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Grandparenting in Urban Bangalore, India: Support and Involvement From the Standpoint of Young Adult University Students

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Grandparenting in Urban Bangalore, India: Support and Involvement From the Standpoint of Young Adult University Students

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Abstract

A variety of caregivers, including grandparents, help raise children. Among grandparents, most Western samples evidence a matrilineal (i.e., mother's kin) bias in caregiving, and many studies show more positive impacts and stronger relationships with grandmothers than grandfathers. The aim of the present study is to test competing hypotheses about a potential laterality bias and explore contrasts between grandmothers and grandfathers in a sample of urban young adult university students in Bangalore, India. A sample of 377 (252 women) relatively mobile and high socioeconomic status individuals 17 to 25 years of age completed a survey consisting of sociodemographic and grandparenting questions. Results reveal generally little evidence of either a patrilineal or matrilineal bias, though findings varied for some outcomes. As illustrations, there were no differences in residential proximity or the most recent time when a participant saw matrilineal or patrilineal grandparents, whereas maternal grandmothers were more approving of one's choice of a life partner than were paternal grandmothers. In inductively coded responses to an open-ended item about the roles of grandparents, maternal grandmothers were more often identified as "guides" and less often deemed "non-significant" than paternal grandmothers, while paternal grandfathers were less often viewed as guardians and more often noted for their influence compared with maternal grandparents. Findings also revealed differences between grandmothers and grandfathers, such as grandmothers playing more prominent roles in community and religious festivals. Findings are interpreted within changing residential, work, education, and family dynamics in urban India as well as a primary importance on parents relative to grandparents.

Keywords

grandmothers, grandfathers, urban India, social change, family dynamics

Introduction

A variety of caretakers help raise children (Hrdy, 2009; Kramer, 2010). Cross-culturally, grandparents often play important supportive roles, supplementing the care provided by a child's parents (Coall & Hertwig, 2010; Coall, Hilbrand, Sear, & Hertwig, 2018; Shwalb & Hossain, 2017). A large body of international research shows that grandparents, especially grandmothers, often have positive impacts on grandchildren's survival, growth, and social development (Buchanan & Rotkirch, 2018; Coall & Hertwig, 2010; Sear & Mace, 2008; Voland, Chasiotis, & Schiefenhövel, 2005). However, the roles and contributions of grandfathers have attracted less attention (Leontowitsch, 2012), even if the focus of a recent edited volume (Buchanan & Rotkirch, 2016).

A number of factors structure the material investment and socioemotional connections between grandparents and grandchildren. Many studies from Western sociocultural

contexts indicate that matrilineal (a child's mother's side of the family) grandparents tend to be more involved than patrilineal (a child's father's side of the family) grandparents (Euler & Michalski, 2007; McBurney, Simon, Gaulin, & Geliebter, 2002; Pashos, 2017; Perry & Daly, 2017). Moreover, studies find that grandmothers are often more involved and have greater positive impact on grandchildren's outcomes compared with grandfathers, both on the

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matrilateral and patrilateral sides of the family (Coall & Hertwig, 2010; Euler & Weitzel, 1996; Sear & Mace, 2008). That said, in rural (but not urban) Greece and rural China, patrilateral grandparents were more often involved in grandparenting, pointing to the importance of a sociocultural context rather than a universal pattern (Chen, Liu, & Mair, 2011; Kaptijn, Thomese, Liefbroer, & Silverstein, 2013; Leonetti & Nath, 2009; Pashos & McBurney, 2008). As multi-generational, patrilineal, patrilocal households in rural China shift toward more flexible, urban, neolocal residence in urban China, Jankowiak and Moore (2017) suggest that this is associated with a shift from patrilateral to more bilateral kin ties.

The present study investigates patterns of grandparenting by surveying young adult undergraduate students in urban Bangalore, India. In urban India, like many other rapidly changing communities, families face declining fertility, increasing mobility, and a need for enhanced education to achieve work and social success (Niranjan, Nair, & Roy, 2005; Quah, 2015; Roopnarine & Gielen, 2005). Elders are also living longer, making them more often potentially available to provide support than past generations (Arokiasamy, Bloom, Lee, Feeney, & Ozolins, 2012; Babu, Hossain, Morales, & Vij, 2017; Kowal et al., 2012). Young adults more often enhance their social capital through education, resulting in delayed marriage and childbearing, and also raising the question of the role of grandparents in supporting or being supported by their young adult grandchildren (Seymour, 1999). Grandparents can provide different benefits (e.g., material investment, emotional support, promoting family cohesion), each of which warrants focus, including among often-neglected grandfathers (Babu et al., 2017; Chadha, 2012; Coall et al., 2018; Gray & Brogdon, 2017).

