# "Motherhood Penalty?": Examining Gender, Work, and Family among Science Professionals in India

Debapriya Ray Treemis World School Tannistha Samanta<sup>1</sup> Indian Institute of Technology Gandhinagar

## Background

The low female labor force participation is a longstanding concern for sociologists, labour economists and planners at large. While socio-demographic forces of decreasing fertility and increasing achievements in higher educational attainment have been often associated with increasing labor force participation of women in most societies, India presents a puzzling labour market syndrome. Studies note an inverse association between increase in household income, educational attainment and women's employment (Das et al. 2015; Klasen and Pieters 2015). Overall, these studies show that women's employment remains unchanged over the past 25 years despite India's much celebrated growth story, impressive fertility decline, and an emphasis on girls' education. In fact, the phenomenon of the U or a J-shaped labor force curve (Goldin 1995; Klasen and Pieters 2015) where a rise in educational achievement is associated with a dampening effect on female labour force participation, holds true in the Indian context. For instance, a recent study showed that increases in education from none to secondary school are associated with a sharp decline in women's employment from 53.3% to 22.4% (Chatterjee, Desai and Vanneman 2018). The same study reported that although there is a marginal increase in college graduates, women's employment remains depressed (only 28.1% of women college graduates are employed in India).

Our research is motivated by the sociological finding of a systematic "motherhood penalty" as observed in the industrialized West as well as in Asian countries such as China, Japan and Taiwan among educated women in science, technology, engineering, and medicine (STEM) careers (Anderson, Binder, and Krause 2003; Budig and England 2001; Correll, Benard, and Paik 2007; Zhang, Hannum, and Wang Hannum 2008; Jia and Dong 2013; Damuli 2019). Motherhood penalty is explained as a phenomenon wherein being a mother leads to wage reduction and subsequent, career growth in terms of experience, job effort and productivity (England and Budig 2001). The authors calculated the penalty to range between 5 percent and 9 percent, going up with subsequent childbearing. Fathers, on the contrary, do not experience any such penalty. Fatherhood is associated with rewards in hiring and promotion decisions since new fathers are viewed as expressive, yet masculine (Coltrane and Adams 2008), more mature, and stable and hence more suitable for upper-level management (Benard and Correll 2010).

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<sup>&</sup>lt;sup>1</sup> **Corresponding Author:** Tannistha Samanta, Humanities & Social Sciences, Indian Institute of Technology, Gandhinagar, Gujarat 382355, India. Email: tannistha@iitgn.ac.in.

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However, in India where wages/salaries are not negotiated and hence gender-based differentials are uncommon, we ask: how do cultural scripts and normative discrimination, known to restrict women's labor market outcomes of women, manifest in science careers? Much of the scholarship in labor economics/sociology of labor focuses on rural India by drawing complex links between gender, social class, human capital and labour market outcomes. Notwithstanding the important contribution of this literature, there is little attention directed at understanding how contemporary middle class parents with their heightened interest in achieving global aspirations of modernity, marked by liberal ideas of gender equality and women's agency, are navigating the tight rope of carefully creating biographies of their children with conspicuously visible gendered behaviors (Pandey and Bhatia 2017). While contestations and conceptual guarrels around the empirical notion of "middle class" abound in Indian sociological scholarship with questions about measurement, identity, political economy and representation (Donner 2008; Mazzarella 2011), we find Fernandes' (2006) articulation useful for the purpose of this piece. Fernandes (2006) unravels the making and growth of the new middle class in India by going beyond its most visible indicator-income- and instead focusing on consumption patterns, aspirations and political practices.

