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Does identity affect aspirations in rural India? An examination from the lens of caste and gender*

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Abstract

We use priming, a concept popular in social psychology, to study the effect of identity salience on aspirations for self and children as part of an impact evaluation in Odisha, India. We measure the effect of an individual's gender- and caste-identity salience on improving aspirations for themselves and for their children's future profession and education. We find that when women are primed on gender, they exhibit higher aspirations for their daughters. Similarly, low-caste women primed on caste are more aspirational for their daughters. We do not find similar results for men. The effect of caste priming is more apparent in areas where significant ethnic heterogeneity exists and muted in ethnically homogenous areas. We find that aspirations for boys are already very high, thus priming has no effect on aspirations for sons.

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1. Introduction

Conventional studies that evaluate agricultural interventions tend to focus entirely on tangible impacts such as yields, input expenditures, or even the nutritional impacts arising due to home consumption of agricultural output (Ayenew, et al. 2018, Pellegrini & Tasciotti, 2014). The logic for this focus is quite simple: such impacts can typically be easily observed and quantified. Interventions that promote livelihoods and collective action, however, can have important impacts that are manifested through improvements in behavioral outcomes that are not so easily observed. An important behavioral response to increased livelihood opportunities is an increase in aspirations and personal agency (Stutzer, 2004). Aspirations and agency have increasingly been recognized as an important developmental indicator, as they arguably reflect individuals' hopes for achieving the life they have a reason to value. Because of challenges in observing these outcomes, they are typically ignored when measuring programmatic success but may be relevant nonetheless, especially if these change the long-run trajectory of a household's livelihood.

Recent research on aspirations and poverty examines the relationship between future-oriented behavior and investment in improving social and economic well-being (Favara, 2017; Lybbert & Wydick, 2018b; Wuepper & Lybbert, 2017). A related strand of literature explores the relationship between social identity and preferences (Benjamin, et al, 2016; Benjamin, et al, 2010). Using this body of research as our basis, we hypothesize that an individual's life experiences are an important determinant of her hopes for the future, and if these experiences are, in turn, mediated by social and ethnic identity—as they often are in ethnically diverse societies—then identity may have a direct effect on future aspirations (Raghunathan et al., 2018). It is in this context that we examine the causal impact of gender and caste identity salience on aspirations.

Researchers have long tried to measure the impact of social identity on economic and behavioral outcomes. However, since social identity is intertwined with economic and social outcomes, causal analysis of the effect of identity becomes difficult. In the case of India, two particularly important dimensions of social identity are one's caste and gender. While these dimensions of social identity are exogenous such that people are unable to choose either their caste or their gender, these dimensions of identity have been, and continue to be, critical in determining the economic and social opportunities that are available to people. This makes it difficult to study the independent effect of caste and gender on behavioural outcomes.

Borrowing from the work of social psychologists, we use the concept of priming to temporarily and randomly increase the salience of respondent's gender or caste identity. To do this, we ask selected individuals questions about caste and gender relations in their household and community to make salient concepts of social identity as they answer a subsequent series of questions meant to gauge their aspirations. The allocation of priming is randomized, with one third of respondents each being primed on caste, and gender, respectively, with the final third (a control group) being exposed to a placebo priming, with general questions unrelated to either caste or gender. We then measure whether priming affects aspirations, and how these effects vary for high- and low-caste individuals (in the case of caste-priming), or for men and women (in the case of gender priming) and associated heterogeneous effects.

We find that that overall, women exhibit lower levels of aspirations for themselves and their children compared to men. However, among women, for those primed on gender, levels of aspiration and belief about their children's future is significantly higher than the control group of women that is not primed. We find no comparable results for men. Our results also show that low-caste individuals exhibit lower aspirations compared to high-caste individuals. However, we find that caste-priming had no effect on the aspiration level of respondents. On the other hand, when primed on caste, we find that low-caste women exhibited higher aspirations for their daughters relative to high-caste women.

Our results suggest that the measurement of behavioral outcomes from a program is both a feasible and informative way of evaluating an important – but often ignored – dimension of a program's impact. These results, in turn, serve to inform the wider discourse on the design and implementation of policies that aim to address inequality and discrimination along characteristics such as gender, ethnicity, and caste. In the Indian state of Odisha—and in India more generally—these policies are central to the heated debates around reservations in education, employment, and political office. Because such debates tend to favor identity politics over empirical evidence, our study aims to enhance the quality of debate.

2. Literature Review

2.1 Priming in social sciences research

The effect of social identity on beliefs and aspirations has been studied extensively in other social sciences, particularly in social psychology, which pioneered the use of priming. Only in

the last decade have economists begun to use elements of identity priming to study differences in preferences and behavior using both laboratory and field experiments.

The idea that identity can affect economic behavior and outcomes was first introduced by Akerlof and Kranton (2000), who argued that social norms are linked to multiple individual identities, and these in turn affect behavior because deviation from the norm incurs costs to one's self and to others of shared identity. Their game-theoretic model can be adapted to explain workplace gender discrimination, the persistence of gender-based jobs, obstinate poverty, and social exclusion. While the model provides a solid base for further empirical analysis, the non-random distribution of social identity has made the attribution of causality challenging. In such situations, priming provides a relatively effortless means of increasing identity salience using subtle situational cues that activate mental concepts most closely associated with the notion (or identity) being primed.

Benjamin et al. (2010) were among the first to use the concept of priming in economics through laboratory experiments. They found that when the Asian American identity is made salient to experiment subjects, they exhibit greater patience in the subsequent tasks they are asked to complete, much like non-immigrant black subjects who are primed on racial identity. However, they find no effect of gender priming. In another paper, Benjamin et al. (2016) use religious identity priming to study its effect on economic behavior. They conclude that for Protestants, identity salience induces more voluntary contributions to a communal fund, whereas for Catholics, identity salience not only induces lower voluntary contributions, but also a belief that others will do likewise.

