# INFLUENCE OF CASTE SYSTEM ON SELF-ESTEEM AND SCHOOL PERFORMANCE

### Inaugural Dissertation

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By

Boby Xavier Thaiparambil

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| At the request of                     |  |
|---------------------------------------|--|
| Prof. Dr. Jana Nikitin (Chair)        |  |
| Prof. Dr. Jens Gaab (Referee)         |  |
| Prof. Dr. Andrew Gloster (Co-Referee) |  |
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Declaration

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Klein Basel, 8 April 2017

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#### **Abstract**

Education is important especially for a fast developing country like India, while, social stratification adversely affect Indian education. This social stratification in India poses a sensitive context for education, so it needs a particular consideration.

In my dissertation I explored the influence of Indian social stratification on school performance and self-esteem, which resulted in three publications.

The first publication is a theoretical review (Thaiparambil, Waldmeier and Kunnel John, 2017 –in press), which deals with the social stratification in India. The consequences of the Indian caste system still creates severe impediments for education in India, though the Government of India provides reservations quotas to handle the stratifications still it remains ineffective, further more it diminishes the quality of the education. Therefore, my study proposes a meritand income-based reservation quota to overcome the psychological consequences, which should be sided by actions to foster social connections and the sense of belongings.

The second study was focused on the influence of Governmental class and the self-esteem on school performance in India. It was a multisite longitudinal study. Indian education system is strongly influenced by Indian society and its diversity of caste, economic status, gender relation and cultural characteristics. Although the Indian constitution of 1950 eradicated the caste system, inequalities based on caste by birth remains as a stumbling block to national development as it denies education for marginalized groups (MHRD-Ministry of Human Resources Department of India, 2008). The result shows that in overall there is no significant relationship between self-esteem and school performance, but the governmental class significantly influences school performance.

Third study deals with the Big Five and NEO FFI 3 personality traits and their relation to school performance. For the development of a nation education is important, as for India education is much more important, since it is leaping into a developed nation. Personality traits are one of the factors that influence academic performance, so reliable and valid as well as economic assessments of these psychological constructs are needed. Thus, the aim of the study was to evaluate the psychometric properties of Big Five and NEO FFI-3 Personality questionnaire on Indian adolescents. The Cronbach's alpha reliability analysis shows low internal consistency for BFI and NEO FFI-3.

These publications contribute a developing research in the field of education in India. It identifies the prevailing issues that influence education system in India such as the quality of education, socio-economic factors and social-stratifications/caste. And points out education as the remedy to weed out social-evil from Indian society. And in order to achieve this, the study recommends income and merit based reservation system and actions to encourage social connections to overcome psychological consequences of social-stratification and thus to cultivate caste/class-insensitive education.

#### 1. Introduction

Education is one of the most important factors that boost up the economic development of a nation (Shaguri, 2013). Empirical studies substantiate this fact, a study conducted by Lockheed et al (1980) in 18 low-income countries shows that additional years elementary education increases farm productivity up to average 7.4% (Lockheed et al, 1980). In this regard education has a particular for developing country, since countries investing in higher education are closely connected with higher increases in labour productivity and long-term economic growth (Bank, 1994). Education has also significant role in reducing poverty. A study conducted in India shows that post-elementary education has an impact on reducing the absolute and relative poverty by increasing agricultural development in rural areas, that in turn boost-up the economy.

India is developing country and education is important for the development, since it boost up the economy of nation. One of the stumbling blocks that pull back India to be a developed nation is its laming Indian education system. Indian education is suffocated with the facts like poor infrastructure, inadequate facility, poor quality of teachers and lack of financial resources (Government of India, 2015). Adding to these facts the most important issue that India faces today in the field of education is the caste based inequality, economic status and cultural characteristics. The attempts to enhance the development of education in India on one hand hampered by pernicious effect of caste and social stratification, while on the other hand attempt to protect these students from these influence eventually brings down the quality of education.

Recent days Indian economic growth has created hopefulness in its social economic development, ironically it still lags behind in comparison with other countries in the field of secondary education and youth literacy. Since the purpose of education is not only development of intellectual skill and knowledge but also for the effective growth and development of Indian economy. So there is urgency for improving Indian education system. The setbacks of Indian education system are manifold and encompass political, societal and infrastructural aspects as mentioned above. So, my first study was a theoretical review (Thaiparambil, Waldmeier and Kunnel John, 2017 –in press) on the Importance and Impediments of education in India and Proposition of a merit- based and social stratification insensitive approach.

India has a great legacy of knowledge and wisdom (Murty 2013:Premendra 2014), but the access to education was limited to selected (higher-class strata) of the society. The Constitution of India in 1950 officially prohibited caste-by birth based inequality, yet it still exists and it denies the education for the marginalized groups (MHRD, 2008). To up lift these disadvantaged group the Government of India has grouped the traditional caste system into three namely General Classes, Other Backward Class (OBC) and Scheduled Caste / Scheduled Tribe (SC/ST) based on socio-economic status. But, it still represents basically the traditional caste system. As a result Indian society greatly influenced by the adverse effect of caste system, especially, as mentioned above the Indian education being chocked by the negative impact of caste system.

There is a significant relationship between self-esteem and school performance (Vishalakshi and Yeshodhara 2012). Further more, self-esteem is an important determinant of school performance as well as it is highly sensitive to environmental influences. To substantiate this fact: a study conducted by Wong et al shows that racial experience in African Americans adolescents affects their self esteem and predicts decline in grades and academic ability (Wong, Eccles et al, 2003). In this regards the observation made by the UNICEF on the caste discrimination is relevant. It reports that lowest caste children in India experience severe discrimination in education; which in turn has a negative impacts on self-esteem and academic performance (Nambissan, UNICEF, 2009). On the one hand, many studies confirmed the relation between low perform and poor academic performance (Bankston &Zhou 2002; Filozof et al. 1998; Vishalakshi and Yeshodhara 2012), on the other hand some studies shows the limited evidence of low self-esteem leading to poor school performance (Bachmann&OMalley1986; Baumeister et al.2003 and Pullmann&Allik, 2008). Thus, the causality of self-esteem is under debate. So my second study investigate the association between socio-economic strata, self-esteem and school performance cross sectionally as well as longitudinally on Indian students. I assume that socio-economic stratum has a significant impact on school performance and that self-esteem is mediating this effect.

The personality traits are one of the factors that influence academic performance (Chamorro-Premuzic and Furnham 2003;Chowardy 2006;Hazarati-Viari, Rad et al 2012; Ciorbea and Pasarica 2013;Nehra 2014). For example Hazrati et al (2012) in their study indicate that the personality traits like openness and conscientiousness exhibit more successful in academic life, since these personality domains predicts motivation among students. As mentioned above India being a developing country, an improvement in education system is inevitable. Since, personality factors have been found to be important predictors of academic performance, a

reliable and valid as well as economic assessment of these psychological constructs are needed. Therefore, the third study aimed at to evaluate the psychometric properties of the Big-Five Inventory (BFI-10) and NEO Personality Inventory (NEO FFI-3).