Contributing to the debate on the struggles of women's careers in STEM through the lens of motherhood and the practice of middle-classness, we unsettle the conventional framing of motherhood penalty, understood through wage-gaps. Admittedly, practices of middle-classness, as Donner and De Neeve (2011) assert, are often governed by upper-caste norms of morality, family values and consumption cultures which are perceived as critical markers of Indian modernity. This assertion is crucial because as we show, despite impressive educational gains made by India's middle class, their perception and experience remain fraught with idealized notions of motherhood and socially appropriate familial loyalties. Seen this way, we offer a conceptual reformulation of the term, motherhood penalty, by freeing it from its materiality and instead embedding it into the intangible forms of experiences, aspirations, and practices.

We begin with a review of the scholarship on motherhood penalty across cultural contexts followed by the details of our data and methods. We then discuss the analysis of the data and end with concluding remarks.

### Gendered trajectories in women's work: A review

#### Motherhood penalty: Sifting through cultures

"Motherhood penalty" as observed in the West comprises a significant wage gap that is explained by interlocking factors which include level of education, marital status, number of children and race. Significantly, there is ample evidence to suggest a strong association between motherhood penalty and educational attainment with possible dampening effects of postponing the first childbirth. (Mincer 1974; Amuedo-Dorantes and Kimmel 2005; This finding has been supported by later studies (such as Wilde, Batchelder and Ellwood 2010) that showed motherhood penalty can *increase* with educational attainment. That is, highly educated women (with greater skill-set and human capital) are also the ones who are more likely to be engaged in demanding professional and managerial positions with higher wage penalties. Other factors, including age of child/children and mothers themselves play a crucial role in understanding the variation in penalty. Budig and England's (2001) research showed penalties in the order of 3%,

9% and 12% for one child, two children and three or more children respectively. Finally, marital status is shown to be associated with wage penalties for women. Wage penalties are higher for married and divorced mothers compared to non-married mothers in the U.S (Budig and England 2001). Marriage, these studies suggest, result in a wider wage gap by decreasing productivity (primarily because of compulsory childcare) or by increasing employers' discrimination. (Bianchi et al 2000). Surprisingly, marital status has no discernible effect on men.

Motherhood penalties vary by cultural context and reflect the varying nature of socio-political realities, institutional biases and governmental policies (see Gash 2009 for an analysis of European nations). Scholarship on Asian countries confirm similar patterns. For instance, research on China's labor market suggests that the effect of transition from a state-owned centrally planned economy to a non-state market economy has resulted in increased wage gaps between men and women (Jia and Dong 2013). They show that mothers had to bear statistically significant wage gap and differences in income had substantially risen from gradualist reform period (1990-96) to radical reform period (1999-2005), largely owing to post economic transition in China. Again, Zhang and colleagues (Zhang, Hannum and Wang Hannum 2008) in the context of urban China, identify that social parameters of marriage and motherhood profoundly explain gender gaps in employment and earnings. Given that women's formal employment in India has shrunk considerably over the years (Bhalla and Kaur 2011; Himanshu 2011), a systematic review of the antecedents of this change remains limited (notable exceptions include Godbole et al. 2005; Godbole and Ramakrishna 2015).

### The curious case of India: Moving beyond the glass ceiling argument

The ubiquitous trend of women thinning out as one moves up in organizational hierarchy is restricted not only to India but also observed worldwide (Godbole and Ramaswamy 2015). The problem is particularly perplexing in India because a significant number of girls opt for science in their high school through college but fail to make a career in science. That is, the proportion of women attaining advanced degrees in the sciences does not translate into those holding senior positions in research or the educational sectors (Bal 2004). Godbole and Ramaswamy's (2015) attribute the persistent low levels of women's representation in science and technology fields to pervasive gender discrimination that manifests in hiring practices, grants allocation, peer acceptance, attaining fellowships and independent projects. Typically, the concept of "glass ceiling" or artificial barriers to achievement is invoked to explain differential outcomes in higher education by gender, race and social class (Powell and Butterfield 1994; Kanter 1977). In this paper, we interrogate the empirical utility of the notion of glass ceiling since scholars writing on the women's question in sciences in the Global South have often privileged the culture argument over organizational factors (Venkatesh 2015).