Studies on priming are not restricted to laboratory-based experiments: field experiments on priming show the very real-world implications of identity salience on short- and long-run economic outcomes. Afridi et al. (2015) study the effect of hukou identity (urban or rural registration status) salience on rural Chinese students and find that in the absence of competition¹, identity salience reduces the performance and earnings of rural students, although this effect disappears in an experiment regime involving competition.

In a recent study that more closely links identity salience to actual human capital outcomes, Mukherjee (2017) finds that among rural Indian subjects when gender is primed, girls exhibit a downward bias in beliefs and aspirations, whereas caste-primed parents belonging

¹ Performance in the game was measured based on the number of mazes a student was able to solve in fifteen minutes. In the piece rate regime students earned ¥1 for every correctly solved maze. In the competition regime, only the winner with the highest number of correctly solved mazes won ¥6 and the rest won nothing.

to higher castes have higher aspirations about their children's future income and educational attainment, which in turn translate into better test scores. The role of identity in determining educational outcomes is corroborated by Karachiwala (2016) who finds that when low-caste students are paired with high-caste teachers, aspirations improve and time investment by parents increases, potentially due to access to higher-quality information on employment opportunities. Relatedly, Hoff and Pandey (2006) find that when caste affiliation was made public before an incentivized test, low-caste students performed worse in mixed-caste groups.

Priming is also a useful tool for identifying effects in cases where experiments are not feasible, either due to the large sample sizes required or due to ethical considerations. As an example, Callen et al. (2014) studies the effect of exposure to violence on risk preferences in Afghanistan, priming individuals by asking them to describe a violent incident. They find that those who recalled violent incidents were more likely to prefer certainty in an experimental risk preference game, violating the predictions of Expected Utility. The broad consensus in the priming literature points to the fact that when individuals are primed on their identity, they behave differently, and this behavior is closer to their group norm, than non-primed individuals. In other words, when individuals are primed their behavior is more closely anchored to the group characteristics and less dependent on other *individual* characteristics.

2.2 Aspirations formation and investment

The other body of literature most closely related to the present study is the emerging work on aspirations: what determines the formation of an individual's hopes and beliefs about her future, and how this in turn affects investments towards their realization. Genicot and Ray's (2012) pioneering work introduces the concept of aspirations-based poverty traps, in which individuals with low levels of aspirations in one period invest less effort than those with higher levels of aspirations, in turn leading to the self-fulfilling low realization of wealth in the next period. In their conceptualization, it is not actual aspiration that matters, rather the gap between their present state and the state to which they aspire that determines investment behavior. The model is unique in that it accounts for the possibility that aspirations can be either too high or too low, both of which result in frustration and subsequent underinvestment. As an example, LeBoeuf and Estes (2004) find that subjects performed worse on trivia questions when they were primed by being made to list out similarities between themselves and Einstein, thus raising their aspirations exceedingly high compared

to the control. Yet when made to lower their aspirations by listing out differences between Einstein and themselves, subjects performed better in answering the trivia questions. Janzen et al. (2017) also find strong evidence supporting the inverse-U theory of aspirations failure, in which very high or very low educational (for one's own child) and financial aspirations lead to low education and financial investment.

The present study also draws on the prior research that specifically links identity to aspirations. Beaman et al. (2012), using a natural experiment, find that having a local female leader as a role model raised the aspirations and educational attainment of girls in India. Similarly, in Ethiopia, Bernard et. al. (2014) show that when exposed to positive documentaries about people from their community who had been successful in agriculture and small businesses, their treatment group exhibited higher aspirations than the control group that watched a general entertainment program. They also find positive treatment effects on longer terms outcomes such as credit and savings behavior as well as investment in children's education, thus showing evidence of how aspirations can lead to positive behavior change. In a study based in rural Nepal, Janzen et al. (2017) also find proof of upward-looking aspirations, that is, own aspirations are found to be positively associated with the aspirations of those higher (but not lower) in social status.

3. Data and experimental design

The data in the present study come from a primary household survey conducted in Kalahandi and Kandhamal districts in the Indian state of Odisha between January and April 2018. These districts are two of the poorest in the country and rain-fed paddy cultivation is the primary source of income in the area. The area is prone to frequent and severe droughts contributing to the precariousness of agriculture-based livelihoods and exacerbating the severity of poverty. Female literacy is low in both districts, at approximately 45 percent according to the 2011 census. Kalahandi has a more ethnically diverse population, with scheduled tribes (ST) and scheduled castes (SC) making up 28.5 percent and 18 percent of the population respectively. On the other hand, Kandhamal is predominantly tribal with 53.6 percent of the population identifying as ST and 15.8 percent identifying as SC.

Our survey was administered in 84 villages among 980 farming households. One adult male and one adult female from each household was interviewed, for a total sample of 1,960 respondents. Data on aspirations were collected as part of a larger survey aiming to measure the impact of a targeted program that was designed to increase crop diversification through

behavior change communication, technology provision, and information dissemination channeled through village and self-help groups. To capture the effect of identity salience on aspirations, we built a randomization protocol into our survey tool such that roughly one third of the respondents answered gender-priming questions, one third answered caste-priming questions, and the remaining third answered general questions unrelated to caste and gender.² The priming questions were followed by questions on aspirations and behavioral experiments.

The areas of Odisha in which we conducted our research are deeply stratified on the basis of ethnic identity. Moreover, the differences between the major groups are starkly observable with respect to appearance, attire, jewelry, and, most importantly, names. The villages are also physically separated into ethnically homogenous hamlets, with those higher on the caste/tribe hierarchy maintaining physical and ritual distance from those lower on the social ladder. These pronounced differences allow us to design our priming instrument in a way that makes gender and caste identity salient by exploiting cues that already exist in the respondent's environment. We borrow from the work of Mukherjee (2017) in creating the priming questions.