#### 2. Theoretical Background

The Caste system in India can be described as system of social stratification, which divides the society into groups based on its members occupations and it is closely associated with Hinduism (Berreman 1972; Singh 2009). These groups are called *jatis* or sub-castes. There are thousands of *jatis*, which are assigned to four main, hierarchically arranged, groups called varnas: Brahmans, associated with priests and the learned class, Kshatriyas, commonly identified with rulers, warriors and property owners, Vaishyas, associated with traders, farmers and artisans and Shudras, associated with servants and labourers. A group of people were considered as born out of the varna scheme: the untouchables or the Dalits; as they are often referred today. They were considered as impure and therefore untouchable because of their occupation, which included for example, cleaning toilets, garbage removal and handling corpses (Sadangi, 2008; Singh, 2009). The hierarchical order in the caste system led to discrimination and exclusion of the lower castes in various dimensions for centuries (Sadana, 2009). Nambissan (2009) states that historically members of the lower castes were excluded from education since it was considered as the right and privilege of the higher castes. Schools were legally opened to *Dalit* communities only in the mid nineteenth century. However, the attempts of the lower castes to benefit from education were strongly opposed by the higher castes (Nambissan, 1996).

The Government of India put up measures to bring up these disadvantaged groups in to the main stream of the society, by grouping these traditional caste system into three classes namely General Class, Other Backward Class and Scheduled caste /Scheduled Tribe. The purpose of these governmental classes was to irradiate caste- related discrimination, but it still represents the traditional caste system. After the Independence, the protective measures and the parental aspirations for their children's education has increased the number of *Dalit* children in schools (Nambissan, 2009). However, the situation continues to be severe. Holzwarth et al. (2006) reported that the *Dalit* students are exposed to various forms of daily humiliation, exploitation and exclusion in the schools. UNICEF (2009) reports that "on the one hand these experiences are detrimental to children's self-esteem and self worth; on the

other hand they are likely to have serious implications for their interest and motivation in studies" (Nambissan, UNICEF, 2009).

#### 3. Methods and Results

## 3.1 Influence of governmental class and self-esteem on school performance in India: a multisite longitudinal study

Participants were students recruited from the 11<sup>th</sup> and 12<sup>th</sup> grade from the six schools in India. There were three schools from Madhyapradesh, north India, of which one is girl's schools and other three schools are from Kerala, south India. The participating schools from Madhyapradesh follow CBSE syllabus (Central Board of Secondary Education) and Kerala schools follow State Board of Education (SBE). There were over all 953 students participated, in which 20 had to be eliminated due to unknown school identifier and other 25 due to unknown government classification. The final sample consisted of 908. And N=154 were eliminated due to missing values or covariates, thus the actual sample size was N=754 for the analysis in the first assessment. Among these, N=412 participated in the second assessment. Again due to incomplete data N=90 were eliminated and thus N=322 were included for the analysis of the second assessment. There were only five schools participated in the second assessment.

#### 3.1.1 Procedure

The participating-students were provided with written informed consent prior to their participation. Two contact persons in India printed the questionnaire and introduced to students and supervised the sessions. The information regarding the class affiliation and school performance was obtained from the school records. To complete the assessment students were given 30 minutes and the questionnaires were collected and send back to Switzerland. The Cantonal Ethics Committee (Basel-Stadt and Basel-Land) acknowledged the study protocol and informed consent forms, while stated that local circumstances are to be assessed by local authorities. So we obtained permission from the school principals and from the school management trusties. The measures that are used are: the governmental class affiliation we obtained from the school registration records, school performance – we obtained from the exam-results from the school authority, thirdly parents' monthly income was assessed by a five point measure and self-esteem was assessed by using 10-iteam Rosenberg self-esteem scale.

#### 3.1. 2 Statistical Analysis

In order to assess the specific relationships between both class affiliation and self-esteem, and school performance at the first assessment, and there by controlling for student's gender, age and family income we used multiple linear regression. And separate regression models were used for each of the six schools for this multiple regression analysis. Multiple linear regression contains a random intercept and a random slope for self-esteem but not for the class affiliation, since latter do not significantly improve the model fit. In order to test the class affiliation assessed at the first assessment predicated school performance at the second assessment. Multilevel model used for class affiliation as predictor, controlling for school performance at the first assessment predicted school performance at the second assessment. By using this model with class affiliation as predictor, controlling for school performance at the first assessment, self-esteem at the first assessment and for student's sex, age and family income. This model contained a random intercept and a random slope for class affiliation at first wave.

#### **3.1.3 Results**

Cross-sectional relationships between class affiliation, self-esteem, and school performance

During the first assessment the average school performance strongly varied among the six schools (likelihood ratio=331.4, p<. 001). The M2 was exhibiting highest while K2 exhibiting lowest values. And the interclass correlation for school performance was r=0.43. For each school regression analysis was performed individually and result shows that school performance did not vary among the three class levels except for one school where school performance was highest in the highest-class level and lowest in the lowest class level. The multi level analysis revealed significant differences in school performance among the three governmental class levels when considering all schools together ( $F_{2.742}$ =3.65, p=0.026). The predicted school performance vales were the following 44.4 (SD=4.0), 47.0 (SD=3.6), and 49.0 (SD=3.6) for ST/SC, OBC and GC classes respectively and found increasing with increasing class level. And the effect size of these differences were d=0.68 between ST/SC and OBC. The relationship between self-esteem and school performance, adjusted for all covariates and for caste affiliation, did not reveal clear pattern. So the relationship was positive in two schools and negative in one school while not significant in three schools. By combining all six schools multi level model revels that there is no significant relationship between self-esteem and school performance.

12Longitudinal relationships between class affiliation, self-esteem, and school performance

There was no significant relationship between class affiliation at the first assessment and study performance at second assessment for each individual schools (p>.16 for any school) and also when combining all schools by using a multilevel model ( $F_{2,310}$ =0.371, p=0.690). The predicated school performance vales were 44.4 (±6.3), 46.2 (±6.0), and 45.4 (±6.0) for SC/ST Class, OBC Class and General Class levels, respectively. The stability between two schools performance between the two assessments were high (b=0.61, SE=0.042, t(310)=14.6, p<.001).

#### 4.1 Psychometric evaluation of BFI and NEO FFI on Indian adolescents

There were 933 students at the first assessment and 405 students for the second assessment in BFI studies with the time gap of five to nine months. Participants were recruited at the 11<sup>th</sup> and12th grade aged between 15 to 19 years old from the private secondary schools in India. For the NEO FFI students were recruited three selected schools from south India and one school from north India. There were 449 students aged 16-17 participated. Permission was obtained from the schools authorities. Although cantonal ethics committee were not directly responsible, since study was done in India they approved the study. The governmental affiliation and school performance were obtained from the school registration as well as exam mark list or the percentage from the schoolteachers respectively. The socio economic status as well as only income (as an approximate of the first) correlates with school performance (White, 1982). Therefore parents' monthly income was added as a control variable in the regression analysis. It was evaluated using five- point measure ranging from 1 (0-5,000 Rs) to five (more than 100,000 Rs)

#### 4.1.1 Procedure

The native Indians translated the questionaries' into regional language in Switzerland. The questionaries' were sent to the contact persons in India together with guidelines. The schoolteachers were assigned to the task of collecting the data under the supervision of two contact persons. Students were given 30 minutes to complete the questionnaire. Then the contact persons collect the questionnaire and send back to Switzerland. The questionnaires were distributed and collected by the instructed teachers during school hours.

#### **4.1.2 Statistical Analysis**

It was performed by using IBM SPSS Statistics, version 20. The Cronbach's for each personality traits was calculated and test-retest correlations were determined. Then the principle components analyses (PCA) were conducted to explore the structure of the BFI-10 and NEO FFI. Hierarchical regressions at Time-1 and Time-2 were computed to examine the association between the traits and school performance. And sex, age, school (six-level categorical variable at T1 and five-level T2), parent's monthly income and class (three-level categorical variable) were controlled.