As such, Venkatesh's (2015) careful analysis of the role of cultural moorings in explaining attrition of women doing science globally (including India) forms the empirical premise of this paper. The author notes that women doing science in industrialized countries which are also known to grant civil liberties to women such as the United States, Sweden, the Netherlands and Germany also have low participation of women in science and technology careers. This empirical incongruence between overall social and policy liberalism and lower female labor participation in science careers has been explained by the normative discrimination against women, specifically their cognitive abilities, motivation, and parenting roles resulting in weak

organizational policies that fail to enhance women's position in the labor market. In case of India and other comparable countries in the Global South, Venkatesh (2015) argues that despite the fact that there are fewer women in top positions in science/technology-based careers, these countries do not necessarily witness high dropout rates in higher education. In other words, there is no clear evidence of the "leaky pipeline" problem or exit of women as they move up the organizational hierarchy. In fact, the stagnation occurs at a much later stage. Indeed, our findings parallel those of Venkatesh's (2015) in that the often invoked notion of 'glass ceiling' fails to offer a realistic understanding of gender asymmetries in science institutions in India where normative scripts govern expectations around women (and men's) productive and reproductive labor.

While our focus in this paper remains exclusively in unpacking the gender asymmetries at work and home, we are acutely aware that these asymmetries are often intertwined with social inequalities of class and caste. As such, in a stratified context where social distances in terms of residential segregation, language, identity formation and occupations are still organized around caste and communal lines it is not surprising that a majority of women from the marginalized caste categories do not pursue higher education but instead take up jobs after college graduation (Bayly 2001; Dreze and Sen 2013; Venkatesh 2015). This inter-caste inequality that stifles social mobility is an important sociological question and is beyond the scope of this paper and so warrants a separate study (cf. Vaid 2018).

### The case of "missing women" in science & technology

Despite patrifocal norms, the gap between women's enrolment and professional presence in science and technology careers in India is narrower when compared to industrialized countries. Women's enrolment in graduate programmes in sciences and engineering in India have increased at undergraduate and postgraduate levels. For example, Parikh and Sukhatme's (2004) research on women engineer scientists show a steady increase in enrolment rate in engineering colleges from 1.5 percent in 1974-75 to 16.2 percent in 1999-2000. In a similar vein, Komath (2019) use data from two time points (2011-12 and 2015-16) of the All India Survey on Higher Education (AISHE) conducted by the Ministry of Human Resource Development of the Government of India shows an increase of approximately thirty-nine percent of women per 100 men in Masters of Science (MS) courses.

From the same set of enrolment data, Komath (2019) deduces that though women have outnumbered men at the Masters level their representation dwindles in M.Phil. and PhD Programs. That is, gains made in enrolment dissipate as one moves up in advanced degrees and pursues professional careers. For example, Ramaswamy and Godbole (2015) report very low percentage of women faculty, especially in higher ranks such as those of associate professor and professor. The clustering of women at lower ranks is also common in premier institutions of India such as the Indian Institutes of Technology (IITs) (Godbole et al 2005). Interestingly, these numbers are in stark contrast to the university systems where the sex-ratio of faculty is relatively better given the diversity of disciplines; the sciences, technology, and the humanities.

It is widely accepted in academia that overall prestige and influence of one's work is evaluated by the number of publications in highly reputed journals (Godbole et al 2005). Kumar (2005) in his study of 117 scientists (56 women and 61 men) covering eight institutions in the country showed that women published more in scientific journals and that there were no differences between women with or without children when it comes to productivity. However, Kumar (2005) alerts that despite similar "performance" in terms of productivity, women rarely make it to the higher ranks or serve on editorial boards of prestigious journal, when compared to their male counterparts. This inequality remains pervasive in nominations and academic recognitions. For example, being nominated as a Fellow with the National Science Academies is an important recognition among research active academics. Research shows that the recipients of the prestigious *Shanti Swarup Bhatnagar Award* awarded by the Council of Scientific and Industrial Research, Government of India to recognize outstanding research in the sciences, medicine and physics, are mostly men. Recent data (2019) shows that only one out of nineteen Bhatnagar awardees is a woman.<sup>2</sup>