The questions we asked respondents for the purpose of caste priming use variations in the attire of different communities as one of the mechanisms for priming. During preliminary field work, we noted important differences in the way women and men from different communities dressed. For example, women from tribal groups in the region tie their sarees above their ankles whereas women from the non-tribal groups tie their sarees such that their ankles were not exposed.³ Similarly, men from tribal groups wear plain or light colored *lungis* (loincloths), whereas non-tribal men most often wear trousers and shirts. We also based priming questions around the physical and ritual segregation that is practiced by the ethnic groups, both in determining where they live in the village, and in practices around marriage,

² It is to be noted that throughout the paper we use the term caste-priming, however the more appropriate term would be 'jati'-priming. Jatis are roughly defined as ethnic groups, formed based on caste, tribe, religious or other shared ethnic identity. Our data has information on the major constitutionally defined groups, namely Schedule Tribe, Scheduled Caste, Other Backward Classes and General/Upper Caste. There exist sub-caste and tribes within these larger groups with presumably important sub-group hierarchies, but we did not collect information on those and are thus beyond the scope of this paper.

³ There is vast literature in sociology and anthropology on the process of sanskritization of lower caste groups that discusses how upward economic mobility causes lower caste groups to increasingly adopt the customs and practices of upper caste as way towards social mobility. The most obvious of this is in the way women are expected to dress and adopt markers of being married. As an example women from so-called *respectable households*, are expected to dress modestly and are expected to apply vermilion powder in the hair and wear black beaded necklaces to make it salient that they are married.

eating habits, and shared social spaces. Questions asked for gender priming were similarly constructed around women’s safety, decision making, education equality, and inheritance.

We employ several measures of aspirations, the first of which is an aspirations index modelled on Bernard and Taffesse (2014). Respondents were asked questions about their current and aspirational status with regard to four dimensions: income, education, assets, and social standing. Income and assets are measured in Indian rupees while education is measured as years of schooling. Social standing is measured on a ten-point scale, with one being the lowest social standing, and ten being the highest. We used visual cues to aid comprehension and ensure accurate elicitation of aspirations. We then gave the respondents 20 beads and asked them to weight each of the four dimensions based on their subjective perception of its importance to their overall well-being. The distribution of beads across the four dimensions was used as a series of weights to construct the aspirations index. The formula for creating the index for individual i is

$\text{Aspiration Index}_i = \sum_{k=1}^4 \left(\frac{a_i^k - \mu^k}{\sigma^k} \right) \cdot \omega_i^k$	(1)
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where $k = \{1,2,3,4\}$ are the aspirational dimensions, a_i^k is respondent i ’s aspiration on dimension k , μ^k and σ^k measure the sample mean and standard deviation of aspirations in i ’s community, and ω^k is the subjective weight attached to dimension k by respondent i . For our analysis, we define the respondent’s community as his or her block. Standardizing the index in this manner means that we are essentially using an aspiration z-score, and this facilitates ease of interpretation.

The other outcomes we use to measure aspirations are respondents’ hopes for their children’s future. We first asked the respondents what they wanted their children to be when they grow up. A parent is considered to have aspirations for their children if they hope for their child to be something other than a homemaker, farmer, or laborer. We asked the respondent to report these aspirations separately for his or her oldest son and oldest daughter. Unlike for daughters, we find almost no variation in the aspirations for sons, as almost all respondents aspired for their sons to be in a non-farm/non-manual labor profession, hence in this study

we focus on aspirations for daughters only⁴. We then asked respondents about what they actually believe their son and daughter will become in the future. We framed this as their *belief* about their child's future, as opposed to their *hope* for their child's future. This measure is binary and is coded as above, but again, we show results only for daughters owing to very low variation in the responses for sons.

The next set of outcomes we consider are the individual dimensions used to construct the aspirations index mentioned above. Specifically, we consider the effect of priming on the aspired level of education for the respondent's oldest son and daughter⁵, as well as their own aspired level of income, and social status.

4. Descriptive Statistics

Our total sample consists of 1,960 respondents of which 647 were primed on gender, 635 on caste and 677 were in the control group. The average respondent in our sample was 41 years old, of which nearly 70 percent were literate, 95 percent were married, and about half were female. Since data collection was conducted in a majority tribal area, we see a sizeable proportion of STs in our sample, totaling around 58 percent, while SCs and "Others"⁶ make up 20 percent and 22 percent, respectively.

We define and calculate the household dependency ratio as the number of persons in the household below age 15 and above age 65 divided by the number of persons age 15-64 (that is, those who are considered to be of working age in India). In our sample, the dependency ratio is approximately 12 percent. The average household size is 5.34 persons, and average household landholding size is 2.5 acres. The wealth index is calculated by applying principal component analysis (PCA) on ownership of a wide range of assets⁷. We see that all three

⁴ Similarly, a vast majority of respondents wanted their sons to complete college or higher (the highest level in our survey), which was not the case for girls.

⁵ The respondents were asked to answer questions about their son and/or daughter. If they had multiple sons and/or daughters, there were asked to respond only for their oldest son and/or oldest daughter.

⁶ The 'Others' category comprises of respondents who are classified in official Government of India lexicon as belonging to the General and Other Backward Classes (OBC) groups. There is no ethnicity/caste-based reservation in education, jobs and political office for persons belonging to the General category. Reservation for OBC is based partly on an income or economic need criteria which is not the case for SC and ST. Moreover, along with a smaller central OBC list, each state is allowed discretion about whom to include or exclude from the state OBC list. For this reason, the definition of OBC varies from state to state, and it is not uncommon to find the same caste/group defined as OBC in one state and upper caste (General) in a neighbouring state. Because of lack of a consistent definition of OBC across states, we club General and OBC into an "Others" category.

