPOTHESES**

In partnership with Nielsen (India) Private Limited, Karta has undertaken a foundational study of selected JNV schools (including Karta impact schools and non-impact schools) as well as elite private schools within India. The purpose of this study is to establish an understanding of the barriers to opportunity faced by the student population in Karta partner schools vis-à-vis their urban elite counterparts and to measure the impact of Karta interventions. While the relationship between higher education and socio-economic status has been established, to date, there is little research that explores the complexity of social mobility within India's secondary school structure and there is a gap in empirical evidence on the needs and barriers faced by students attending JNVs. The goal is to establish a foundational understanding of the barriers to opportunity faced by the student population in Karta partner schools in order to rigorously and sustainably measure the impact of Karta's involvement in select JNV schools, and to refine Karta's programmatic work.

This research aims to achieve these goals by focusing on the following objectives:

1. To characterise the youth from the JNV schooling system to establish a foundation against which longitudinal trends and impact of interventions can be assessed.
2. To compare the barriers faced by Karta's target rural youth with peers in urban private schools.
3. To preliminarily assess the impact of Karta by comparing JNV schools partnering with Karta (impact schools) to other JNV schools (non-impact schools).

Five key overarching barriers to achieving social mobility through access to high-quality education emerge from the relevant literature: (1) parental education and income; (2) educational aspirations; (3) awareness of, and exposure to, higher education; (4) English language; and (5) access to technology. It is hypothesised that the barriers facing students attending JNV schools will be significantly higher than students attending private schools have to overcome. It is also hypothesised that students from impact schools will have

greater educational aspirations, awareness, and exposure to higher education, and greater English language and technological competency when compared to students from non-impact schools.

### **3. METHODOLOGY**

A cross sectional study design was followed for the foundational study in JNV schools. Ethical approval for the study was obtained from Sigma-IRB (Institutional Review Board) in India (Ethical board clearance number: 10084/IRB/D/18-19).

#### **3.1. Sample size estimation**

The decisive indicator P for working out the sample size at the lowest level of reporting has been considered as the “% of students aware of Karta’s intervention”. A figure of 50% was used to establish the required sample size at 95% level of confidence and 5% margin of error. As multiple stages were used to select the sample, a design effect of 2 was considered. Further 10% non-response was also considered. The targeted sample size was 3400 students from 32 Non-Impact JNV schools. In addition a sample of students from JNV Impact schools and private urban schools were also planned to be covered for comparison purposes.

#### **3.2. Participants**

The study sampled 3607 students (3279 from JNV schools of which 165 attended JNV impact schools, and 328 from private schools. Data collection was conducted in a total of 36 JNV schools (4 schools from 8 regions of the country, one additional school each from Goa and Maharashtra), 2 JNV impact schools and four private schools (one residential school in Dehradun and three day schools in Mumbai). The sample consists of students in 11<sup>th</sup> and 12<sup>th</sup> standard.

#### **3.3. Procedure**

A multi-stage sampling procedure was conducted for selecting JNV schools. In the first stage, two states were randomly selected from each region. In stage two, two schools from the included states were randomly selected (resulting in a total of four schools per region). Stage three involved recruiting and administering the study to all students in 11<sup>th</sup> and 12<sup>th</sup> class from both the Science stream and the Arts/Humanities stream. Private schools were selected on the basis of being amongst the top schools in India visited by international universities.

Authorities from each school were contacted by Karta & Nielsen to provide information on the study and to seek permission to administer the study during April-June 2019. Written informed consent forms from parents were obtained during April-July 2019. The study teams operating in each state were trained by the Nielsen research team. The school principal was informed in person by the trained state teams and consent was obtained during August-September 2019. Students were provided an introduction to the study and assent was confirmed before administering the study. Once school, parental, and participant consent was obtained, the study and questionnaire instructions were explained to the students.

The students completed a self-administered questionnaire at their school in their respective classrooms or space provided by school authorities in the school building. Students filled out the study using paper and pen. The study teams offered clarification to students when they were completing the questionnaire. Once students completed their questionnaires, the study team collected the questionnaires. The data entry was done for each questionnaire and data was compiled for data analysis.

### **3.4. Measures**

Participants were asked to respond to questions on the following themes: their socio economic profile, their educational aspirations, their awareness, attitudes and beliefs regarding higher education, their confidence in using English, and their access to technology and internet. The study questions were developed by Nielsen and Karta, jointly, based on existing programmatic learnings and qualitative interviews. All study questions were reviewed by the NVS prior to study implementation and were piloted among JNV students from non-selected JNV schools to validate the tool.