The narrative is similar when one analyzes data on leadership. Women remain grossly underrepresented in leadership positions in science, medicine and technology fields. None of the top positions in the apex science organizations (see description of India's public funding structure for STEM research in the footnote) have never been chaired by a woman (Rath and Mishra 2017).<sup>3</sup> Clearly, women lose out due to lack of role models, unconscious biases and an overall intellectual climate that is unwelcoming. It is however important to note that part of the underrepresentation in awards and leadership is also due to a smaller population pool combined with prescriptive discrimination. It is this double jeopardy of women in science & technology fields that remains inadequately understood in the scholarship in India.

However, it is important to note that previous research on science professionals, primarily women, have shown that despite inherent sexism in hiring, promotion and leadership decisions, women remained oblivious of gender discrimination (Venkatesh 2015; Sur 2011; Sandhu, 2000). Career stagnation and denials in promotion were attributed to infrastructural bottlenecks such as, poor lab equipment or delays in procurement, rather than on structural biases that restrict women's upward mobility. We find similar rationalizations in our study as well (discussed in the analysis section).

## **Data and methods**

Data for this study comes from a prestigious central government funded science research organization in India located in the city of Ahmedabad (Gujarat State). This top science research organization offered a useful sociological site for this study given its uniform and structured hiring and promotion processes; that is, non-meritocratic status like signifiers (such as. gender,

<sup>&</sup>lt;sup>2</sup> https://www.tifr.res.in/TSN/article/201909260832301436805SSBPrize2019.pdf

<sup>&</sup>lt;sup>3</sup> The four apex funding and research organizations in India supporting STEM research are the Department of Biotechnology (DBT), Department of Science and Technology (DST), Department of Earth Sciences and Council for Scientific and Industrial (CSIR). In addition, there are two centrally funded space and atomic energy centres (DOS and DAE) that invest heavily in basic as well as mission-oriented research. Finally, the three Academies of Sciences in India – The Indian National Science Academy (INSA), Indian Academy of Sciences (IAS), Indian National Academy of Engineering (IAE) and The National Academy of Sciences, India (NASI ) also promote science research and its application (Godbole and Ramakrishna 2015).

In August 2019, the INSA had a woman scientist, Dr Chandrima Saha, as the president of the Academy. She is the first woman to head the INSA (The Wire Staff 2019).

age, caste) could be easily separated from those that are determined by intuitional merit (such as promotion). This enabled us to reflect on the intersecting roles of gender, family and social norms, keeping institutional level indicators fixed.

The study was reviewed and approved by the Institutional Ethics Board at the Indian Institute of Technology, Gandhinagar. Approvals were sought from of the study organization to conduct interviews. Interviews with 19 research staff were carried out over a period of 2 weeks in the Spring of 2018. The first author conducted all the interviews in Hindi and English. The interview instrument was validated by the second author in consultation with another expert. Sociological parameters of age, gender, caste, religion and social class (monthly household income) were collected during the interview process. While reporting findings we have use pseudonyms for all our respondents.

The following tables show gender distribution of employees and administrative/functional positions at our sample organization.

Designation/ Cadre <sup>4</sup>	Male (#)	Female (#)	Total (#)
Level 1	297	66	363
Level 2	137	38	175
Level 3	228	54	282
Level 4	178	46	224
Level 5	127	13	140
Level 6	41	05	046
Level 7	11	00	011
Outstanding Scientist	06	00	006
Distinguished Scientist	02	00	002
Total	1027	222	1249

Table 1Sex Distribution of Employees in the Study Organization<br/>(data updated till 2018)

Source: Primary data collected by the authors

<sup>&</sup>lt;sup>4</sup> The hierarchy of designation or cadre/ranks runs across all the arms of government funded research and development organisations in India. Level 1 is the entry level position. In order to move up the organizational ladder each employee must have work experience of minimum five years in the preceding rank. Though this is an essential qualifier, our sample organization emphasises on merit-based promotion (as mentioned by the respondents). Most of the respondents for this study were from the Levels 3 and 4.