One might hypothesize that patrilateral grandparents in India will be more involved than matrilateral grandparents. Scholars have long commented on multigenerational, patrilineal, joint families in India (Ross, 1961; Shah, 1998; Sooryamoorthy, 2012; Srinivas, 1995), although some have pointed out that such families are more common among those living on shared family farmlands (Niranjan et al., 2005; Singh, 2005), in northern India (Gangopadhyay & Samanta, 2017), and have long existed alongside nuclear families (Singh, 2005). A recent study of 495 college students from Uttar Pradesh, India, provides some support for this expectation, where relationships were found to be stronger with patrilateral grandparents (particularly patrilateral grandfathers) than matrilateral grandparents (Pundir & Bansal, 2015). However, the survey instrument was not provided to directly assess how relationships were measured (a composite of 34 questions scored 0 to 4 on personal, emotional, social, and educational aspects was noted, but specific questions not given), and only a single relationship score was provided rather than multiple aspects of grandparenting dynamics. As urban India increasingly shifts from multigenerational to nuclear families and young adults live with

non-relatives (Niranjan et al., 2005; Sooryamoorthy, 2012), grandparents are less often living in the same homes as their grandchildren (Allendorf, 2013; Babu et al., 2017). Indeed, grandparents may not be available to assist if they live in far reaches of a growing metropolis, much less another city. Bangalore has attracted migrants from various parts of India for expanding labor and education possibilities, and also potentially at the expense of availability of grandparents. An alternative hypothesis is that the increased mobility of Bangalore young adult university students may result in no laterality bias in grandparenting, or even a matrilateral bias, given an idea that more autonomy may foster emotionally preferable matrilateral biases (Perry & Daly, 2017).

The aim of the present research is to test competing hypotheses about a potential laterality bias (e.g., whether a patrilateral, matrilateral, or no laterality bias exists) in a sample of urban young adult university students in Bangalore, India. We also explore whether relationships differ with grandmothers and grandfathers, given evidence from other societies for such differences. Because grandparenting can be structured by residential proximity, mediated by parental relationships (Michalski & Shackelford, 2005) and constrained by grandparental health status (Samanta, Chen, & Vanneman, 2014), we consider these factors. We address both quantifiable aspects of grandparenting dynamics (e.g., financial investments by grandparents and frequency of communication) and responses to one open-ended question about the role of grandparents to shed complementary light on these changing relationships.

Method

Subjects

Undergraduate and graduate students were recruited at CHRIST (Deemed to be University) in Bangalore, India. Research interns prepared a short presentation about the project, which was shared in the various classrooms across the Arts, Humanities, Commerce, and Science Deaneries programs. Participants were given study information, and those who volunteered signed a consent form and completed a paper-and-pencil survey in English (The university; medium of instruction is English, though students' mother tongues are often local/regional languages other than English). Hence, the study used convenient sampling, and based on the university population, the sample would comprise more students from local and neighbouring South Indian states (Kerala, Tamil Nadu, and Karnataka). According to the 2011 Census of India, 79.8% of the population of India practices Hinduism, 14.2% adheres to Islam, 2.3% adheres to Christianity, and 1.7% adheres to Sikhism (Census, 2011) (<https://www.census2011.co.in/religion.php>). The University student population has a larger proportion of Christian students when compared with the country's population statistics; however, the distribution may range

between 20% and 40% of each class. About 30% to 50% are likely to be Hindu and the rest from other religious backgrounds. Upon completion of the survey, participants were offered a coupon which could be exchanged for breakfast and coffee/tea.

Survey

The survey covered basic sociodemographic information (e.g., age, gender, residential status). Socioeconomic status was coded using the Kuppuswamy scale and based on three criteria: education of head of family, income of head of family, and profession of head of family (Singh, Sharma, & Nagesh, 2017). Some items tapped parental relationships: participants were asked how close they live (via automobile, car, bus, rickshaw, etc.) to their mothers/fathers, with options including (1) "I live with her or him," (2) "I live 10 mins away from her or him," (3) "I live within an hour," (4) "I live in another city," and (5) "I live in another country." To evaluate parental communication, participants were asked "How often do you discuss family relationships with your (mother/father)?" and "How often do you discuss university life (e.g., school work and activities) with your (mother/father)?" with responses ranging from 1 (*not at all*) to 5 (*extremely often*). Subjects were asked, "When did you last communicate (e.g., phone) with your (mother/father)?" with responses ranging from 1 (*daily*) to 6 (*never*).

The core of the survey assessed various domains of grandparental involvement, soliciting information about each of four potential categories of grandparents (maternal grandmother [MGM], maternal grandfather [MGF], paternal grandmother [PGM], paternal grandfather [PGF]). Participants were asked whether a particular grandparent was alive (yes/no) and, if alive, her or his age in years. A grandparent's health was rated from 1 (*very good*) to 5 (*very poor*). Residential proximity was scored using the same question as for parents (e.g., 1 for "I live with her or him" and 5 for "I live in another country"). Subjects were asked, "How often do you see or communicate with your (category of grandparent, such as MGM)?" with responses varying from 1 (*never*) to 5 (*always*). Two other grandparental communication questions were "When did you last see your (grandparent)?" and "When did you last communicate (phone) with your (grandparent)?" with responses including 1 (*daily*), 2 (*weekend*), 3 (*holiday*), 4 (*past semester*), 5 (*past year*), and 6 (*never*). An open-ended item asked about financial support: "In the past 12 months, how much financial assistance would you estimate your (grandparent) has given to you (e.g., for school expenses, food, transportation costs)?" These responses were categorized as 0 (*none*), 1 (*little, or more than 0 and up to 1,000 rupees*), 2 (*1,000-5,000 rupees*), or 3 (*a lot, or more than 5,000 rupees*). Other items clarifying grandparental relationships were "How often do you ask your (grandparent) for support (financial)?" "How often do you provide

support to your (grandparent) (emotional/financial?)" and "How often do you have disagreements with your (grandparent)" with responses ranging from 1 (*never*) to 5 (*always/every time*).