#### 4.1.3 Results

Psychometric properties of the BFI-10 and NEO FFI 3

The result of the psychometrical analyses for each shows very low reliabilities of all personality traits such as T1 the interpretable Cronbach's alphas ranged from .14 (Agreeableness) to .47 (Openness), at T2 from .18 (Extraversion) to .53 (Agreeableness). The Openness at T2 was excluded from further analyses due to the negative Cronbach's alpha. In order to assess test-retest stability Pearson correlations between the respective personality dimensions measured and calculated at T1 and T2. And the Coefficients over five to nine months ranged around zero, which shows no stability overtime.

In hierarchical regression analyses the control variables explained 45% of the variance in school performance at T1 and 70% at T2. The highly significant contributions of several schools at both times indicate a big impact these control variables. In the second step the five personality traits were added to T1 and the four personality traits with interpretable Cronbach's alpha scores at T2 into regression equation, which did not significantly improve the variance explained neither at T1 nor at T2. At T1 conscientiousness as the only personality trait, that contributed independently and significantly to school performance at significance level of  $\alpha$ =5% ( $\beta$  = .06, p = .042).

#### **5.** General Discussion and Limitations

The main focus of my study was on the Influence of Indian caste system on school performance and self-esteem. In order to achieve this goal at first we did a literature review, which clearly indicates the bitter consequence of caste system on Indian adolescents, which in turn reduces the quality of education in India. And showed ineffectiveness governmental effort to tackle the issue such as reservation system. Then I did a multisite longitudinal study

on the influence of governmental class and self-esteem on school performance in India second study. The result shows that there is no significant overall relationship between self-esteem and school performance and also found school performance significantly differed between governmental class. Since personality was one of the important factors for school performance, I set out to analysis psych-metric effect of BFI-10 and NEO FFI-3 60 items questionnaires. The result showed very low internal consistency therefore, BFI and NEFO FFI-3 cannot be replicated for the Indian adolescents.

### 5.1 Importance and Impediments of education in India: Proposition of a merit-based and social-stratification insensitive approach (Publication in Press)

Education system that of functional and effective is important for the economic as well as societal development in India. However it is to be noted that, often the success and the quality of education impeded by India's cultural based social stratifications. Though the Government of India introduced reservation system, which is basically, quota based affirmative action but grounded on backwardness of the caste rather than the quality and the family income of the student (Laskar, 2010). So in order to tackle these issues I propose structural as well as psychological measures. Regarding the current reservation system I propose to revise from being merely grounded on class or caste affiliation to being merit as well as income-based. And to tackle the psychological consequence caused by the social-stratifications. I propose approaches and actions to foster social connections and sense of belongingness, which in turn can reduce the psychological consequence of social-stratification in Indian education and thus to foster caste/class-insensitive education. Thus the merit-based and social stratification – insensitive education covers academic, economic as well as psychological perspectives.

# **5.2.** Influence of Governmental class and Self-esteem on School Performance in India: A multisite longitudinal study

If India has to emerge as a developed country, it needs to wrestle and retract the sensitiveness its educational system for social stratification. As mentioned above Indian social stratification impedes India to be a developing nation. So I did a multisite longitudinal study on the influence Governmental class and self-esteem on school performance in India. The result shows that the school performance significantly differed between governmental classes, as it indicates with lowest grade in lowest class and highest grades in highest class. The result

contradicts another study conducted in India by Goyal and Singh (2014), which shows OBC students perform either on par or better than the general category students in professional courses. The reason could be students in professional courses follow a different syllabus. Governmental classification was also based on socio-economic status. And one of the factors that influence academic performance are socio-economic factors and education of the parents (Teodor 2012;Farooq et al 2011). A study conducted in India, Chennai among 96 students from state board education at secondary level shows a significant and positive relationship between school performance and socio-economic status (Franky and Chamundeswri 2014). Present findings substantiated by these studies.

Regarding Self-esteem, in the multilevel model shows no significant relationship between school performance and self-esteem, while other studies conducted in India contradict our findings (Bhagat, 2016; Jasmine 2015). A study conducted in South India, Mysore in private as well as in governmental schools on 9th grade students shows a positive relationship between self-esteem and academic achievements (Vishalakshi and Yeshodhara 2012). The participated schools from North India and South India follows two different syllabuses namely in North India, CBSE (Central Board of Secondary Education) while South Indian schools follow State Board Syllabuses. These distant school syllabuses and the significant numbers of students from OBC and General class who are socially and economically forward might have influenced the result. Often CBSE syllabus give education in more scientific way while State Board syllabuses gives more importance to practical aspects of related subjects. The collective nature of the Indian society might have caused our present finding. Confirming this argument a study conducted on 5,000 teenagers and young adults in 19 countries shows that irrespective of our personal values, often people base most of their self-esteem on the fulfilling the governing values of the society (Paris Michel-Ange 2014).

#### 5.2.1 Limitations

There were also limitations in our study. The schools were randomly selected and often schools in the private sector are more affordable to OBC and General class students than for low class students. So there were insignificant numbers of students from low caste (SC/ST). As mentioned above selected schools were following two different syllabuses. And the cultural and linguistic difference in South India and North India was also another factor that influenced our study.

# 5.3. Psychometric Evaluation of the Big-Five Inventory-10 and the Neo- Five Factor Inventory in Indian Adolescents

Personality traits are one of the important factors for education and as for India education is important since, India is leaping into a developed country in near future. Therefore, in this study, I evaluated the psychometric properties of Big-Five Inventory (BFI-10) and NEO FFI-3 60 items personality questionnaire in Indian adolescents. My study shows that BFI10 items and NEO FFI-3 items are seems to be inadequate for Indian schools because it shows weak psychometric properties. The BFI-10 indicates very low Cronbach's alpha and no test-retest stability and NEO FFI-3 also show very low Cronbach's score. I examined PCA to explore NEO FFI-3 on Indian adolescents and found the eigenvalues of all five components very low. It indicates that the expected five-dimensional structure could not be replicated in Indian adolescents, which contradicts other studies examining the NEO FFI-3 60 items in India (Hafiz 2016;Sharma 2011;Dubey et al 2010). By examining the association between school performances with NEO FFI-3 personality traits, I found Conscientiousness and Agreeableness was significantly and positively related to school performance. And these findings validated by a study conducted in Australia by Heaven et al (2002) on adolescents. And Openness, Extraversion and Neuroticism are found to be not significantly correlated with school performance. These findings are supported by the studies conducted by Heaven et al (2002), Schuerger and Kuna (1987) and Hafiz (2016).

By conducting PCA for BFI-10 three traits out of five at T1 and two out of four at T2 were classified and found very low eigenvalues. It shows that the expected five dimensional structures could not be replicated on Indian Adolescents, contrasting other studies, which examines BFI-10 in the Western World (Rammstedt & John 2007;Rammstedt et al 2013). And also unlike the studies inspected the Big Five in India with longer questionnaires (Lodhi et al 2002;McCrae &Costa 2008;Schmitt et al 2007). The BFI study also examined the association between school performance and personality traits. The study found that the correlation between school performance and personality traits were very small and only few became significant, though investigating this association is questionable, since the personality was not reliably tested. Again in hierarchical regression, I found that there was no overall effect of the Big Five on school performance. It contradicts the Western studies, which credits Big Five as a significant part of the variance in school performance (Farsides T., & Woodfield R., 2003; Furnham, Chamorro-Premuzic, McDougall, 2003; Kommarraju, Karu, Schmeck &Avdic 2011). Conscientiousness was found to be a significant on school performance at T1 (Furnham, Chamorro-Premuzic, McDougall, 2003a, 2003b; Furnham, Chamorro-Premuzic,

McDougall, 2003; Laidra, Pullmann & Allik 2007; Poropat 2009). The other missing five-dimensional structure and not emerging effect on school performance due to the low-reliabilities of the BFI-10 subscales (Vul, Harris, and Winkielman & Pashler 2009). Former studies indicate smaller variance in the Big-Five traits in developing countries including India (McCrae Terracciano et al 2005; Schmitt et al 2007), which also may reduce the correlations with school performance.