## Table 2

Administrative Designation	Male (#)	Female (#)	Total (#)
Division Head	109	17	126
Group Head	10	00	10
Group Director	25	01	26
Deputy Director	07	00	07
Associate Director	01	00	01
Director	01	00	01
Director (Subsidiary unit)	01	00	01
Total	154	18	172

Sex Distribution of Administrative/Managerial Positions in the Study Organization (data updated till March 2018)

Source: Primary data collected by the authors

Our sample comprises predominantly engineers who have a Bachelor of Technology (BTech) degree and have been associated with the organization for over fifteen years. The sample (N=19) includes 10 female engineers, 2 female scientists, and 7 male engineers (henceforth, science professionals). The average age of respondents in our sample was 40 years (Range: 23-50 years). Because the goal was to examine how experiences may differ by marital and parenting status, the wide age range was useful. We categorize all respondents as either middle or upper middle class which we determined based on their combined household incomes, house ownership status, occupational profiles, and English language education signifying access to certain forms of cultural capital. All the respondents self-reported as Hindus. None of them belonged to the marginalized castes (namely, Scheduled caste, Scheduled tribes and Other Backward Classes for whom certain seats are reserved for caste-based quotas as per the affirmative action programme). While in no way claiming to offer a representative sample, the absence of both religious and caste minorities in our sample signal the well-documented elite capture of economic opportunities and political institutions in the country (see for example Belliappa 2013 for an ethnographic work on women professionals in India's booming IT sector or Upadhya 2016 on engineering education in coastal Andhra Pradesh, India).

We combined Narrative style interviews with a semi-structured questionnaire. Questions focused on respondents' perceived understanding of productivity and merit, the dual demands of professional work and family needs, challenges in balancing their professional and personal lives, working hours, nature of work (itinerant or not), work environment, publication record or nominations to professional committees, collaborations with fellow employees, promotions and fund allocations. Open ended and likert scales form questions were used. Additionally, research staff who are parents were requested to respond to another shorter survey that had questions on understanding the relationship between parenthood and a successful scientific career, parental and professional demands, child-care arrangement and policies and its efficacy in allowing them to continue their work.

Interviews lasted for about thirty minutes to an hour. Initial set of respondents (a total of 5) were recruited with the assistance of a staff member working with the organization. Although, we are aware that this could lead to possible sample bias, this initial introduction by an insider staff was helpful in building interviewees' trust and confidence. Later, once rapport was established, the remaining 14 participants were recruited following a snowball sampling method to access respondents beyond the closed network of friends/acquaintances of the insider staff. In the analysis section, we use pseudonyms for the participants. Finally, it is worth noting that we are also acutely cognizant of the paradoxical tensions embedded in researching and offering reflections on a context that in some ways similar to our own professional setting (higher education research centre dominated by STEM fields). On one hand, being "insiders" to a similar professional setting, we add value in researching and representing the "voices" of our interviewees but at the same time we run the risk of "being seen as a native informant offering an exotic 'other' to mainstream Northern subjects" Belliappa (2013:6). We reconcile this paradox by being reflexive about our position, place, power and privilege as researchers or as Macbeth (2001) calls, adopting a "positional reflexivity" standpoint.

In what follows, we utilize existing scholarship to review themes of gender roles, motherhood and the practice of middle-classness to understand how our sample respondents perceived their own science careers and structural hierarchies.