### **3.5. Data analysis**

Population proportions for each of the three samples (students from non-impact JNV schools, students from private schools, and students from Karta impact schools) were calculated and reported in percentages. Students surveyed from non-impact JNV schools were compared to students from impact JNVs and private schools. Significance testing was conducted among these groups to assess the differences in socio-economic influence, educational aspirations, awareness & exposure, barriers to self-confidence. Reported P-values suggest the likelihood that the null hypothesis is true.

## **4. FINDINGS**

### **4.1. Participant profile: parental education and income, and academic performance**

The profile of all groups studied in the study can be found in Table 1. The profile of surveyed students shows almost equal distribution across school year and gender for all groups. The average age for JNV students from impact and non-impact schools is 16 years and the average age of private school students is 17 years. The academic performance of JNV students is comparable with the academic performance of their private school peers.

Parental education was found to be significantly different between JNV students and private school students; 26% of JNV students' fathers (and 17% of their mothers) have at least a graduate education while 87% of private school students have fathers and mothers who have obtained a graduate education. This wide gap is also reflected in findings on parental yearly income (*Table 1*).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	3279	328
<b>%Class XI/ %Class XII</b>	50.6/49.4	47.3/52.7	50.5/49.5	57.3/42.7
<b>Average age (years)</b>	16	16	16	17
<b>% Female</b>	44.6	38.2	44.3	48.5
<b>Father's education: % graduate &amp; above</b>	25.9	34.5	26.3	86.6
<b>Mother's education: % graduate &amp; above</b>	17.1	15.8	17.0	86.6
<b>Parental total yearly income (INR): % less than 3,00,000</b>	64.1	71.5	64.5	1.5
<b>% Grade point average</b>	80.8	87.1	81.1	90.5

Table 1

## 4.2. Educational aspirations

### *Non-impact JNV schools*

Around 47% of JNV students from non-impact schools indicated that they desired a post graduate degree and 39% reported that they hope to obtain a Bachelor's or graduate degree. The most desired fields of interest for these students are science, business, medicine, and engineering.

JNV students from non-impact schools indicated that they are very interested in going abroad to study (85%) but only 45% reported that they believe that they will be able to leave India to obtain higher education (Table 2).

### *Private school comparison*

In comparison to 48% of non-impact JNV students, 84% of private school students reported a desire to obtain a postgraduate degree. The most desired fields of interest for private school students are commerce, humanities, and pure science. These students, similar to JNV students, indicated that they are very interested in going abroad to study (88%) but unlike JNV students who see a gap between aspirations and beliefs, 80% of private school students indicated that they believe that they will be able to leave India for higher education (Table 2).

*Impact vs. non-impact JNV schools*

Students from Karta’s impact schools (62%) reported a greater desire to obtain a post-secondary degree when compared to students from non-impact JNV schools (47%). Students from impact schools were also found to be significantly more interested in humanities and business and significantly less interested in engineering and medicine when compared to non-impact JNV schools. An interest in studying abroad for higher education students, and the belief that studying abroad is possible, is consistent across Karta impact and non-impact schools (*Table 2*).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	3279	328
<b>Desire to obtain a graduate or bachelor’s degree</b>	38.8	27.9	38.2	11.3
<b>Desire to obtain a postgraduate degree</b>	47.2	61.8	47.9	83.8
<b>Interested in going abroad for further study</b>	84.6	82.4	84.5	88.1
<b>Belief in ability to go abroad for further study</b>	44.9	45.5	45.0	80.2

*Table 2*

**4.3. Awareness of, and exposure to, higher education**

*Non-impact JNV schools*

Of the students studied in JNV non-impact schools, 19% had three or more sessions on careers or university admission guidance offered through their school, with 43% indicating having a dedicated career or admissions advisor at their school. Further, 19% of students reported that an Indian university visited their schools and 5% reported a visit from a foreign university. Qualitative follow-up with students surveyed showed that Karta-led interventions had been mistaken as visits by foreign universities; and therefore, foreign universities visiting JNV schools could be considered very unlikely. Not surprisingly, only 23% of students attending JNV non-impact schools reported that they have enough or more than enough information on higher education opportunities (*Table 3*).

*Private school comparison*

In comparison to the 23% of JNV studied from non-impact schools, 62% of students surveyed from private schools reported having enough or more than enough information on post-secondary opportunities. The majority of these students (66%) indicated that they had three or more sessions on careers or university



admissions guidance, with 93% indicating they have a dedicated career or admissions advisor at the school. Further, 77% of private school students had Indian universities visit their schools and 92% had foreign universities visit (*Table 3*).