A set of 10 questions covered aspects of family relationships, including involvement of parents and grandparents in a student's decision making. Participants were asked to specify the level of involvement from 1 (*never*) to 5 (*always*) for each of MGMs, MGFs, PGMs, PGFs, and, for further comparison, mothers and fathers, for the following set of situations: "Decisions relating to education, selection of courses, college/university"; "Decisions related to career choice and job-related issues"; "Approving choices related to the peer/friend circle"; "Approving choice of a life partner"; "Does this person talk to you about the significance of the community/religious festivals that you celebrate with your family?" "Does this person remind you about and recall the various community and religious festivals that is celebrated in your family?" "Who in your family places more importance to celebrating community and religious festivals in your family?" "Who in your family communicates about the norms to be followed when attending community-related events?" "Does this person correct you when you make mistakes or do something wrong?" and "Does this person indulge you or comfort you when things go wrong?" For these items about grandparental involvement, if a grandparent had died within the past 2 years, participants were encouraged to respond based on that grandparent's involvement during this recent window of time.

To evaluate grandparental roles, an open-ended question was asked: "What roles does your (each category of the four types of grandparents) play in your life?" Responses were inductively coded into a set of categories: guide (he or she helps you form an opinion, helps you make a decision about something else, influences someone's judgment and behavior, helps you get through something difficult, helps you become a responsible and independent person), guardian (long-term commitment, appreciating, aware and sensitive to one's needs, person who has authority to make decisions, responsible legally, someone who protects), significant (someone important or noticeable), support (gives encouragement to help succeed, either emotional or practical/financial support), influence (the power to have an effect on people, to affect or change how someone develops, behaves, or thinks), and not significant (very little or no involvement, no contact due to distance or cutoff). For some participants, open-ended responses yielded multiple codes.

Statistical Analyses

To test between-subject differences in grandparenting dynamics, independent-sample *t* tests were employed. To test within-subject differences in grandparenting, paired *t* tests were employed. To test group differences in roles of grandparents, χ^2 tests were used.

Results

Sociodemographic Data

A sample of 377 students participated who were between 17 and 25 years of age. The average (*SD*) age was 19.9 (1.9) years. Approximately two thirds of the sample were women (252 women, 121 men, four gender not reported). This was a sample of relatively high socioeconomic status, with 237 coded as “upper,” 87 as “upper middle,” 20 as “lower middle,” four as “upper lower,” and one as “lower” class.

Approximately half ($n = 183$) of the students reported living with a friend or friends (e.g., in a hostel or apartment). Fifteen participants reported living alone. The remainder of participants indicated they live with family members, although the composition of family members varied (e.g., parents, siblings, grandparents, and others), and occasionally, these living arrangements included friends and family. Only two individuals reported living with a romantic partner such as a husband. A slight majority of participants reported living in Bangalore since beginning University ($n = 213$). Other participants had lived in Bangalore before starting University but less than 5 years ($n = 33$), between 5 and 10 years ($n = 29$), between 10 and 15 years ($n = 17$), or their entire lives ($n = 82$).

The average (*SD*) age of mothers and for fathers was 46.9 (4.9) years and 51.4 (4.9) years, respectively. A vast majority of parental marriages were arranged ($n = 302$) rather than of parental choice ($n = 68$). A vast majority of parents (333/374 responses) were from the same community and had the same mother tongue (332/372 responses). A vast majority of parents were together ($n = 322$), with 26 parents reportedly separated due to work, 10 separated/divorced, and, in 14 cases, a participant’s parents were not together due to parental death. Participants reported financial support for university expenses from fathers ($n = 185$) more commonly than from mothers ($n = 21$), although both parents ($n = 153$) commonly provided such support.

Participants lived closer to mothers than fathers and, by multiple measures, maintained stronger communication with mothers than fathers. In paired *t* tests, living proximity was closer to mothers ($M = 3.0$, $SD = 1.5$) than fathers ($M = 3.1$, $SD = 1.5$), $t = -3.41$, $df = 353$, $p = .001$. Participants reported more often discussing family relationships with mothers ($M = 3.6$, $SD = 1.0$) than fathers ($M = 2.9$, $SD = 1.1$), $t = 13.04$, $df = 355$, $p < .001$. Similarly, participants more regularly discussed university life (e.g., school work and activities) with mothers ($M = 3.7$, $SD = 1.0$) than fathers ($M = 3.2$, $SD = 1.2$), $t = 9.06$, $df = 356$, $p < .001$. A subject’s last communication was more recently with mothers ($M = 1.2$, $SD = 0.5$) than fathers ($M = 1.4$, $SD = 0.7$), $t = -5.87$, $df = 348$, $p < .001$.