### Analysis

All respondents, women and men reported high levels of job satisfaction and maintained that they found the organization to be gender-neutral in its hiring practices. However, recruitment statistics of the organization suggested otherwise. For example, latest statistics on the sex-ratio of administrative and decision-making positions of the organization, provided in the previous section, indicated gross underrepresentation of women in these positions. How do we make sense of this rationalization where our middle-class respondents are ambivalent if not gender blind to institutional and normative hierarchies in the face of visible underrepresentation? Sur's (2011) study on women scientists in noted Indian physicist C. V Raman's lab provides useful insights. She argues that women scientists were more self-aware of the social class privileges that they typically enjoyed and hence gender discrimination was perceived to be more of an outcome of individual behaviour, of men, than of institutions *per se*.

We extend this argument by pointing to the ambivalent relationship middle class Indians have with the state (Jeffery 2008 as cited in Donner and De Neve 2011) and the need to locate these rationalizations within larger historical processes. Scholarship tracing the historical evolution of this class have shown that public representations of the Indian middle class even prior to Independence were rooted exclusively in the lifestyles of public servants and salaried bureaucrats and their subsequent self-fashioning as modern, nationalist elite (Ahmad and Reifeld 2002). Later, as Jaffrelot and van der Veer (2008) argue, a sentiment of 'self-assured bourgeois nationalism' along with the growth of state institutions marked a symbolic alliance of uppercaste Hindu cultural traits with middle-classness. Although the post-liberalization 'new' middle class is marked by more heterogeneity and an erosion of cultural and economic hegemony of the 'old' middle classes, a majority of the middle class in India still depends directly or indirectly on government-aided services including education, occupations and public infrastructure. As authors writing on the Indian middle class would argue, there is a pervasiveness of the state in

middle-class urban life which has endured the onslaught of global discourses including privatized services and modernist urbanism (Donner and de Neve 2011; Jaffrelot and van der Veer 2008).

The challenges of combining professional careers with the demands of the family has been well documented (Gupta and Sharma 2003; Jain 2005; Mazumdar and Sharma 2005). Results from the *Time Use Survey 2000*, conducted by the Ministry of Programme Implementation, Government of India, is revealing; the survey shows that women spend almost double the time as compared to men in activities relating to taking care of children, the sick and the elderly, regardless of their employment status. As such, participation in the economically "productive" labor market does not necessarily reduce expectations of delivering "non-productive" household services and reproductive labor for women. The following quote from one of the respondents is illustrative of this normative expectation:

My husband offers help in domestic chores. He does the laundry, tidies the house, shops for the day or sometimes week, arranges my son's school bag. Of course, I cannot expect him to cook or clean dishes or cut vegetables. He will never be able to do it because he has never been trained in that manner. I appreciate the help that he offers. (Ratna, 38 years, mother of one child, employed for 15 years)

Responses such as the one above not only reiterates the sexual division of domestic labour but also demonstrates how household-level inequalities are normalized. Clearly, as Hartmann (1981) in her Marxist-feminist analysis of housework persuasively argues that families are not just units shaped by affect or kinship but are circumscribed within the modalities of patriarchy and capitalism. She goes on to show that in this discursive power dynamic between production and redistribution of labor, the effect of social class is eroded under the stronghold of patriarchy-"...women of all classes are subject to patriarchal power in that they perform household labor for men" Hartmann (1981:386). This is evident from previous scholarship in India - which shows that in situations where husbands do share the housework, their chores remained restricted to either shopping for groceries or doing laundry (both jobs are less arduous than childcare, cooking meals or caring for a sick relative) (Gupta and Sharma 2002; 2003). In our sample, respondents who reported having a hired household help or a house maid, the burden of childcare fell entirely on the married woman. This is also perhaps, as we have argued earlier, the practice of middleclassness being preserved within the moral economy of the family (Uberoi 2006). Akin to research on the Indian middle class (Donner 2011; Desai 2017), we find that upper-caste and upper middle-class norms of morality and respectability continue to shape articulations of motherhood among our female respondents.