#### *Impact vs non-impact JNV schools*

While 23% of students surveyed from non-impact schools have enough information on higher education opportunities, 27% of students attending impact schools indicated having enough information on higher education opportunities. This finding is in line with the expected outcome because a key aspect of Karta's social mobility approach is to provide students with information on higher education (*Table 3*).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	3279	328
<b>School offered more than 3 sessions on careers/admissions guidance</b>	19.1	33.9	19.9	66.2
<b>Dedicated careers/admissions advisor at school</b>	43.4	50.9	43.8	93.0
<b>Indian universities visited school</b>	18.6	11.5	18.3	76.5
<b>Foreign universities visited school</b>	5.2	35.2	6.7	91.8
<b>Had enough information about higher education (enough/ more than enough)</b>	21.2/1.7	23.6/3.0	21.3/1.7	43.0/18.9

*Table 3*

#### **4.4. English language**

##### *Impact and non-impact JNV schools*

Over 74 % of JNV students speak a regional language at home, 26% speak Hindi at home, and less than 1% speak English at home. Approximately 64% of students from non-impact schools indicated that they believe that they speak fluently in English (*Table 4*).

##### *Private school comparison*

In contrast to the low numbers of students from JNV schools speaking English at home, the vast majority of private school students indicated that they speak English at home (81.4%) with Hindi (13.4%) and regional language (5.2%) less common. Further, over 92% of private school students indicated that they speak fluently in English (*Table 4*).

*Impact vs non-impact JNV schools*

Language spoken at home is not expected to be different across impact and non-impact schools. However, students attending impact schools are anticipated to have better English language skills when compared to non-impact schools. The findings confirm this hypothesis; 76% of students at JNV impact schools speak fluently in English compared to 64% of students in non-impact schools. This gap remains pronounced when assessing discrepancies in reading, comprehending, and writing in English across the groups (Table 4).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	3279	328
<b>Speak English at home</b>	0.5	0	0.5	81.4
<b>Speak English fluently</b>	63.5	75.8	64.1	92.4

Table 4

**4.5. Access to technology**

*Impact and non-impact JNV schools*

Approximately 39% of students attending JNV schools have access to a computer (including a laptop or tablet) at least once a day at home and 47% of students reported having internet connection in their home. At school, 11% indicated access to a computer at least once a day. Smart phone access at home was more prevalent with 76% of JNV students reporting having access to one at least once a day. The smart phone access was not readily available in schools as only 4% of students have access to a smartphone during the day. These findings are based on combined data from JNV impact schools and non-impact schools considering digital technology at home or at school is not a Karta requirement and there is no expected difference across these two groups.

*Private school comparison*

Differences between private school students and JNV students in terms of access to technology are stark and statistically significant. Over 92% of private school students indicated that they have access to a computer at least once a day at home and 54% have had access to these devices once a day at school. Further, 95% of private school students reported access to a smartphone at least once a day at home while 34% have access at school (Table 5).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	<b>3279</b>	328
<b>Access to a computer/laptop/tablet at least once per day at home</b>	-	-	<b>13.0</b> <sup>9</sup>	91.5
<b>Access to smart phone at least once per day at home</b>	75.7	71.5	<b>75.5</b>	95.1
<b>Internet connection at home</b>	47.8	29.1	<b>46.9</b>	100.0
<b>Access to a computer/laptop/tablet at least once per day at school</b>	11.6	7.3	<b>11.4</b>	54.3
<b>Access to smart phone at least once per day at school</b>	3.9	1.8	<b>3.8</b>	33.8

Table 5

#### 4.6. Giving mindset

JNV students from both Karta impact and non-impact JNV schools, when given a question of a hypothetical situation, indicated that they were willing to sacrifice on average 21% of their grade so a friend could receive a passing grade. This number is significantly higher than what private school students indicated (9%) (Table 6).

	JNV (non-impact) schools	JNV (impact) schools	JNV schools (total)	Private schools
<b>Total students (N)</b>	3114	165	3279	328
<b>Percentage points willing to sacrifice from own grades to give to a friend so they can pass</b>	20.7	21.8	20.8	8.5

Table 6

<sup>9</sup> Source: Navodaya Vidyalaya Samiti census study of 270,922 JNV students, conducted March-July 2020.

## 6. DISCUSSION

As hypothesised, the results show a discrepancy in parental education and income among students attending JNV schools and students attending private schools. Moving beyond identifying socio-economic status as a barrier to quality higher education and social mobility, these results provide insight into the mechanisms that link class differentials between students attending JNV schools and students attending private schools in terms of future opportunities. It is found that disadvantage can manifest itself through educational beliefs, awareness of, and exposure to, higher education, competency in English language, and access to technology.