My study found very low Cronbach's alpha score for BFI Personality. The reason is that there are only two items per trait and they are explicitly chosen not to be too close to each other, one could question the adequacy of calculating Cronbach's alpha scores for internal consistency (Rammstedt & John 2007;Rammstedt et al 2013). The test-retest stability was around 0 over the period of 5 to 9 months on this sample. While, the findings of Rammstedt and John (2007) and Rammstedt et al (2013) who found a respectable stability ranging between .41 and .84 after six to eight weeks in USA and Germany. The stability may reduce in longer timespan in our sample but in the Western world personality traits are normally found to be stable over much longer period (Terracciano, Costa & McCrae 2006).

#### 5.3.1 Limitations

There are two categories of psychometric test Knowledge based and Person based tests. Knowledge based test consists of numerical reasoning and verbal reasoning while, the latter focused on pre or post unhealthy changes in habitual or temperamental or regular patterns of behavior in an individual (Venkatesan 2010). It clearly indicates that addressing the cultural and linguistic factors in psychometric measures are important (Triandis et al 2002; Aggrawal 2009). In our present study, I had to face certain translation and comprehension problem, which limited my findings. The translated questionnaires at Time 1 are written rather complicated language (high/classical literature) that made difficult for the students to understand statements mentioned in the questionnaire unlike the translation done in Marathi by Lodhi et al (2002) but the samples were post-graduate students. In the NEO FFI-3 study, we faced the same issue, though the translation was based on essence than the literal, still there was a misconception in translating the questionnaire due to the grammatical form in Malayalam language from the original. Such as: 'I am not a worrier' is translated into Malayalam 'I am not a problematic person'. Secondly, in clinical setting the validity of an out-come of psychometric depends on the sensitivity to behavior change. Scale may be valid and reliable, but it may still lack sensitivity (Venkatesan 2010). India being a multicultural society a special care is required on cultural sensitivity. Thirdly, The statements which questionnaires contain more applicable to Western society than of Indian society, moreover Indian concept of personality interpreted in terms of Indian philosophy that comprises religious factors. Often, Indian society centered mainly on the society/community than the individual. In an individualistic culture person focus on the traits in their inferences about the behavior, whereas in collective culture more focus is on the contextual factors. And in collective culture often exhibits less temporal and cross-situational consistency in their behavior. The behavior of the person often predicted from the social rules and norms and individualistic culture from the assessment of the internal dispositions. Due to selfenhancement tendencies in individualistic culture, self-assessment can be distorted, while in collective culture it will be self-effacing tendencies (Church 2000; Surbhi 2015). Finally, the participating schools in Madhya Pradesh follow Central Board of Secondary Education (CBSE) and Kerala schools follow the State Board of Education (SBE) syllabus. The main difference between CBSE and SBE syllabus is that the former is under the superintendence of the Union Government of India, whereas the respective State Government and thus, the study of regional languages undertake the latter and culture is encouraged. Based on these assumptions, it shows that the societal and religious factors have influenced the result.

#### 6. Conclusion and Implications for future research

In spite of the limitations, this dissertation contributes a developing research in the Indian Education system. Present theoretical review(Thaiparambil, Waldmeier and Kunnel John, 2017 –in press) analyses, psychological and societal issues in the field of education in India. As mentioned above education is an inevitable factor for a developing country because it boost up the economy of a nation. India is a fast developing country and today India stands best in the aerospace engineering, but the education system in India system still lag behind in comparison to other BRIC nations. This laming education system impedes India to be a developed nation. The main stumbling block in Indian education is the low quality of education system and the influence of Indian social stratification. The most importantly major issue India faces today is the inequality based on caste. In order to tackle this issue our study proposes a merit-based and social stratification –insensitive education. A merit-based reservation system calls for a renewal of the present governmental reservation system, from the socioeconomic factors to a family income and merit of the student. This revised reservation system can uplift the quality of Indian education system. Encouraging social

connectedness and belongingness in education institutions can foster social stratification-insensitive education system.

Personality traits have an influence on school performance. So the aim of my second study was to evaluate the psychometric properties of Big Five Inventory and NEO FFI-3 personality questionnaire on Indian adolescents. Though BFI and NEO FFI have been used in India, which showed good internal consistency on postgraduate students, while, in the present study it showed poor internal consistency with the adolescents in India. The major reasons for such a result is the linguistic issues such as misinterpretation of the language that occurred in the translation. Secondly the statements in the questionnaire do seem not very much relevant to Indian culture and society. For: example: I am productive person who always get the job done. An average Indian adolescent may not understand these statements since, unlike the western countries in Indian society rooted collectivism often personal responsibilities are shared and depended on the group or family. Thirdly, the participated students in our study were from the rural and interior village of India, where the skills in language both in original (English) and regional (Malayalam and Hindi) may be questionable due to different dialect. Finally BFI and NEO FFI questionnaire more adaptable to individualistic, since, in a collective society children are often learn to conform and identify closely with a group or family. So in order to have validated psychometric properties of BFI and NEO FFI future research one have to consider the characteristic of a collective society such as more focus on context especially multicultural -linguistic nature of Indian society.

In my multisite longitudinal study on the influence of Governmental class and self-esteem on school performance shows that overall there is no significant relationship between self-esteem and school performance. The present findings pose a question on the importance of self-esteem in Indian society. India is multicultural society, where family, traditions and religions have upper hand. In western culture teens were given more freeodm such as allowing them to hold a part-time job and other activities while in Indian or eastern society it happens much later. The difference of this parenting in a collective society may not encourage personal independence. The childern in the collective society show individualistic tendencies, but often such tendencies are not well accepted in a collective society. Above all, in collective society, people are independent within their groups or family, often priority is on the common goal of their groups. This shows that the importance in a collective society has been always on the group or society not on person. Another reason could be factors that influence the self-esteem of the adolescent are the environment a child lives. A longitudinal study conducted by Raevuri et al (2007) on Finnish twins aged between 14 to17 shows that environmental and

genetic factors have been an influence on the development of the self-esteem in adolescent. Adding to this the quality of the schools also includes strong educational leadership, emphasis on basic skills, safe and orderly environment of the schools and frequent evaluation of the pupil's progress also influences school performance and self esteem of the students (Sylva, 1994). Thus, the collective nature, quality of the schools and environmental factors of the Indian society might have influenced our study.

Regarding the school performance, the difference of syllabus might have influenced our findings as mentioned. Findings also shows overall there is no significant relationship between school performance and governmental class but individual leveal it differs. The reason could be as mentioned most of the students were in the study from OBC and General, who are socially and economically sound. Thus it is undoubtedly proved that socioeconomic factors have influence on school

The major issue India faces today in education system is the influence of social stratification /caste system which not only brings down the quality of education but also creates psychological consequences on the future generation. Despite of all the limitations, study throws light into areas where education has to give more attention, such as Merit based reservation system, social-stratification insensitive education system and also suggests validated psychometrics of personality traits adaptable for Indian Adolescents. Finally, from the perceptive of my present study I assume that education is the light that can dispel the darkness of caste-feelings from the human mind. Therefore, the future study in the field of Indian education system should have a special attention on the multicultural nature of Indian society and also the different academic syllabuses.