Motherhood, according to almost all female respondents in our sample, drastically altered professional priorities that needed to be adapted to the changed realities. Maternal guilt, an outcome of inadequate institutional support and cultural ideals of intensive mothering (cf. Collins 2020) was a dominant sentiment among all our respondents. Contrary to studies in the industrialized West, where childrearing remains a private responsibility for most mothers who work outside the home, we noted how kinship-based ideals of reciprocity and conformity, offered creative strategies to remain in paid employment for all our participants that were mothers. Here, we find parallels with Belliappa's (2013) ethnography on women professionals in

the information technology (IT) sector where, by mobilizing collective kinship networks such as relying on parents/parents-in-laws for childcare and conforming to symbolic gestures such as wearing traditional "Indian" outfits, keeping a demure temperament and seeking approval of decisions, her participants towed the uneasy line of tradition and autonomy. Although we did not specifically probe questions around care arrangements, our respondents on their own expressed deep sense of gratitude for their families (in-laws, in most cases) and their subsequent efforts in reciprocating this support through caregiving obligations.

Female respondents in our sample noted that their pregnancies and subsequent motherhood did not alter their colleagues' professional attitude towards them but interestingly these respondents noted that they were no longer associated with impactful projects and professionally lucrative opportunities upon returning from maternity leave. In a pronatalist context where motherhood is valorized (Krishnaraj 2010; Bagchi 2017), maternity leave is perceived as a "break" from work often associated with low levels of research productivity and denials in promotion. The following quote from Rashmi (29 years, married, mother of twins, employed for 4 years) is telling:

I was one of the best in my cohort and even my immediate boss recommended me. But they (the promotion committee) only kept on stressing upon my one-year leave that I was officially sanctioned. They said it will be unfair to promote me because I had a long break from my career and asked me to apply again in the future.....

Interestingly, perceptions on gender-based underrepresentation and career stagnation varied both by marital and motherhood status among our respondents highlighting the contradictions in the practice of middle-classness. The two quotes below are illustrative of this contradiction:

It is certainly difficult for a woman to have family and a successful career, especially science career as it demands a lot of time. But most women do it even though they may become victims of societal pressures. (Gargi, 55 years, married, mother of two adults, employed for 30 years)

I do not think there is less women. Things are changing now. Look around [the organization] and you will see so many women working and giving tough competition to their male counterparts. (Joya, 28 years, married, no children, employed for 3 years)

For these middle-class women scientists, there is both an acknowledgement and denial of gender asymmetries in work and family. Sociologists working on India have suggested that for middle class women, conspicuously visible gendered behaviour is central to asserting higher caste and class position. In particular, Desai (2017) notes that for upper caste women an acceptance of deference and segregation signals modesty and appropriate femininity in the face of aspirational career choices. Notably, for all our respondents, the role of family seemed to emerge as the most significant factor governing their professional success. Several respondents noted their gratitude towards their parents, who provided enabling environments to pursue their professional choices. Significantly, middle-classness as it is argued is as much marked by continuities around family values, communal moralities and gender ideals as it is challenged by the global forces of educational aspirations and desires (Fernandes 2006). The following quotes summarize these sentiments.

My mother single-handedly looked after me and my three other siblings and she was a teacher as well. So, I have grown up in an environment where I saw my mother struggling between work and family. From childhood she taught us to be independent and never to compromise anything for the sake of career. (Komal, 35 years, married, mother of one child, employed for 9 years)

Though my father is a farmer, he never stopped me from studying. My grandmother and uncles were very sceptical but my parents always supported my dreams. (Jyoti, 37 years, married with one child, employed for 11 years)