If men marry and begin having children at later ages than women—as was reported among parents—we would expect paternal grandparents to be older than maternal grandparents, and grandfathers to be older than grandmothers.

Because men tend to live shorter lives than women, we would expect lower fractions of paternal grandparents to be alive than maternal grandparents, and lower fractions of grandfathers to be alive than grandmothers. All of these expectations hold among grandparenting demographics reported by participants and are presented in Table 1. The health of paternal grandparents is also rated slightly worse than maternal grandparents.

Testing Laterality (Matrilateral Versus Patrilineal) Biases and Other Key Empirical Patterns in Grandparenting

To test competing hypotheses about a potential laterality bias, we employed paired *t* tests in which grandparent types were compared (e.g., MGMs and PGMs). Given a high number of comparisons, alpha was set to .01. This is a powerful statistical approach because it offers a within-subject comparison (i.e., the same individual evaluates grandparents of different sides of the family), removing between-subject potential confounds. For those outcomes given in Table 1, there were no significant differences between MGMs and PGMs or MGFs and PGFs. Thus, no evidence of a patrilineal or matrilateral bias emerged in this set of contrasts.

For the next battery of outcomes depicted in Table 2, there was similarly little evidence of a laterality bias. There were no significant differences in the outcomes between MGFs and PGFs. In comparisons between MGMs and PGMs, MGMs were more approving of one’s choice of a life partner than were PGMs ($t = -3.13$, $df = 241$, $p = .002$). MGM more often corrected participants when they made mistakes or did something wrong ($t = -3.11$, $df = 233$, $p < .001$) and more often indulged participants or comforted them when things went wrong ($t = -4.96$, $df = 241$, $p = .000$) than did PGM.

A second aim was to compare participant relationships with grandmothers and grandfathers. Employing the same statistical approach for maternal grandparents, longer durations had lapsed since the last communication with MGFs than MGMs ($t = -2.63$, $df = 140$, $p = .01$), and individuals provided more support to MGM ($t = 3.32$, $df = 143$, $p = .001$) and engaged in more disagreements with MGM ($t = 4.48$, $df = 140$, $p < .001$). In contrasts between paternal grandparents, the only significant difference was less frequent disagreements with PGF than PGM ($t = 3.589$, $df = 86$, $p = .001$).

A number of other differences emerged between grandfathers and grandmothers. On the mother’s side, MGM gave more approval for one’s choice of a life partner ($t = -3.73$, $df = 241$, $p < .001$) than did MGF. MGM more often talked with participants about community/religious festivals ($t = -6.05$, $df = 245$, $p < .001$), more often reminded participants about various community and religious festivals ($t = -6.54$, $df = 240$, $p < .001$), placed more importance on celebrating community and religious festivals ($t = -6.23$,

Table 1. Descriptive Data for Central Grandparenting Variables.

	MGM	MGF	PGM	PGF
Is your ___ alive? (yes responses)	257	171	222	117
Age of ___ (M/SD for outcomes)	72.2 (7.8)	75.2 (6.9)	75.5 (8.2)	78.3 (7.3)
How would you rate your ___ health?	2.6 (0.9)	2.6 (0.9)	2.7 (0.9)	2.7 (1.0)
How close do you live to your ___?	3.5 (1.0)	3.7 (0.9)	3.5 (1.1)	3.6 (1.1)
How often do you see or communicate with your ___?	3.2 (0.9)	2.9 (1.0)	3.1 (1.1)	3.1 (1.1)
When did you last see your ___?	3.4 (1.1)	3.5 (1.2)	3.3 (1.1)	3.4 (1.2)
When did you last communicate (phone) with your ___?	2.9 (1.3)	3.1 (1.3)	3.1 (1.5)	3.0 (1.5)
In the past 12 months, how much financial assistance ___ gave to you?	2.0 (1.2)	2.0 (1.1)	2.0 (1.2)	2.3 (1.3)
How often do you ask your ___ for support (financial)?	1.5 (0.8)	1.5 (0.9)	1.5 (1.0)	1.9 (1.2)
How often do you provide support to your ___ (emotional/financial)?	2.9 (1.3)	2.6 (1.3)	2.8 (1.3)	2.7 (1.4)
How often do you have disagreements with your ___?	2.3 (1.0)	1.9 (0.9)	2.4 (1.1)	2.3 (1.1)

Note. MGM = maternal grandmothers; MGF = maternal grandfathers; PGM = paternal grandmothers; PGF = paternal grandfathers.

$df = 235, p < .001$), and more often communicated about norms to follow when attending community-related events ($t = -5.81, df = 231, p < .001$) compared with MGF. MGM were also more likely than MGF to correct participants when they made mistakes ($t = -4.57, df = 233, p < .001$) and indulged participants or comforted them when things went wrong ($t = -6.25, df = 235, p < .001$). Thus, by many measures, MGM were more involved than MGF with their grandchildren's lives, including the celebration of community and religious festivals.