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#### 8. Appendix

#### **CURRICULAM VITAE OF THAIPARMABIL XAVIER BOBY**

#### PERSONAL INFORMATION

Name: BOBY

Sirname: THAIPARAMBIL XAVIER

Address: MÖRSBERGERSTRASSE 34

**4057 BASEL** 

Nationality: INDIA

Date of birth: 15.02.1974

Place of birth: MANJUMMEL, ELOOR, INDIA

### **EDUCATIONAL QUALIFICATIONS**

High School Education: Fact Township High School

BA English Literature: 1995-1997, Mahatma Ganndhi University, Kerala

MA Christian Studies: 2004-2007, Madras University

MA Spirituality and Counselling: 2006-2008, Dharmaram Vidya Kshetram

Diploma Parapsychology - 2015, UK College of Holistic Training

#### WORK EXPERIENCES

Counselling Psychologist in Manjummel Hospital, Kerala;

School counsellor: St. Treasa's School, Gwalior and Infant Jesus School,

Varaphuzha, India.

Counsellor – Aswas Counselling Centre (Arch Diocese of

Varapuzha, Kerala, India)

## LANGUAGE PROFICIENCY

Malayalam, English and Hindi and German

# **SPORT**

Badminton, Volleyball

## **HOBBIES**

Travelling and Reading

| IMPORTANCE AND IMPEDIMENTS OF EDUCATION IN INDIA: PROPOSITION  |
|--|
| OF A MERIT-BASED AND SOCIAL-STRTIFICATION INSENSETIVE APPROACH |
| (in Press)   |

Boby Xavier Thaiparambil, MA; Anja Waldmeier, MSc; Roshin Kunnel John, MA, M Phil; Jens Gaab, PhD

Division of Clinical Psychology and Psychotherapy, Department of Psychology, University of Basel

Corresponding Author

Boby Xavier Thaiparambil, MA, Division of Clinical Psychology and Psychotherapy,
Department of Psychology, University of Basel

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Caste system, Social stratification, Education

### Abstract (147 words)

Social stratification is a severe impediment for education in India and the current approach with reservation quotas is not effective and even diminishes the quality of education. The complex system of social stratification in India poses a sensitive context for education and requires particular consideration. Social stratification in India exerts its effect through both economical as well as social-psychological pathways, so a possible remedy needs to consider both of these mediators and their possible interactions. To counteract the possible detrimental effects of the social stratification in India, we propose that the current reservation systems should be revised from being merely grounded on class or caste affiliation to being merit- as well as income-based. Also, actions to foster social connections and the sense of belonging should be considered as a feasible and important measure to overcome psychological consequences of social-stratification in Indian education and to foster caste/class-insensitive education.

#### Introduction

One of the most important factors for societal and economic development is education. But while the assumption that "Education is a Nation's Strength" (Shaguri, 2013) in general is undisputed, a mere equation of education or school attainment with development might seem unwarranted. In this regard, Hanushek (2013) stresses the importance of the schooling quality, which is harder to achieve than the provision of schooling infrastructure and access. From a historical perspective, the establishment and expansion of schooling is driven and influenced by the ideological as well as political context (Easterlin, 1981). Thus, not only do determinants of school quality and performance play a crucial role for education to drive societal and economic development – especially in countries and regions with improved school provision and attainment in face of a lagged economic development – but it can furthermore be assumed that there is a mutual dependency between education and societal development. Here, a focus on India is informative.

The Indian education system has a long tradition, which dates back to the Gurukula tradition and which was limited to the higher social strata of the society and was primarily focused on learning the sanscrit language and matters of religion. However, its current form is framed after the model of European education system (Kumar, 2017). From the colonial days, English language gained importance along with other languages and became, in the contemporary India, the single most important factor in higher education. At present, education is being governed by both central and the state boards in a parallel fashion. While India is considered a fast developing country despite its efforts to improve the education system, progress is still laming due to a number of facts like poor infrastructure, inadequate faculty, poor quality of teachers and lack of financial resources (Government of India, 2015). Furthermore and importantly for India, a major issue that India faces today in the field of education has been the inequalities based on caste, ethnicity and gender (Shaguri, 2013).

Thus, we argue that attempts to enhance the development of education in India is on the one hand substantially impeded by the detrimental effect of caste and social stratification, while on the other hand attempts to shelter its students from these influences would substantially enhance schooling quality. Therefore, the current scenario of Indian education system is examined in the light of the caste and class stratification and alternative pathways to handle their impeding effects on education are proposed. This entails an exploration of the influence of education on the sustainable development of the nation and the impact of social stratification and the current system of reservation on this process through the review of available empirical studies, position papers, newspaper articles and the education policy of the Government of India and United Nations. This is followed by the proposal of a merit based and caste/class insensitive approach as an alternative to overcome the impediments of the current system of education in India. Finally, limitations of the findings and implication for future research are discussed.

#### Socio-economic stratification in India

The Indian caste system can be defined as a system of social stratification, which divides the society into groups based on its members occupations and is closely associated with Hinduism (Berreman, 1972; Singh, 2009). For uplifting these disadvantaged groups the Government of India has transformed the traditional caste system into three classes, i.e. General Class, Other Backward Class (OBC) and Scheduled Castes/Scheduled Tribes (SC/ST). The major differences between caste and class are that the membership in the caste is given by birth and that caste is a closed group characterized by endogamy whereas class is an open group. Also, in the class system vertical mobility is possible, such as a person can move higher and go down, whereas in caste there is no such mobility. Finally, a given class can be distinguished from another class on the basis of economic criteria such as income,

occupation whereas caste are based on religious and mythical traditions and may have hereditary and traditional occupation (Laskar, 2010). But although the governmental classes are thought to replace castes and in consequence to eradicate caste-related discrimination, classes still represent basically the caste system, since class assignment is based on sub-caste affiliation instead of individual socio-economic status (De Zwart, 2000). Thus, the so-called untouchables (Dalits) are assigned to SC/ST, other socio-economically unprivileged castes, such as shudras are grouped into OBC (De Zwart, 2000) while members of the highest caste being assigned to General or Forward class (Chauhan, 2008). The OBC and General Class are assigned on the basis of socio-economical and education criteria from Hindu religion and the groups in other religions are also assigned to these classes. Accordingly, the Mandal Report noted that "in the traditional Indian society social backwardness was a direct consequence of caste status" (Government Of India, 1980 p.22, as cited in De Zwart, 2000).

As the result of Indian Constitution's interference in 1950 higher caste lost the privileges they enjoyed and the lower caste gained more attention from the government in favor of their right for equality (Chaturvedi, 2007; Galanter, 1963). Historically, caste affiliation determined the legal rights and obligations as well as secured the power of caste system to make rules for itself and constitute tribunals to enforce these rules, without being controlled by the government. However, the 1950 constitution of India put forward a new order with regard to castes in Indian society and the role of law for regulating it by personal law with law of uniform civil code, which assures equality in the society and made enforcement of disabilities a crime, punishable by imprisonment or fine.