### 6.1. Educational beliefs

The desire for JNV students to attain post-secondary degrees in fields such as engineering and medicine could point to a desire for financial security through obtaining a professional degree that has a direct path to a career. The desire of private school students to study humanities and pure science could show an increased freedom to “learn for the sake of learning” that is afforded to them by their financial position. Karta’s social mobility approach and activities continue to involve skill building and career awareness around a variety of educational pathways and opportunities in light of this finding.

Interestingly, both students from JNV schools and private schools have a similar interest to study abroad but the difference between the two groups, in believing that it is possible, is striking. The consistency in desire to go abroad among students serves to justify Karta’s role and intervention; there are motivated and interested students from all backgrounds but the access and opportunities to achieve these motivations is different across socioeconomic status. The access and opportunity gap is evident in this gap between aspirations and beliefs.

### 6.2. Awareness and exposure to higher education

Perhaps the biggest disparity those from rural and low-socioeconomic backgrounds experience in regards to educational attainment is exposure and support to higher education. Private school students have universities visiting their schools and have a designated support person for career exposure and education pathways while the vast majority of students attending JNV schools do not. The data shows that Karta’s work with JNV partnering schools has effectively begun to increase this awareness of higher education institutions outside India within impact schools but it is necessary to increase the volume and scale of exposure to maximize the benefits for students.

### 6.3. English language competency

The ability to speak, read, and write in English is necessary for gaining access to higher education in India and ultimately disrupting social inequality. The data presented in this study clearly demonstrates the discrepancy between JNV students and private school students in their ability to speak English. This is likely in part due to discrepancies in languages spoken at home between JNV and private school students.

The data also shows that Karta’s social mobility interventions have the potential to reduce this gap. The fact that English language is inherent in Karta’s activities explains that students at impact schools are more confident speaking, reading and writing in English when compared to students at non-impact schools.

Through offering services in English and working with students to gain better English language skills starting at the beginning of their high school career, Karta is working to disrupt the language inequality that exists as a result of class and wealth and expand the number of opportunities for students.

#### **6.4. Access to technology**

The difference in access to computers or similar devices between private school students and JNV students both at home and at school was hypothesised. Access to this type of technology is directly correlated to wealth and status. Students from both JNV schools and private schools are more likely to have technology at home than at school. This finding has implications for Karta's in-school approach and gives a sense of the location in which students are able to access information over computers. Interestingly, the majority of JNV students have smartphone access at home. This finding could indicate the usefulness of communicating to students over this medium and ensuring that Karta approach is compatible with these devices. However, it is important to note that a likely reason why smartphone access in schools for JNV students is low is that these devices are prohibited within JNV schools and this is where students live for the majority of the year. Thinking creatively to digitally and virtually reach JNV students is a top priority for Karta moving forward.

#### **6.5. Giving mindset**

The finding that JNV students would hypothetically sacrifice more of their own grades to help a friend pass when compared to private school students provides preliminary insight into the unique attributes of JNV students. These students are not only motivated academically, they embody a sense of generosity, selflessness, and community. Qualitative research substantiates this finding showing that JNV students are able to see themselves as a part of a bigger picture, understanding that empowerment and prosperity for all, not just a select few, is necessary for advancing a more equal, healthy, and prosperous society.

### **7. CONCLUSION**

The findings surface disadvantages and differences arising from "accident of birth", manifested through educational beliefs, exposure to higher education, English language competency, household amenities, and access to technology. These findings point to significant inequalities and disadvantages, substantiated by Karta's direct "in-field" experience working with rural youth in India, and now further exacerbated by the current Covid-19 pandemic. Equally striking is the higher prevalence in rural youth of prosocial attitudes of co-operation and altruism. At Karta, these attitudes are in daily evidence through the mindset and behaviours of Karta's Catalyst Scholars and Members.

The Study's sobering research findings underscore the *raison d'être* of our Movement. At the same time, through Karta's social mobility interventions, there is early, promising evidence of improvement in 21<sup>st</sup> century skills, English language, awareness of opportunities, and aspirations. At Karta, we see social mobility further accelerated when responsibility, effort, engagement and readiness to adapt is borne by youth and by "opportunity-providers" (e.g. employers and educational institutions).

The findings from the 2019 Social Mobility Study inform Karta's work in championing and effecting social mobility. Global social mobility at scale relies on mission-aligned individuals and organisations from

disparate sectors, socioeconomic constituencies and geographies, working together to make the world more peaceful, more equal and more prosperous. Today at Karta, we have reason to be optimistic: we see the world of opportunity running hand in hand, learning with Karta – adjusting behaviours and assumptions, adapting mindsets, and innovating approaches – resulting in truly heterogeneous participation. This is exemplified by the mission-aligned individuals, organisations, and partnerships making our research and practice possible, rigorous, and impactful.