In contrasts between PGMs and PGFs, PGF were more likely to be involved in a grandchild's career and job decisions ($t = 2.65, df = 217, p = .009$) than PGM. However, PGM were more involved in all four measures of community and religious festival participation: PGM more often talked with grandchildren about community/religious festivals ($t = -3.28, df = 217, p = .001$), more often reminded participants about community and religious festivals ($t = -3.94, df = 216, p < .001$), placed more importance on celebrating community and religious festivals ($t = -3.66, df = 205, p < .001$), and more often communicated about the norms to follow when attending community-related events ($t = -3.48, df = 201, p = .001$).

Codes for the open-ended question about the roles a grandparent plays in a respondent's life revealed that the most frequently specified role was support, followed by significance, guide, and then influence. These patterns are shown in Table 3. A grandparent was deemed not-significant in 88 of some 631 possible cases. The least frequently coded option for grandparents' roles was guardian. These descriptive data suggest that PGMs may be less likely to act as guides; patrilineal grandparents may be less likely to serve as guardians, PGFs provide the most influence, and PGMs are most likely to be viewed as not significant. To statistically formalize these comparisons, χ^2 tests were employed first to compare grandparents of different laterality and then

grandmothers and grandfathers of the same side of the family, with analyses using only the first role for a given grandparent. These are not strictly within-subject comparisons because these analyses incorporate codes from participants who have either one or both types of grandparents in specific tests. These analyses reveal that distributions of coded roles differ between MGMs and PGMs (MGMs: $\chi^2 = 11.57, df = 5, p = .041$; PGMs: $\chi^2 = 14.06, df = 5, p = .015$), largely due to MGMs more often serving as *guides* and less often being deemed *not significant* than PGMs. In comparisons between MGFs and PGFs, the distribution of PGFs differed from expectation ($\chi^2 = 16.04, df = 5, p = .007$), due to PGFs less often acting as *guardian* and more often noted for *influence*. Roles of MGMs and MGFs did not differ significantly. The distribution of PGFs differed from that of PGMs ($\chi^2 = 12.33, df = 5, p = .031$), with PGFs more often recognized as *guides*. These coded responses thus reveal laterality differences in grandparental roles and different roles between paternal grandparents but not maternal grandparents.

Discussion

The aim of the present study is to test the competing hypotheses about a potential laterality bias and explore contrasts between grandmothers and grandfathers in a sample of urban young adult university students in Bangalore, India. Our participant population is a highly mobile, relatively high socioeconomic class of young adults, as shown by the sociodemographic profile. This same profile confirms that they are experiencing the sorts of demographic and social changes playing out across much of urban India (e.g., fragmentation of multi-generational households, delays in adult landmarks such as marriage, and enhancement of education: Singh, 2005).

There was generally little evidence of either a patrilineal or matrilineal bias. Outcomes reported in Tables 1 and 2

Table 2. Descriptive Data for Grandparental Involvement Variables.

	M	MGM	MGF	F	PGM	PGF
Decisions relating to education, selection of courses, college/university	4.2 (1.0)	1.8 (1.2)	1.8 (1.2)	4.2 (1.0)	1.7 (1.0)	1.8 (1.2)
Decision related to career choice and job-related issues	4.1 (1.1)	1.8 (1.2)	1.8 (1.2)	4.1 (1.1)	1.6 (1.0)	1.8 (1.2)
Approving choices related to the peer/friend circle	3.2 (1.4)	1.5 (0.9)	1.4 (0.9)	2.7 (1.4)	1.5 (0.9)	1.4 (0.9)
Approving choice of a life partner	3.6 (1.5)	2.2 (1.5)	1.9 (1.3)	3.3 (1.6)	1.9 (1.3)	1.9 (1.3)
Does this person talk to you about the significance of the community/religious festivals?	3.8 (1.2)	3.1 (1.5)	2.5 (1.5)	3.3 (1.3)	2.9 (1.5)	2.4 (1.5)
Does this person remind you about and recall various community/religious festivals?	3.7 (1.2)	3.0 (1.5)	2.4 (1.5)	3.2 (1.4)	2.8 (1.6)	2.4 (1.5)
Who in your family places more importance to celebrating community/religious festivals	4.0 (1.1)	3.4 (1.5)	2.8 (1.6)	3.4 (1.3)	3.1 (1.6)	2.7 (1.6)
Who in your family communicates about the norms to be followed when attending	3.8 (1.2)	3.0 (1.5)	2.4 (1.5)	3.2 (1.3)	2.8 (1.5)	2.4 (1.5)
Does this person correct you when you make mistakes or do something wrong?	4.6 (0.8)	3.3 (1.5)	2.8 (1.6)	4.4 (1.0)	2.9 (1.6)	2.7 (1.6)
Does this person indulge you or comfort you when things go wrong?	4.2 (1.1)	3.1 (1.6)	2.6 (1.6)	3.8 (1.4)	2.5 (1.6)	2.4 (1.6)

Note. Data represent *M* (*SD*). Mothers (M) and Fathers (F) are also included for additional comparison. MGM = maternal grandmothers; MGF = maternal grandfathers; PGM = paternal grandmothers; PGF = paternal grandfathers.