⁷ These include household consumer durables, agricultural machinery, livestock and transport equipment.

treatment arms are similar on indicators of household wealth, proxied by land ownership and the wealth index.

Based on the definition for aspirations described above, 81 percent of parents in our sample have high aspirations for their daughters, while 96 percent have high aspirations for their sons. The aspired level of education for girls is 12.5 years and for boys is 13.7 years.

<<<Table 1 here>>

5. Results

The main empirical specification we use in our analysis to measure the effect of identity priming on aspiration and beliefs for one's self and children, is

$$Y_{ib} = \beta_0 + \beta_1 P_{ib} + X'_{ibe} \delta + \rho_b + \epsilon_{ib}$$

where Y_{ib} is the outcome of interest (for example, aspiration index, aspirations for daughter, aspired years of schooling etc.) for individual i or their child living in block b ; P_{ib} is a dummy for treatment assignment and is 1 if an individual is primed⁸ and 0 otherwise; X'_{ibe} is a vector of individual and household level controls; and ρ_b is block-level fixed effects.⁹ The parameter of interest in the present study is β_1 which captures the effect of priming on outcome Y . For both the gender- and caste-primed groups, the control group is the set of respondents who were asked neutral questions that were unrelated to caste and gender prior to being asked questions about the aspirations-related questions. Standard errors are clustered at the village level. We use ordinary least squares regression for all of the outcomes being measured, although our results are robust to using alternative specifications such as logistic regression for binary outcome variables such as aspirations and beliefs and Poisson regression for count variables such as years of schooling¹⁰.

5.1 Gender Priming

In Table 2 we report the results for the gender-primed component of the experiment. We see overall that females score lower on the aspiration index compared to men. On average, women have a significantly lower aspiration index score. However, we do not see any effect of gender

⁸ Caste or gender primed depending on which type of identity priming impact we are studying.- such that we compare gender primed with control group and caste primed with control group respectively.

⁹ A 'block' is a sub-district administrative unit.

¹⁰ Results available on request.

priming on either the composite aspirations index or on aspirations for and beliefs about daughters. When we restrict the sample to women only, however, we see that women who were primed on gender have a higher likelihood of being aspirational for their daughters compared to women who were not primed. We see no effect of gender priming on the aspiration index for females and on their beliefs about their daughter's future. The positive effect of gender priming seems to be restricted only to women since we see no effect of gender priming on any of the outcomes for the male subsample¹¹.

<<<Table 2 here>>>

Further, we find no effects of gender priming on aspired years of education for the eldest daughter and son of the respondents (Appendix Table A1). We notably find no effect, positive or negative, of either kind of priming on the outcomes for boys. This could be because aspirations for boys are already high and that priming cannot increase it any further. Indeed, with regard to aspirations for sons, we find almost all respondents wanted their sons to be in a non-agriculture-based profession in the future, and a vast majority wanted their sons to complete college or higher (the highest level in our survey), which was not the case for girls.

5.2 Caste Priming

Table 3 shows the results for caste priming. For our analysis, we classify ST as low caste and all others as high caste. In this classification, SC respondents are thus considered high caste, though historically SCs have been marginalized and disadvantaged, much like STs. During preliminary qualitative data collection and in discussions with our local survey team, we were informed that in the predominantly ST and SC areas of Orissa, such as our sampled districts, there exists a well-established hierarchy between SCs and STs, with SCs occupying a higher social status. We also found that SCs in the study area are wealthier, live in separate hamlets within the village, maintain ritual distance from STs, and have distinctly diverse ways of dressing, both for men and women. For this reason, we define STs as low caste and non-STs as high caste in our analysis.

<<<Table 3 here>>>

Overall, we find that low-caste persons in our sample have lower aspirations for themselves, with the marginal effect being -2.4 lower on the aspiration index. However, neither in the overall sample, nor in the separate low and high caste sample, do we find any effect of caste priming on aspirations and beliefs. In Table A2 we show the results for the effect of caste

¹¹ Not shown, available on request.

priming on the aspired years of education for children. Much like aspirations for one's self and children's profession, we find no effect of caste priming on aspired years of education. Results are robust to an alternative classification—consistent with India's broader interpretation of SC/ST status—in which we define SC and ST as *low* and others as *high*.

We see, therefore, that unlike gender-based priming which were able to affect the respondents' aspirations, caste-based primes have no such effect. Part of this result could be explained by the low strength of the priming, which was perhaps not sufficiently strong to induce identity salience. An alternative explanation is that sample villages are fairly homogenous such that respondents' interaction with other caste groups was limited which, in turn, implies that the priming did not induce salience of one's low status in the social hierarchy. We explore this argument in the next section.

6. Heterogenous effects

In this section we consider heterogenous effects of caste and gender priming. First, we test whether the effects of caste priming are different for women. There is strong evidence to suggest that gender norms vary across caste, just as women's experience of caste-based inequality is more acute owing to the double burden of discrimination- on account of gender and caste.

In Table 4 we study the effect of caste priming on the female sub-sample, and study how the effect varies for low and high-caste women. Our classification of low and high remains the same as described above. As before, we find that ST women have significantly lower overall aspirations for themselves (-4.3 lower than non-STs), and we find that caste priming does not have an impact on women's aspirations for themselves overall. However, we find that those ST women who were primed on caste are more likely to have higher aspirations for their daughters. When restricting the sample to low-caste women, we find that those who were primed on caste show a significantly higher likelihood of having aspirations for their daughters compared to the control group on non-primed low-caste women. This does not seem to be the case for high-caste women, who show a lower likelihood of having aspirations for their daughters when primed on caste.