In consequence and in order to reduce inequality in Indian society, the Government of India introduced counteracting or alleviating policies, such as the reservation system. Being basically a quota-based affirmative action, the objective of the Indian reservation system is to uplift social and educational opportunities for underprivileged communities. But although governmental polices set out to reduce the inequality and discrimination by reservation, it did

not fully met its incentive (Mili, 2016). For example, The Times Of India (2014) pointed out that only 10% of eligible students have access to higher education in India and that the poor and deprived are still trapped in low quality of education. Also, according to the UNICEF report, lowest-caste children in India experience severe discrimination in education; which in turn has negative impacts on self-esteem and academic performance (Nambissan, 2009). Accordingly, the India Exclusion Report (2013-2014) states that "children who spend a greater part of the day in school, experience discrimination, neglect, active biases and prejudices, and ill-treatment from teachers and peers, (which) often results in a decision to drop out or frequently absent themselves from the schools" (India Exclusion Report 2013-2014) and a study conducted in Karnataka, south India on low class female students shows that they often face exclusion on the bases of caste and their poor academic performance (Bhagavatheeswaran et al 2016).

In India – and especially in urban areas – education has led to economic growth, created job opportunities and increased income and by thus helped people to rise above their birth and background. But in spite of all hopeful development, still the social order remains immutable and low caste are locked firmly into place by birth and governed by the rigid structure of social rules or as the New York Times put it: Caste is not past (The New York Times, 2013).

Education is humanity's best hope and most effective means in quest to achieve sustainable development (Pramling Samuelsson, 2008).

According to the UNESCO, education is at the root of sustainable development, impacting diverse areas of global importance, such as biodiversity, poverty reduction, gender equality, health promotion as well as peace and human security (United Nations Educational, Scientific and Cultural Organization, 2014). Therefore ensuring and improving education has been and still is a main stake in the United Nations Millennium Developmental Goals (Goal 2: Achieve

Universal Primary Education, 2000-2015) and the current Agenda for Sustainable

Development (United Nations Development Programme, 2016). But how does education lead to development in developing countries? In the following, examples of its wide effects are given.

First, education has profound effects on productivity. For example, Lockheed et al. concluded on the basis of a survey study in 18 low-income countries that four additional years of elementary education increases farm productivity up to average 7.4% (Lockheed, Jamison, & Lau, 1980). Also, a study conducted in Lao PDR indicates that primary or lower secondary education increases the chance of accessing the market of up to nearly 20% in farmers (Onphanhdala, 2009). Education also benefits equal distribution. Analyzing an international data set covering the last 30 years, it was shown that high educational attainment and equal distribution of education are important determinants of equal income distribution (Gregorio & Lee, 2002). In this regard, education has to be considered as a necessary social capital as the economic and social development is closely linked with higher education (Beissenova, Duisenova, & Muslimova, 2013). Again, this is of particular relevance for developing countries, since countries investing in higher education are associated with higher increases in labor productivity and long-term economic growth (Bank, 1994). To illustrate this, a study combining longitudinal data on changes in infrastructure and enrolment in Kazakhstan with qualitative focus group interviews showed that the education of a person is seen to be significantly related to future level of income and social status (Beissenova, et al., 2013). Furthermore, education exceedingly is interrelated to democracy through civic participations, such as voting and organizing (Glaeser, Ponzetto, & Shleifer, 2007). Education also impacts on reducing poverty. For example, a study conducted in India showed that post-elementary education has a significant role in reducing absolute and relative poverty by increasing agricultural development in rural areas that in turn boosts economic growth (Tilak, 2007).

But with regard to these positive effects of education, it needs to be acknowledged that although education requires a certain basic quantity in terms of infrastructure and numbers of teachers, it is quality of education that is essential for the economic development of a country (Barro, 1996; Hanushek & Woessmann, 2007). For example, a study conducted in Madhya Pradesh (India) shows that the effects of schooling strongly depends on teachers skills and behaviors, such as the frequent use of black-board when teaching, an interaction-focused teaching style, giving and checking class and home works regularly as well as the revision of the previous lessons (Govinda, Varghese, & Carron, 1993). This is also reflected in current debates on quality-based education in India, such as teacher training and betters learning facilities. In this regard Narendra Modi, Prime Minister of India stated "So far, the government's focus was on spreading education across the country. But the time has now come to shift the focus on the quality of education. Now, the government should emphasize more on learning rather than schooling" (The New Indian Express, 2016). Considering that the Indian economy strongly depends on number of education-sensitive factors, such as macro economic environment, quality of public institutions and technology, use of information and communication technologies, and innovation and technological adaption (Sreenivasulu, 2013), education needs to be considered a powerful and available instrument to shape a knowledge-based society in India (Ministry of Human Resource Development, 2008).

Determinants of education in developing countries

Considering that both the quantity and quality of education is important for development, what are the determinants of education, especially in developing countries? According to the United Nations, there are a number of decisive factors that influences education in developing countries, such as poverty, gender equality and health issues (United Nations, 2005). The importance of these factors will be exemplified with respect to the educational as well as the students' characteristics in the following.

First, there is a substantial relationship between the provision of adequate educational facilities and academic achievement. For example, a study conducted at Zimbabwe University reported that access to Internet is positively related to educational performance (Nyikahadzoi, Matamande, Taderera, & Mandimika, 2013). Furthermore, a study conducted in Sokoto, Nigeria on the relationship between the school environment and academic achievement in higher secondary school shows that the teacher's experience enhances the competency in teaching and increases the output quality of the student (Aruwaji, not dated). Accordingly, a study conducted in Madhya Pradesh, India also points out that the facilities in the school and the quality of teaching, can have effects on the academic performance only when the students are effectively engaged in learning activities (Govinda, et al., 1993). Also, the ability to accommodate students according to their needs is another important factor in the academic achievement, as students placed in the age-appropriate class performed better in a study conducted in Nigerian schools (Abdullahi, Mlozi, & Nzalayaimisi, 2015).

Furthermore and especially relevant for India, the question arises whether socio-economic factors have an influence on academic achievement. Farooq et al (2011) reasons that with regard to characteristics of the students and his background, socioeconomic as well as psychological factors exert a strong influence on education (Farooq, Chaudhry, Shafiq, & Berhanu, 2011). This is exemplified by a study conducted in Nigeria, showing that parent's visits to schools, pocket money, education of the parents, parent's occupation, residential type and family feeding positively affected student's academic performance (Abdullahi, et al., 2015). A study in private colleges in Rawalpindi and Islamad, Pakistan further provides evidence for the importance of familial education, with communication skills such as fluency in English as well as support and guidance of students by their parents having an impact on academic performance of the students (Mushtaq, 2012). These results are in line with reports that the size of the family negatively influences the female attendance in schools in India,

because as family becomes larger, elder daughters have to stay at home and carry out household matters (Jaychandran, 2002).