Table 3. Roles of Grandparents in Open-Ended Responses.

Category and totals (total <i>N</i> responses/ total <i>N</i> respondents)	MGM (<i>N</i> = 216)	MGF (<i>N</i> = 146)	PGM (<i>N</i> = 176)	PGF (<i>N</i> = 95)
Guide 132 (125)	56 (54)	30 (30)	18 (17)	28 (24)
Guardian 62 (58)	24 (21)	25 (25)	9 (9)	4 (3)
Significant 146 (138)	48 (45)	30 (29)	47 (46)	21 (18)
Support 165 (136)	59 (51)	33 (33)	51 (39)	22 (13)
Influence 96 (86)	24 (22)	11 (11)	31 (29)	30 (24)
Not significant 88 (88)	22 (22)	18 (18)	35 (35)	13 (13)

Note. The total number of responses can exceed the number of respondents because some respondents gave multiple answers. MGM = maternal grandmothers; MGF = maternal grandfathers; PGM = paternal grandmothers; PGF = paternal grandfathers.

revealed almost no laterality differences, while codes given in Table 3 showed some differences. As illustrations of these patterns, there were no differences in living proximity, frequency of communication, most recent visit with, financial support, how often young adults in this sample sought support, involvement in decisions related to education, career and job choices, friendships, approving of a life partner, or religious and community festivals between matrilineal and patrilineal grandparents. These patterns are thus at odds with either a strong matrilineal or patrilineal hypothesis. While research from many samples in Western Europe or North America has identified matrilineal biases and several studies have observed patrilineal biases in rural China and Greece, this was not the case here in an urban university student sample in Bangalore, India. Findings from the present study are also at odds with the general expectation of a patrilineal bias based on patrilocal joint Indian household

ethnographic characterizations (e.g., Ross, 1961) or a report of a patrilineal bias from a university student sample in Uttar Pradesh, India (Pundir & Bansal, 2015).

We offer several tentative reasons why there was not a strong laterality bias in grandparenting in this sample. One key factor may be that these are young adults who require less care than young highly dependent grandchildren. The bulk of research on the influence of grandparents highlights the impact on young grandchildren, particularly in the first few years of life. This may be a time at which direct care from grandparents, particularly grandmothers, has maximal impact on survival and health (see Sear & Mace, 2008). However, in our focus on young adult samples, grandparents may be less essential to survival or health and instead (as discussed below) have greater impact in providing emotional and material support supplementary to a young adult's parents and peers. These forms of grandparental care are more

flexible, obtained either from matrilineal or patrilineal grandparents in a context in which young adults live more often with friends or smaller families rather than multi-generational households. The grandparents of these young adults may also have other family members, particularly more dependent grandchildren, to whom they provide attention and care.

We underscore the primary importance of parents as sources of material, social, and emotional support in this sample. Participants indicated relying more on parents than grandparents for the items listed in Table 2; as examples, participants relied more on parents than grandparents in making educational, career/job, peer/friend, and life partner decisions; relied more on parents than grandparents when becoming involved in community or religious festivals; responded that parents more often corrected them than grandparents when making mistakes; and responded being indulged or comforted by parents over grandparents when things go wrong. Put simply, in this sample of young adults, parents appear to matter more than grandparents. This pattern contributes to less overall reliance on grandparents generally and lack of a strong laterality bias in grandparental support. Notably, by multiple measures such as residential proximity and frequency of communication, participants had stronger relationships with their mothers than fathers, which is consistent with much cross-cultural research on parent-child dynamics (e.g., Gray & Anderson, 2010; Hrdy, 2009; Low, 2015), including India (Singh, 2005). Moreover, previous work in Bangalore pointed to different roles played by fathers and mothers, resulting in variation in how “replaceable” the loss of a father could be on children (Shenk & Scelza, 2012).

Despite the general lack of a grandparenting laterality bias, a few outcomes did differ between grandparents on the maternal and paternal side. MGMs were more involved in decisions about a grandchild’s life partner, more often corrected grandchildren who made mistakes, more often indulged grandchildren when things went wrong, and more often tended to be viewed as guides and were less often viewed as not significant compared with PGMs. PGFs less often served as guardians and more often were noted for influence than MGFs. Although these patterns do not yield a simple summary, they do point toward some evidence of more intimate matrilineal, particularly grandmaternal, dynamics, in addition to greater patrilineal grandpaternal influence. These patterns thus offer hints that underneath an overarching laterality approach may exist different dynamics across different domains (i.e., emotional support vs. financial contributions vs. family influence).

Contrasts between grandmothers and grandfathers showed many similarities, although differences arose too. The observation of similarities could tie into previous points about the lower engagement with grandparents than parents and that lives of grandmothers and grandfathers are sufficiently intertwined to yield many similarities (in outcomes such as residential proximity). That said, participants reported more

regular communication, including disagreements, with grandmothers than grandfathers, especially on the maternal side. Grandmothers were more involved in community and religious festivals than grandfathers, both on the maternal and paternal sides. Maternal grandparents more often corrected participants when they made mistakes, indulged them when things went wrong, and gave more approval for a choice of a life partner than MGFs, suggesting deeper involvement of grandmothers, particularly MGMs, than grandfathers. PGFs were more often viewed as guides than PGMs. This amounts to some evidence of differential roles fulfilled by grandmothers than grandfathers, such as deeper emotional ties with MGMs and greater festival involvement promoted by grandmothers than grandfathers. Such observations echo evidence of more emotional maternal grandmothering relationships (e.g., Gray & Brogdon, 2017) and female participation in religious activities in countries like the United States (e.g., Miller & Hoffmann, 1995).