<<<Table 4 here>>>

These findings are not unusual as the process of *sanskritization* of lower caste groups is widely documented, especially with regard to women's movement outside the home for market work

(Eswaran, et al, 2013). As we move up the caste (and consequently, class) hierarchy, women's participation in market work falls sharply in India. With rising incomes of men and with increasing upward economic mobility, more and more women are withdrawing from the labor force in favor of domestic work (Afridi, et al, 2018). In fact, women's role as homemakers may even be seen as desirable among the upwardly mobile, since women are seen as bearers of family honor. This may be driving our results where we see caste primed higher caste women much less likely to aspire for their daughters to work outside the home compared to the control group. The opposite is true for ST women among whom the adoption of upper caste practices- of which requiring women to stay at home is one- is still quite low.

We then test if the absence of any effect of caste priming is driven by the lack of heterogeneity in the population that might ultimately weaken the effect of priming. To do this we restrict the sample to Kalahandi only, the district in our study area that is much more ethnically diverse than the overall sample. We hypothesize that if the respondent lives in a homogenous setting, then they are less aware of their relative position in the ethnic hierarchy since everyone around them is of the same ethnic group. Alternatively, if the respondent lives in a more diverse area characterized by the presence of people both lower and higher on the social hierarchy, then the respondent is more acutely aware of their relative position.

<<<Table 5 here>>>

Table 5 shows the result of caste priming on the Kalahandi sub-sample. Unlike the full sample, here we find that ST respondents report a -2.07 lower aspiration index score. When caste is primed, ST respondents exhibit higher aspirations for their daughters. This effect is consistent in the low-caste sub-sample as well, where caste-primed STs have a higher likelihood of reporting aspirations for their daughters compared to the control. We do not see parallel results in the high-caste sub-sample of Kalahandi. However, when looking at aspired years of education, we find that when caste is primed, aspired years of education is higher for girls; and when low-caste respondents are primed on caste, their aspired years of education for girls is significantly lower (Table 6). On the other hand, high-caste respondents primed on caste have higher aspired education for girls compared to the control. Thus, we do find that the effect of caste priming is stronger in areas that are more ethnically heterogenous, presumably due to ethnic differences being more overt and salient.

<<<Table 6 here>>>

7. Conclusion and future work

This paper explores the role of priming, a methodology commonly used in social psychology and more recently in economics, to study the effect of identity salience on respondent's aspirations for themselves and for their children. We prime caste and gender by asking treated respondents questions related to the identity being primed and based on aspects they encounter in everyday life with regard to their identity, such as ritual segregation, intermingling of sexes, women's safety, and clothing. These cues exogenously increase the salience of the relevant identity of the treated group, while the control group is asked ordinary questions unrelated to caste and gender. We find that women have lower overall aspirations for themselves, but when primed on gender, they are likely to express higher aspirations for their daughters. On the other hand, we find that low-caste respondents, both men and women, also have lower aspirations for themselves, but caste priming has no effect on their aspirations for themselves or their children.

We then look at heterogeneous effects at the intersection of caste and gender and find that when low-caste women are primed on caste, they express higher aspirations for their daughters. We see the opposite effects for high-caste women: priming leads to lower aspirations for daughters. We examine whether the absence of a caste-priming effect on the overall sample of respondents might be explained by the homogeneity of the population residing in their area which might limit their interactions with members of other caste groups and thus attenuate the effect of priming on the salience of identity. To do this we restrict our sample to the more diverse Kalahandi district and find that in this sub-sample, caste priming does influence low-caste respondents, resulting in higher aspirations for their daughters.

Our results suggest that the measurement of behavioral outcomes in program monitoring and evaluation is both a feasible and potentially valuable way of assessing a program's success, particularly as a program matures over time. Our results are also relevant to India's wider discourse around public policies designed to address gender- and ethnicity-based inequality through reservations in education, employment, and political office. The presence of pervasive—often negative—identity salience may alter people's perceptions of what they want their life to be, what they think it will be, and eventually what investments they will make to fulfil these aspirations. Such may be the case in rural Odisha and in India more generally. Given how passionate the debates are on this topic and how lacking in reasoned evidence they tend to be, this study aims to make some small contribution to the empirical basis on which public policies are pursued on issues of identity. In doing so, we make a case

for the potential contribution of information and behavior change communication campaigns that reinforce positive aspects related to identity and its salience to nudge people to invest in building their human, economic, and social capital.

Bibliography

Afridi, F., Li, S. X., & Ren, Y. (2015). Social identity and inequality: The impact of China's hukou system. *Journal of Public Economics*, *123*, 17–29.

<https://doi.org/10.1016/J.JPUBECO.2014.12.011>

Akerlof, G. A., & Kranton, R. E. (2000). Economics and Identity. *Quarterly Journal of Economics*, *115*(3), 715–753. <https://doi.org/10.1162/003355300554881>

Ayenew, H. Y., Biadgilign, S., Schickramm, L., Abate-Kassa, G., & Sauer, J. (2018). Production diversification, dietary diversity and consumption seasonality: panel data evidence from Nigeria. *BMC Public Health*, *18*(1), 988. <https://doi.org/10.1186/s12889-018-5887-6>

Beaman, L., Duflo, E., Pande, R., & Topalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: a policy experiment in India. *Science*, *335*(6068), 582–586. <https://doi.org/10.1126/science.1212382>

Benjamin, D. J., Choi, J. J., & Fisher, G. (2016). Religious Identity and Economic Behavior. *Review of Economics and Statistics*, *98*(4), 617–637. https://doi.org/10.1162/REST_a_00586

Benjamin, D. J., Choi, J. J., & Strickland, A. J. (2010). Social Identity and Preferences. *American Economic Review*, *100*(4), 1913–1928. <https://doi.org/10.1257/aer.100.4.1913>