Consequential to these socioeconomic factors, psychological factors also play an important role on academic performance. Here, the relationship between self-esteem and school performance has been addressed in many studies, however with mixed results (Huang, 2011). While on the one hand the relationship between low self-esteem and poor school performance in general has been confirmed repeatedly (Bankston & Zhou, 2002; Harter, Whitesell, & Junkin, 1998), others have questioned causal role of self-esteem (Pullmann & Allik, 2008). For example, a study conducted among 10th grade high school students in United States noted that self-esteem only had a small effect on academic achievement (Bachman & O'Malley, 1986). However, recent studies conducted in developing countries highlight the reciprocal relationship between self-esteem and academic performance. For example, a study conducted among pre-university students of Qaemshahar, Iran shows that level of self-esteem is an important factor for academic performance as students developing high self-esteem also increase their academic performance (Aryana, 2010). Also, in another study conducted in Pakistan, Lahore shows that socioeconomic status has a significant impact on the students' performance in school, with higher self-esteem leading to higher study performance (Farooq, et al., 2011). Noteworthy, Vishalakshi et al. (2012) reported that high level of self-esteem brings a high level of confidence, which in turn improves academic performance among standard IX students from government and private schools in Mysore, India. Furthermore, they observed that self-esteem itself is strongly influenced by the socio-economic status of parents as well as a friendly and beneficial atmosphere of the schools (Vishalakshi & Yeshodhara, 2012). Another empirical study conducted in Kualampur, Malaysia shows that self-esteem is one of the key factors that influence students' academic performance with students displaying higher self-esteem performing better in their academic matters (Rosli et al., 2012). This is supported by a study conducted in Haryana, India among 175 higher

secondary students, study shows that there is a positive and significant relationship was existing between self esteem and family environment and found no significant relationship between self-esteem and socio-economic status (Singh & Bhatia, 2012) Also, a study conducted in Raipur, Utter Pradesh, India reported that students from low-income families, i.e. with less than 50'000 Rupees per year, have less self-esteem in comparison to those from families with higher, i.e. .1'00'000 Rupees and above (Mahapatro, 2016) and a study conducted in Rajkot, Gujarat, India among college students found that students with high economic status have higher self esteem than students with low economic status (Parmar, 2014). Also, a quantitative and qualitative study conducted in India among college students between 18 to 23 years of age shows that academic pressures, understood as expectations of the parents, teachers and the students themselves, exert a negative influence on self-esteem (Jain & Dixit, 2014). These findings reflect the context-dependency of self-esteem, which is often formed around familial, work-related and organizational experience (Pierce & Gardner, 2004; Pool, Wood & Leck, 1998).

With regard to the statement that "self-esteem occurs not simply as a result of knowledge of one's location in a status hierarchy but, more important, as the result of the frequency with which one is reminded of that location" (cited from Faunce, 1989, page 378), the relevance of social stigma needs to be addressed. The Indian Express, considered the leading Indian newspaper, reported that – 66 years after officially banning caste discrimination – the Indian school education system still is in the clutches of caste discrimination as SC/ST children are often discriminated from other students (The Indian Express, 2012). To complete this picture, The Hindu (2012) reports that high-caste Hindu students are often seated separately from low-caste students in classrooms, which creates an intimidating atmosphere among low caste students, and a recent report in NDTV (New Delhi Television Limited) concludes that caste discrimination happens even in higher education as well as in PhD studies (Press Trust of India, 2016). As a consequence, Geetha Nambissan, Professor of Sociology and Education in

Jawaharlal Nehru University, New Delhi argued in a UNICEF report that "(....) these experiences are detrimental to children's self-esteem and self-worth (...) and likely to have serious implications for their interest and motivation in studies (Nambissan, et al., 2009).

Reservation: An effective way to improve education?

As shown above, education is an important factor for developing countries, impacting on growth of the economy, agriculture and equal distribution of the income (Shaguri, 2013). This is especially true for India, where education has been identified as one of the main contributors of economy development (Sreenivasulu, 2013). However, while quantitatively India is inching closer to universal education, the quality of its education is still questioned and by large influenced by socio-economic factors, such as education of the parents, income of the family and healthy, safe, protective and gender sensitive school environments (Sadig, 2000). Thus, these socio-economic factors are both impediments as well as possible stepping-stones for the improvement of education in India.

As mentioned above, the Indian caste system is a system of social stratification, which is closely connected with Hinduism and which divides society into groups based on its members' occupation (Berreman, 1972). But even though the Government of India in 1950 has abolished the traditional caste system and introduced governmental classes (see above), the caste system still acts as a hidden separator, since class assignment is based on sub-caste affiliation instead of individual socio-economic status (De Zwart, 2000). To counteract the negative discrimination and to uplift the social status of the lower castes – which is especially dire for those considered as born out of the Varna (Sanskrit for caste) scheme, i.e. the Dalits or untouchables – the Indian government began to implement protective measures through reservation quotas in higher education such as university studies and in government jobs for socially, educationally and economically backward castes (Department of Higher Education,

2016) This measure is anteceded by cost free education for the low-class students from 1st to 12<sup>th</sup> class, thus from 6 to 14 years of age (Ministry of Human Resource Development, 2016). Along with these reservation quotas, the Government of India also offers education loans and full financial support for the low-caste students (Ministry of Social Justice and Empowerment, 2016). But is this positive discrimination effective and/or sufficient? The recent report in The New Indian Express states that only a small percentage of SC/ST and OBC members are enjoying the provisions of the reservation system, while the majority of the low caste members still suffers the consequences of their low social status (The New Indian Express, 2014). With regard to education, positive discrimination does not appear to make a substantial impact for members of lower class or caste. For example, a survey study conducted in India showed that Dalits and Tribes do not benefit from this positive discrimination, with no improvement on education and even a decline of college graduation rates among Dalits (Desai & Kulkarni, 2008). Also, a study on the the impact of positive discrimination in India in targeted groups found that the reservation system does not help students from low governmental classes, but that improvements in education is rather more a consequence of a general improvement of the supply of schooling (Cassan, 2011). To ensure the exclusive provision of affirmative actions for those in need, the Government of India introduced the so-called *creamy layer* in 1992, stating that the relatively wealthy (i.e. 1'500'000 Rupees per annum) and better educated members of the OBC and ST/SC castes are not eligible for the government sponsored educational and professional benefit program. However, this restriction of benefits might only be consequential for the recipients, but not for the aim itself, since there is no evidence that the *creamy layer* disproportionately benefits from the affirmative action program of the government at the cost of their lower counterparts (Desai & Kulkarni, 2008).

Besides the lack of benefits on educational outcome, the reservation system has wider consequence on education. In order to ensure access for reservation group in colleges and universites, marks needed by eligible students are lower than those of higher classes (Robert, 2013). With regard to this, Mehbubul Hassan Laskar – Adovocate at the Supreme Court of India – assumes that "to sympathize whimsically with the weaker sections by selecting substandard candidates, and that also in the higher level of education, is to punish the society as a whole by denying the prospect of excellence" (Laskar, 2010).

Consequently, it has been argued that reservation quotas in the long run affect the quality of Indian education. For example, reservation neglects people's ablity and intellect directly as it allows people with lesser marks and lesser quality to get admission for higher education. The admittance of students with lower quality thus reduces quality of education, since higher education needs high skills, proficency and excellency. According to Laskar (2010) the demerits of the reservation system are twofold. First, it impedes of the development intellectual abilities of the low caste, because it creates a less competitive spirit among the students from backward class. Second, the reservation system prevents the progress of the nation, since it pulls away the meritorious students from higher education. Thus, the reservation system dishonours the right of the meritoious people to get admission for higher education or job because reservation system does not recognize fair competition (Anita, 2014).

Merit-based and social stratification-insensitive education: A proposition

Given that social stratification is a severe impediment for education in India and that the current approach with reservation quotas appears not to be effective and could even diminish the quality of education, there is need for improvement. Therefore, we propose a different approach. Social stratification in India - regardless of being based on governmental or

religious classifications – exerts its effect through both economical as well as social-psychological pathways, so a possible remedy needs to consider both of these mediators and their possible interactions. In the following, our proposition will be described, borrowing on the experiences and approaches in similar settings.