Several other factors could help inform different dynamics with grandmothers and grandfathers. In urban-educated working class families (such as our students), both parents typically work outside the household, with mothers thus variably at home and able to meet the emotional needs of children. Consequently, grandparents, especially grandmothers, may play more emotionally central roles in grandchildren’s lives, for example, correcting during mistakes, comforting when in distress, abetting cultural transmission, and openly having an opinion on the most intimate decision of choosing a life partner (as data here suggest). Evidence from other samples of grandparents suggests such different expectations and experiences may make grandparenting differentially rewarding to grandmothers compared with grandfathers (Somary & Stricker, 1998). Another interesting cultural factor could also be because of the nature of parents’ marriage (arranged marriage, typically within the same community) rather than parental choice of partners from different communities, families of both sides may effectively be pre-screened for compatibility, also reducing potential laterality biases. Put another way, perhaps these types of arranged marriages act against a patrilineal bias and can foster more emotional involvement of grandmothers than might otherwise be expected.

Grandparents fulfill a variety of roles, as indicated by the responses to the open-ended item (see also Ramirez Barranti, 1985). Grandparents are regularly seen as significant, as sources of support, and as guides to offer influence, sometimes to be of non-significance, and to serve as guardians. These roles are broadly consistent with Chadha’s (2012) view that Indian grandparents are sources of support and advice and are often involved in ceremonial and ritual activity. Note that there was little evidence that grandparents are viewed detrimentally, and that the frequency at which they were coded as significant surpasses that in which they were deemed non-significant. Unlike past views of Indian grandparents (Babu et al., 2017; Singh, 2005), grandfathers are

less viewed as authority figures to whom grandchildren indicate submission and loyalty. The specification that grandparents can serve as guides, as sources of support and have influence is notable even in a context of relatively mobile, high socioeconomic status young adults face a rapidly changing world at university and life decisions ahead. Grandparents, by these responses, are still regularly recognized as beneficial even in the face of this change. We also attempted to split the support category apart into emotional and financial support; however, there was almost no financial support free-listed and nearly all was emotional support, so a single category of “support” was retained.

This study has a number of strengths. One is employing a study design that primarily relies upon within-family (referenced to the undergraduate participant) evaluations of grandparental relationships. That analytical approach removes potential between-family confounding variables. Another strength is expanding the cultural scope of grandparenting patterns, given that most such quantitative and theoretical work has been in Europe or North America. Another strength is situating competing hypotheses within a milieu of urban social change among young adults, recognizing tensions between past and present and with an age focus (young adults) less represented in the grandparenting literature.

This study is subject to limitations. The survey erred on the side of having fewer, non-validated items and may not have been sufficiently sensitive to pick up variation (e.g., residential proximity) based on the questions and answer options provided. Only grandchildren provided assessments, whereas complementary insight would be garnered by asking grandparents about these relationships. Longitudinal evidence would more directly capture evidence of social change than inferences suggested from a cross-sectional design, and comparisons with other samples (e.g., rural villages in southern India) might better clarify differences in grandparenting dynamics and factors underlying those differences.

In summary, the present study highlights grandparenting relationships as viewed by a sample of relatively high mobility and socioeconomic status university students in Bangalore, India. There was little evidence of a laterality bias, with most outcomes such as residential proximity showing no differences on the mothers’ and fathers’ sides of the family. A few items such as the greater involvement of MGMs than PGMs in a grandchild’s choice of a life partner appeared. Reasons suggested for the general lack of laterality grandparenting biases are the primacy of parents over grandparents, the ages of grandchildren, and changing demographic, residential, educational, and family life. The findings counter some ethnographic descriptions of Indian patrilineal biases that may instead better characterize joint land-owning families in northern India than the families represented in the present study. A few differences in the roles and relationships with grandmothers and grandfathers as well as mothers and fathers also emerged, with grandmothers

more involved in community and religious festivals than grandfathers and by several measures such as residential proximity mothers more involved than fathers. The findings contribute to an understanding of variation and change in grandparenting in urban India more broadly (e.g., Buchanan & Rotkirch, 2018).

Authors’ Note

This study commenced only after ethics approval was issued at both institutions. After submitting study documentation, the study was deemed exempt by the institutional review board (IRB) at University of Nevada, Las Vegas (UNLV). At Christ University, the proposal and related documents were reviewed by the IRB committee, and an approval certificate was issued on the basis of no harm and also complete compliance with the ethical rules at the institution. Data collection on campus also required an approval from the Student Affairs Director and a letter attesting the same was obtained.