Bernard, T., & Seyoum Taffesse, A. (2014). Aspirations: An Approach to Measurement with Validation Using Ethiopian Data. *Journal of African Economies*, *23*(2), 189–224. <https://doi.org/10.1093/jae/ejt030>

Bernard, T., Dercon, S., Orkin, K., & Taffesse, A. S. (2014). The Future in Mind: Aspirations and Forward-Looking Behavior in Rural Ethiopia. CEPR Discussion Paper No DP10224. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2526352

Callen, M., Isaqzadeh, M., Long, J. D., & Sprenger, C. (2014). Violence and Risk Preference: Experimental Evidence from Afghanistan. *American Economic Review*, *104*(1), 123–148. <https://doi.org/10.1257/aer.104.1.123>

- Eswaran, M., Ramaswami, B., & Wadhwa, W. (2013). Status, Caste, and the Time Allocation of Women in Rural India. *Economic Development and Cultural Change*, 61(2), 311–333.
- Favara, M. (2017). Do Dreams Come True? Aspirations and Educational Attainments of Ethiopian Boys and Girls. *Journal of African Economies*, 26(5), 561–583.
<https://doi.org/10.1093/jae/ejx018>
- Genicot, G., & Ray, D. (2017). Aspirations and Inequality. *Econometrica*, 85(2), 489–519.
<https://doi.org/10.3982/ECTA13865>
- Hoff, K., & Pandey, P. (2006). Discrimination, Social Identity, and Durable Inequalities. *American Economic Review*, 96(2), 206–211. <https://doi.org/10.1257/000282806777212611>
- Janzen, S. A., Magnan, N., Sharma, S., & Thompson, W. M. (2017). Aspirations failure and formation in rural Nepal. *Journal of Economic Behavior & Organization*, 139, 1–25.
<https://doi.org/10.1016/J.JEBO.2017.04.003>
- Karachiwalla, N. (2018). A teacher unlike me: Social distance, learning, and intergenerational mobility in developing countries. *Economic Development and Cultural Change*, 698131. <https://doi.org/10.1086/698131>
- Karlan, D., Zinman, J., Purdie-Vaughns, V., Apfel, N., & Brzustoski, P. (2011). Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation. *Science*, 332(6035), 1278–1284. <https://doi.org/10.1126/science.1200138>
- LeBoeuf, R. A., & Estes, Z. (2004). “Fortunately, I’m no Einstein”: Comparison Relevance as a Determinant of Behavioral Assimilation and Contrast. *Social Cognition*, 22(6), 607–636.
<https://doi.org/10.1521/soco.22.6.607.54817>
- Lybbert, T. J., & Wydick, B. (2018). Hope as Aspirations, Agency, and Pathways: Poverty Dynamics and Microfinance in Oaxaca, Mexico. In C. B. Barrett, M. B. Carter, & J.-P. Chavas (Eds.), *The Economics of Poverty Traps* (pp. 153–177). University of Chicago Press & NBER. Retrieved from <https://www.nber.org/chapters/c13832>
- Lybbert, T. J., & Wydick, B. (2018b). Poverty, Aspirations, and the Economics of Hope. *Economic Development and Cultural Change*, 66(4), 709–753.
<https://doi.org/10.1086/696968>

Mukherjee, P. (2015). *Essays on The Role of Social And Political Institutions In Economic Development*. Cornell University. Retrieved from <https://ecommons.cornell.edu/handle/1813/41149>

Pellegrini, L., & Tasciotti, L. (2014). Crop diversification, dietary diversity and agricultural income: empirical evidence from eight developing countries. *Canadian Journal of Development Studies / Revue Canadienne d'études Du Développement*, 35(2), 211–227.
<https://doi.org/10.1080/02255189.2014.898580>

Raghunathan, K., Quisumbing, A. R., Kumar, N., & Cunningham, K. (2018). *Women's aspirations for the future, and their financial, social and educational investments* (IFPRI Discussion Paper No. 1752). Washington, DC. Retrieved from <https://www.ifpri.org/publication/womens-aspirations-future-and-their-financial-social-and-educational-investments>

Stutzer, A. (2004). The role of income aspirations in individual happiness. *Journal of Economic Behavior & Organization*, 54(1), 89–109.
<https://doi.org/10.1016/J.JEBO.2003.04.003>

Wuepper, D., & Lybbert, T. J. (2017). Perceived Self-Efficacy, Poverty, and Economic Development. *Annual Review of Resource Economics*, 9(1), 383–404.
<https://doi.org/10.1146/annurev-resource-100516-053709>

Tables

Table 1: Descriptive Statistics

Variable	Gender Prime	Caste Prime	Control	Difference (1-3)	Difference (2-3)
	1	2	3	4	5
Age (years)	41.433 (12.657)	41.970 (16.401)	41.595 (12.774)	-0.163 (0.700)	0.375 (0.842)
Literate (percent)	0.699 (0.459)	0.685 (0.465)	0.678 (0.468)	0.021 (0.026)	0.007 (0.025)
Married (percent)	0.951 (0.217)	0.950 (0.219)	0.951 (0.215)	-0.001 (0.012)	-0.002 (0.011)
Female (percent)	0.505 (0.500)	0.496 (0.500)	0.499 (0.500)	0.006 (0.026)	-0.003 (0.029)
Scheduled caste (percent)	0.201 (0.401)	0.214 (0.411)	0.195 (0.396)	0.006 (0.023)	0.019 (0.023)
Scheduled tribe (percent)	0.581 (0.494)	0.570 (0.495)	0.598 (0.491)	-0.017 (0.028)	-0.028 (0.027)
Other castes (percent)	0.218 (0.413)	0.216 (0.412)	0.207 (0.405)	0.011 (0.027)	0.009 (0.024)
Dependency ratio	0.117 (0.099)	0.125 (0.104)	0.122 (0.096)	-0.005 (0.005)	0.003 (0.006)
HH size (no.)	5.255 (2.051)	5.402 (2.198)	5.353 (1.986)	-0.098 (0.091)	0.049 (0.100)
HH wealth index	-0.003 (0.883)	-0.008 (0.905)	0.011 (0.871)	-0.014 (0.048)	-0.019 (0.046)
Land area owned (acres)	2.002 (2.370)	2.724 (16.017)	2.785 (15.526)	-0.783 (0.618)	-0.061 (0.130)
Aspiration Index	0.162 (10.920)	0.546 (13.435)	-0.150 (11.487)	0.312 (0.588)	0.696 (0.680)
N	647	635	677	1324	1312