First, we consider reservation quotas to ensure educational access for members of lower social strata to be ineffective with regard to its aims as well as counterproductive for the improvement of the quality of the Indian education system. Here, a merit-based approach with income-sensitive financial support seems warranted. This merit-based approach has empirical support. For example, a study conducted among nursing students between 15 to 25 years of age in Karachi (Pakistan) finds that entry qualification was significantly related to academic performance (Ali, 2008). While this supports a merit-based admission approach, it raises the question whether this would systematically exclude students of low-income families from the educational system in India. In support of this concern, (Sadana, 2009) points out that in India, 13% of the children from rural areas do not attend school due to the lack of affordability. Furthermore, a study conducted in rural Indian states (Bihar, Kerala, Andra Pradesh, Uttar Pradesh, Rajasthan and Madhya Pradesh) indicated that schooling costs for students are too expensive for low-income families and in consequence, poor families either fail to register their children or withdraw them prematurely from primary schools (Jayachandran, 2002). As described above, in India cost-free education is provided for all students until 12th class, so that primary education as well as the first part of the secondary education are provided at no schooling costs. However, from higher secondary, thus 11th and 12<sup>th</sup> classes, as well as for higher education, i.e. university and college, reservation quotas exist for students based on their socio-economic backwardness, but not on school marks or academic performance. In order to tackle both the social as well as the economic aspect of aforementioned problem, we agree with Laskar (2010) and propose a restructured reservation system in higher education which would be based on the backwardness, i.e. family income,

school marks and academic performance. Importantly, there are examples that this is possible and effective. For example, The Indian Express – a leading newspaper in India – reported that the State of Maharastra, India provides scholarship to low-caste/low class students for higher studies based family income and school marks of the student, empowering members of lower castes/class and in turn increasing the quality of education (The Indian Express, 2016). Second, the Indian education is very sensitivity to social stratification. As Jiloha – a psychiatrist in New Delhi – stated, "deprived caste students who are in want of social approval and acceptance, carry high levels of social anxiety as compared to general population students. This anxiety interferes with their work efficiency resulting in poor performance" (Jiloha, 2007). Thus, although the caste system was offically abolished in 1950, Indian education still appears to be under the bondage of the caste system. But since it needs to be acknowledged the overcoming the social-stratification in India appears a rather elusive goal, we propose a social-stratification insensitive education system for India as a mean of meanwhile mitigation. Here, recent research on social connections and its application are highly informative.

geographical accessablity for schooling, and the academic quality of the student, i.e. her or his

The basic assumption in this regard is that social-stratification insensitive education thrives on social connections and when the sense of belonging is encouraged in schools. This is exemplified by studies among young and adolescent students in Australia and India, showing that social support, belongingness, friendship and optimism are important determinants of well-being and happiness in adolescent students (O'Rourke & Cooper, 2010; Sharma & Malhotra, 2010). Also and importantly for the focus of this proposition, positive social interactions, such as a birthday party with peers, enhances the achievement motivation (Walton, Cohen, Cwir, & Spencer, 2012). Thus, measures to foster social connectedness or belongingness are possible cornerstones of a caste/class-insensitive education system.

A series of large and prospective studies in US-American universities are highly informative in this regard. Based on the observation that the stress arising from the feared confirmation of as well as the affiliation to negative stereotypes comprises the academic performance in minority students, Cohen et. al. (2006) conducted two controlled double-blind prospective studies conducted among African and European American university freshmen. The intervention under investigation was based on the reaffirming the self-integrity. Therefore, students were given a list of values such as relationship with friends or family and asked to choose their most important values and to write a brief paragraph about why these were important to them. In order to reinforce their choice, students were furthermore asked to state their level of agreement with the declaration regarding their chosen values such as "I care about these values". Noteworthy, this brief writing-assignment intervention improved academic grades in African-American students and considerably reduced the racial achievement gap in the short as well as in the long-run (Cohen, Garcia, Apfel, & Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009). The major finding indicates that lessening the psychological threat of being confirmed as a member of a minority is possible by a circumscribed psychological intervention.

Following a similar approach, Walton and Cohen (2011) expanded their previous findings with an intervention aiming to enhance belongingness in otherwise socially stigmatized students, who are unsure of their social belonging in mainstream institutions. Again, using African-American and European-American college students, the participants in the intervention underwent an intervention to increase the sense of belonging. Therefore, students were provided with the perspective that the experienced social hardship in the academic setting is of short duration and shared amongst all students. Thus, the aim of the employed intervention was to encourage students not to attribute experienced personal and social problems to stable deficits of themselves or their ethnic group but to shared, short-lived and passing consequences of starting their university studies. In the intervention process

participants were asked to read a report of seemingly true results of a survey amongst senior students. Most of the students in the survey stated that they had worried about whether they belonged in college during the difficult first year, but gradually grew confident in their belonging as the time passed. The concerns they had about belonging were thus characterized as common at first and as momentary because of the challenging nature of the college. The participants were asked to internalize this perspective and to write an essay describing how their own experience in college resounded the experiences summarized in the survey report. Their essays were further read and captured on video as participants were informed that it would be publicized to future students so that it may help them to ease their transition to college. This short and well-accepted intervention helped students to reframe their social self-perception and not only raised academic performance of the African-American students steadily and persistently over the 3 years assessment period – cutting the race gap in academic performance by 79% in the final year – it furthermore also improved health in African-American students to the point of eliminating the otherwise observed race gap in self-reported health (Walton & Cohen, 2011).

Although it needs to be noted that these results were obtained in the US-American university setting and thus the employed interventions still need to be tested in different settings and circumstances, we assume that similar strategies could be of use to facilitate a casteinsensitive education system in India. Already, the Indian education system and its academic curriculum offers extracurricular activities such as vocational class, personality development and motivational classes and Government provides financial support to aided and Government-run schools, which could provide a suitable setting for similar approaches (Cheney 2005).

#### Conclusion

A functional and effective educational system is of crucial importance for the economic as well as societal development of India. The present study explored Indian education system with regard to possible effects of governmental class and caste stratification. Our analysis on the basis of a differentiated discussion of various resources shows that the success and quality of education is impeded by India's culturally imbedded social stratification. The current strategy of the Government of India to tackle the issue is based on a reservation system, which is basically a quota-based affirmative action and thus grounded on backwardness of the caste rather than the quality and family income of the student. With regard to the aspired and actual effects, an unwelcomed mismatch of low benefits for members of low-castes and the risk of reducing the quality of education for all has to be noted (Laskar, 2010).

The cultural richness of India and its complex social stratification poses a very sensitive context for education and thus requires particular consideration. To counteract the possible detrimental effects of the social stratification in India, we propose both structural as well as psychological measures. With regard to the former, the current reservation systems should revised from being merely grounded on class or caste affiliation to being merit- as well as income-based. Second and with regard to the latter, approaches and actions to foster social connections and the sense of belonging should be considered as a feasible and important measure to overcome psychological consequences of social-stratification in Indian education and to foster caste/class-insensitive education. Our proposition of a merit-based and social stratification-insensitive education thus covers academic, economic as well as psychological perspectives. We humbly acknowledge that these ideas are far from new. Mahatma Gandhi, spiritus rector of modern India, himself reframed the denied dignity of the low-caste by naming them Harijan (Child/People of God), a word coined by Guajarati Poet Narasimha Mehta. Also, Gandhi pointed out that "by education I mean an all-round drawing out of the best in the child and man in body, mind and spirit" (M. K. Gandhi, Harijan, July 31, 1937), so

the Gandhian vision on education was clearly focused on quality. If India is to become a developed country, it needs to temper and abrogate the sensitiveness its educational system for social stratification.

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