Prior research suggests that part of the reason why Indian women professionals do not immediately acknowledge gender discrimination at workplaces is because women's class status is derived from their families (Beteille 1991; Uberoi 2006). In her insightful analysis, Belliappa (2013) argues that although women in her study seemed committed to their own independence, their paid labor cannot be immediately viewed as an individualistic pursuit but more as a symbolic capital that remain subservient to family loyalties. Her ethnography builds on prior work on IT careers of women (cf. Radhakrishnan 2009) that show how women employees in these sectors carefully preserve the industry's egalitarian and meritocratic image while at the same time embody a form of respectable femininity. To be sure, these authors show that the cultural signifiers of Indianness are not lost even though women carve out careers in upwardly mobile, high-tech globalized work cultures: "respectable modernity enshrined in tradition" Thapan (2004:415). This contradiction, economic autonomy with strategic conformity to family values, in middle class/upper caste women's experiences can be best understood by what Belliappa (2013) notes in her critique of sociologist Anthony Giddens', 1991 treatise, Modernity and Self-Identity: Self and Society in the Late Modern Age, of how the "self becomes a reflexive project" (32: emphasis in original) under economic and social transformations in late-modernity. Belliappa's focus on the analytical limits of the reflexive modernity thesis, a post-traditional social order marked by individuation, egalitarianism and capitalist rationality, is crucial since she lays it bare how individuation does not automatically free women (and men) of normative scripts such as, desirable femininity or performance of gender roles and structural inequalities, such as gendered household division of labor. Her ethnography brings to sharp relief the cultural anxiety portending an erosion of Indianness in the face of modernity and its discontents-devaluing and rejecting family ideals and care responsibilities. As with other scholars writing on the experience of professional, middle class women, our study makes it clear the dilemma and the cultural contradiction in exercising these emancipatory choices.

Finally, it is perhaps no surprise that the stronghold of the family finds articulation in both career and partner choice decisions of young Indians. As evidenced from our own sample, parental support for education and career choices were intimately tied to parental approvals regarding spousal selection and later, meeting certain parental expectations about reproductive decisions. In fact, five of the seven of the male respondents and all the female respondents in our study noted that their decisions to postpone childbearing were a source of conflict in their families.

I remember my parents asked us whether we had biological problem for not having a child. My husband was so embarrassed to encounter this from my parents but I had

laughed it out.... It was such a funny incident. And at the end they were very relieved to hear that it was our decision to postpone pregnancy and not a medical problem. (Maya, 42 years, married with one child, employed for 13 years)

Returning to our earlier discussion on the cultural contradictions of late-modernity, we contend that self-actualization and independence through the routes of professional careers do not automatically translate into freeing women (and men) from "doing gender" (West and Zimmerman 1987) - marriage and childbearing remain as two significant milestones in the social performance of gender (Gupta and Sharma 2002). To be sure, parental roles in constructing childboods that are aligned with the needs of the global market/economy is not new. Authors have noted that parents, especially mothers, through socialization process and consumption practices, such as foreign language classes, are deeply invested in curating childboods that assert social class distinctions -a key feature in practising middle-classness (Fernandes 2006).

### **Concluding Remarks**

We started this paper while drawing attention to the empirical paradox of higher rates of educational attainment among girls and a gradual thinning of women professionals in top positions in urban India. We argued that Euro-American notions of "glass ceiling" or "motherhood penalty" -typically associated with gains both in prestige and materiality are not immediately useful in understanding underrepresentation of women in science careers in India. Instead, we have built on the existing sociological scholarship that attributes normative scripts and gender roles restricting professional women's upward mobility while showing how it interlocks with the practice of middle-classness. Specifically, building on interviews with science professionals in a government-funded prestigious research organization in the city of Ahmedabad, we show how middle-classness is practiced through the shifting (and often contradictory) notions of motherhood, modernity and gender roles. Female respondents in our sample reported an ambivalent relationship with gender (e.g. expectations around gendered domesticities) and institutional hierarchies (as evidenced by very few women in top managerial and leadership positions) highlighting the contemporary dilemma in "doing gender" vs "doing modernity" (Desai 2017). Notably, the symbolic role of the benevolent middle-class family remained firmly lodged in their articulations of future goals and aspirations. We believe that by going beyond the standard sociological trope of gender asymmetries in explaining "why so few women" and instead focusing on social class-based norms, we offer a new retelling of the women's question in science.

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