Source: Authors. Note: Dependency ratio is defined as the number of people below age 15 or over age 65 for every household member in the 15-65 age group. Aspirations index is defined as in Section 3. Columns (1) – (3) present means and standard deviations of the gender primes, caste primed, and control sample, respectively. Figures in column (4) and (5) are coefficient estimates and their associated standard errors (clustered at the village level) from linear regressions of the form $x_{ij} = \alpha + \beta T_i + \epsilon_{ij}$, where x_{ij} is the characteristic over which balance is being tested (i.e., the variable described in the row header) and T_i is an indicator variable capturing the difference in random assignment between treatment (caste or gender priming) and control groups. Statistical significance of these differences was based on a t-test of the estimated coefficient β for each household and individual characteristic.

Table 2: Gender Priming

Pooled Sample	<i>Aspiration Index Z-score</i>	<i>Aspirational for Daughter (0/1)</i>	<i>Belief for Daughter (0/1)</i>
Female	-2.417* (1.3655)	0.078 (0.0686)	-0.068 (0.1031)
Gender primed	0.646 (0.7638)	0.008 (0.0347)	0.001 (0.0434)
Female x gender primed	-0.430 (1.0918)	0.063 (0.0448)	-0.001 (0.0625)
Adjusted R^2	0.266	0.132	0.189
Observations	1301	841	841
Female Sample			
Gender primed	0.072 (0.7908)	0.063* (0.0336)	0.001 (0.0459)
Adjusted R^2	0.302	0.145	0.197
Observations	658	419	429
Male Sample			
Gender primed	0.732 (0.7647)	0.009 (0.0337)	0.007 (0.0455)
Adjusted R^2	0.233	0.125	0.213
Observations	643	409	409

Source: Authors.

Note: Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table 3: Caste Priming

Pooled Sample	<i>Aspiration Index Z-Score</i>	<i>Aspirational for Daughter (0/1)</i>	<i>Belief for Daughter (0/1)</i>
ST	-2.427*** (0.7460)	-0.038 (0.0353)	0.033 (0.0480)
Caste Prime	1.331 (1.0658)	-0.034 (0.0371)	0.028 (0.0533)
ST x Caste Prime	-1.076 (1.3234)	0.071 (0.0534)	-0.001 (0.0611)
Adjusted R^2	0.301	0.116	0.191
Observations	1286	841	841
ST Sample			
Caste Prime	0.273 (0.6918)	0.038 (0.0341)	0.032 (0.0354)
Adjusted R^2	0.305	0.118	0.160
Observations	749	493	493
Non-ST Sample			
Caste Prime	1.543 (1.0657)	-0.038 (0.0397)	0.032 (0.0573)
Adjusted R^2	0.267	0.107	0.221
Observations	537	348	348

Source: Authors.

Note: Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table 4: Caste Priming: Female Sub-sample

Pooled Sample	<i>Aspiration Index Z-Score</i>	<i>Aspirational for Daughter (0/1)</i>	<i>Belief for Daughter (0/1)</i>
ST	-4.305*** (1.0108)	-0.090* (0.0493)	-0.006 (0.0653)
Caste Prime	-1.009 (1.1747)	-0.083 (0.0530)	-0.048 (0.0664)
ST x Caste Prime	1.392 (1.4769)	0.165** (0.0693)	0.046 (0.0895)
Adjusted R^2	0.377	0.129	0.189
Observations	646	426	426
ST Female			
Caste Prime	0.400 (0.8208)	0.082* (0.0457)	0.011 (0.0559)
Adjusted R^2	0.374	0.149	0.165
Observations	371	244	244
Non-ST Female			
Caste Prime	-0.998 (1.2046)	-0.099* (0.0538)	-0.054 (0.0748)
Adjusted R^2	0.360	0.111	0.203
Observations	275	182	182

Source: Authors.

Note: Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table 5: Caste Priming: Kalahandi

Pooled	<i>Aspiration Index Z-Score</i>	<i>Aspirational for Daughter (0/1)</i>	<i>Belief for Daughter (0/1)</i>
ST	-2.071** (0.9394)	-0.070 (0.0499)	0.006 (0.0623)
Caste Prime	0.856 (1.3759)	-0.062 (0.0521)	0.030 (0.0609)
ST x Caste Prime	-1.098 (1.6326)	0.145* (0.0758)	-0.005 (0.0698)
Adjusted R^2	0.331	0.099	0.169
Observations	797	507	502
ST Sample			
Caste Prime	-0.128 (0.8616)	0.087 (0.0521)	0.032 (0.0437)
Adjusted R^2	0.357	0.090	0.138
Observations	428	266	266
Non-ST Sample			
Caste Prime	0.958 (1.3204)	-0.063 (0.0535)	0.030 (0.0636)
Adjusted R^2	0.296	0.091	0.184
Observations	369	238	236

Source: Authors.

Note: Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table 6: Caste Priming and Aspirations for Education: Kalahandi

	Pooled Sample		ST Sample		Non-ST Sample	
	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>
ST	0.296 (0.3244)	0.092 (0.2364)				
Caste Prime	0.516* (0.2590)	-0.008 (0.2490)	-0.362 (0.2186)	-0.187 (0.2229)	0.556** (0.2608)	-0.038 (0.2635)
ST x Caste Prime	-0.928** (0.3567)	-0.203 (0.3742)				
Adjusted R^2	0.295	0.127	0.221	0.116	0.465	0.163
Observations	506	637	268	323	238	314

Source: Authors.

Note: Standard errors clustered at the village level are given in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects and are estimated using a OLS regression. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Appendix

Tables

Table A1: Gender Priming and Aspiration for Education

	Pooled		Female		Male	
	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>
Female	-0.713 (0.6535)	0.529 (0.4257)				
Gender Prime	-0.320 (0.2368)	-0.027 (0.1750)	0.123 (0.2209)	0.026 (0.1588)	-0.294 (0.2288)	-0.015 (0.1794)
Female x Gender Prime	0.437 (0.3122)	0.072 (0.2654)				
Adjusted R^2	0.261	0.164	0.273	0.208	0.275	0.150
Observations	831	1004	427	513	404	491

Source: Authors.

Note: Results reported for the oldest son and/or daughter of the respondent. Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects and are estimated using OLS regression. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table A2: Caste Priming and Aspirations for Education

	Pooled		ST		Non-ST	
	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>
ST	0.136 (0.2756)	0.030 (0.1805)				
Caste Prime	0.198 (0.2536)	-0.161 (0.2254)	-0.159 (0.1816)	-0.030 (0.1647)	0.208 (0.2447)	-0.139 (0.2225)
ST x Caste Prime	-0.322 (0.3173)	0.133 (0.3029)				
Adjusted R^2	0.249	0.132	0.227	0.122	0.372	0.194
Observations	824	982	482	537	342	445

Source: Authors.

Note: Standard errors clustered at the village level in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects and are estimated using OLS regression. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Table A3: Caste Priming and Aspirations for Education: Female sub-sample

	Pooled		ST Female		Non-ST Female	
	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>	<i>Girl Education Years</i>	<i>Boy Education Years</i>
ST	0.139 (0.3803)	-0.047 (0.2440)				
Caste Prime	0.158 (0.3388)	-0.101 (0.2556)	-0.130 (0.2876)	-0.028 (0.2569)	0.081 (0.3502)	-0.022 (0.2741)
ST x Caste Prime	-0.231 (0.4388)	0.051 (0.3287)				
Adjusted R^2	0.298	0.146	0.292	0.163	0.379	0.210
Observations	423	485	242	263	181	222

Source: Authors.

Note: Standard errors clustered at the village level are given in parentheses, with * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All specifications include block-level fixed effects and are estimated using OLS regression. Coefficients from OLS regressions reported. Other control variables include age (linear and quadratic), literacy, marital status, relationship to household head, household dependency ratio, household size, household asset index, land owned by household.

Priming Module

Caste Prime

1. Is it ok to marry someone from another jati?
2. Should children from different jatis go to the same school?
3. Are you the same jati as most people in your village?
4. Is it ok for someone from higher jati to eat in the house of a person from lower jati?
5. Can you tell what jati someone is from by their dress?

Gender Prime

1. Is it safe for a woman to travel alone to the neighbouring village for work?
2. Should women inherit farming land from their fathers?
3. Should girl children be taught by both male and female teachers?
4. Does the male head/oldest male make decisions about farming practices in your house?
5. Should all girls go to school till 12th grade at least?

Control

1. Is the weather best during monsoon season?
2. Do a lot of visitors come to your village/region?
3. Have you ever been to Bhubaneshwar?
4. Did you attend a wedding in the last one month?
5. Have you been outside the district in the last week?

Aspirations Index Module

- Dimension 1- Assets: When we talk about assets we mean non-productive assets such as fridge, TV, furniture etc. Please give value for your entire household. Give us an estimate of the total value of such assets in Rupees.
 1. What is the value of assets you have at present?
 2. What is the value of assets you would like to achieve?
- Dimension 2- Social status: In this section we would like to know about your social status. Please answer on a scale of 1 to 10, where 1 means "no social status- no one asks me for my advice on any significant decision, in my community", 5 means "half the people in my community ask for my advice on important decisions" and 10 means "No important decision in the community is taken without consulting me"
 1. What is the level of social status you have at present?
 2. What is the level of social status that you would like to achieve?
- Dimension 3- Education: Please answer in terms of level of education completed.
 1. What is your current level of education?
 2. What level of education you would like to (or wanted to) achieve?
 3. What is the level of education that your oldest daughter currently has?
 4. What is the level of education that your oldest son currently has?
 5. What is the level of education that you would like your oldest daughter to achieve?
 6. What is the level of education that you would like your oldest son to achieve?
 - No schooling/Illiterate
 - Nursery or KG
 - Class 1
 - Class 2
 - Class 3
 - Class 4
 - Class 5
 - Class 6
 - Class 7
 - Class 8
 - Class 9

- Class 10
 - Class 11
 - Class 12
 - Completed college at least or higher (Masters, PhD, Doctor, engineering etc.)
 - Don't know/Too young
- Dimension 4- Income: Annual income is the amount of CASH income you earn from all agricultural and non-agricultural activities, and money from any other government assistance programs
 1. What is the amount of household annual income you have at present?
 2. What is the amount of household annual income that you would like to achieve?

The index for individual i is defined as:

$$Aspiration\ Index_i = \sum_{k=1}^4 \left(\frac{a_i^k - \mu^k}{\sigma^k} \right) \cdot \omega_i^k$$

Where k is one of the four dimensions mentioned above, a_i^k is respondent i 's aspiration on dimension k and μ^k and σ^k measure the sample mean and standard deviation of the response in the respondent's community (block), and ω^k is the weight attached to component k .

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