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References

- Allendorf, K. (2013). Going nuclear? Family structure and young women’s health in India, 1992–2006. *Demography*, *50*, 853–880.
- Arokiasamy, P., Bloom, D., Lee, J., Feeney, K., & Ozolins, M. (2012). Longitudinal aging study in India: Vision, design, implementation, and preliminary findings. In J. P. Smith, M. Majmundar, National Research Council, & Committee on Population (Eds.), *Aging in Asia: Findings from new and emerging data initiatives* (pp. 36–76). Washington, DC: National Academies Press.
- Babu, N., Hossain, Z., Morales, J. E., & Vij, S. (2017). Grandparents in Bangladesh, India, and Pakistan. In D. W. Shwalb, Z. Hossain (Eds.), *Grandparents in cultural context* (pp. 159–186). New York, NY: Routledge.
- Buchanan, A., & Rotkirch, A. (2018). Twenty-first century grandparents: Global perspectives on changing roles and consequences. *Contemporary Social Science*, *13*, 131–144.
- Buchanan, A., & Rotkirch, A. (Eds.). (2016). *Grandfathers: Global perspectives*. London, England: Springer.
- Census (2011). Retrieved from <https://www.census2011.co.in/reli-gion.php>
- Chadha, N. K. (2012). Intergenerational relationships: An Indian perspective. Unpublished manuscript.

- Chen, F., Liu, G., & Mair, C. A. (2011). Intergenerational ties in context: Grandparents caring for grandchildren in China. *Social Forces*, *90*, 571-594.
- Coall, D. A., & Hertwig, R. (2010). Grandparental investment: Past, present, and future. *Behavioral and Brain Sciences*, *33*, 1-19.
- Coall, D. A., Hilbrand, S., Sear, R., & Hertwig, R. (2018). Interdisciplinary perspectives on grandparental investment: A journey towards causality. *Contemporary Social Science*, *13*, 159-174.
- Euler, H. A., & Michalski, R. L. (2007). Grandparental and extended kin relationships. In C. A. Salmon, & T. K. Shackelford (Eds.), *Family relationships: An evolutionary perspective* (pp. 230-255). New York, NY: Oxford University Press.
- Euler, H. A., & Weitzel, B. (1996). Discriminative grandparental solicitude as reproductive strategy. *Human Nature*, *7*, 39-59.
- Gangopadhyay, J., & Samanta, T. (2017). "Family matters" ageing and the intergenerational social contract in urban Ahmedabad, Gujarat. *Contributions to Indian Sociology*, *51*, 338-360.
- Gray, P. B., & Anderson, K. G. (2010). *Fatherhood: Evolution and human paternal behavior*. Cambridge, MA: Harvard University Press.
- Gray, P. B., & Brogdon, E. (2017). Do step-and biological grandparents show differences in investment and emotional closeness with their grandchildren? *Evolutionary Psychology*, *15*(1). doi:10.1177/1474704917694367
- Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge, MA: Belknap Press, Harvard University Press.
- Jankowiak, W. R., & Moore, R. L. (2017). *Family life in China*. Malden, MA: Polity Press.
- Kaptijn, R., Thomese, F., Liefbroer, A. C., & Silverstein, M. (2013). Testing evolutionary theories of discriminative grandparental investment. *Journal of Biosocial Science*, *45*, 289-310.
- Kowal, P., Chatterji, S., Naidoo, N., Biritwum, R., Fan, W., Lopez Ridaura, R., . . . Snodgrass, J. J. (2012). Data resource profile: The World Health Organization Study on global AGEing and adult health (Sage). *International Journal of Epidemiology*, *41*, 1639-1649.
- Kramer, K. L. (2010). Cooperative breeding and its significance to the demographic success of humans. *Annual Review of Anthropology*, *39*, 417-436.
- Leonetti, D. L., & Nath, D. C. (2009). Age at first reproduction and economic change in the context of differing kinship ecologies. *American Journal of Human Biology*, *21*, 438-447.
- Leontowitsch, M. (2012). Interviewing older men. In M. Leontowitsch (Ed.), *Researching later life and aging* (pp. 104-123). Hampshire, UK: Palgrave Macmillan.
- Low, B. (2015). *Why sex matters* (2nd ed.). Princeton, NJ: Princeton University Press.
- McBurney, D. H., Simon, J., Gaulin, S. J., & Geliebter, A. (2002). Matrilateral biases in the investment of aunts and uncles. *Human Nature*, *13*, 391-402.
- Michalski, R. L., & Shackelford, T. K. (2005). Grandparental investment as a function of relational uncertainty and emotional closeness with parents. *Human Nature*, *16*, 293-305.
- Miller, A. S., & Hoffmann, J. P. (1995). Risk and religion: An explanation of gender differences in religiosity. *Journal for the Scientific Study of Religion*, *34*, 63-75.
- Niranjan, S., Nair, S., & Roy, T. K. (2005). A socio-demographic analysis of the size and structure of the family in India. *Journal of Comparative Family Studies*, *36*, 623-651.
- Pashos, A. (2017). Asymmetric caregiving by grandparents, aunts, and uncles and the theories of kin selection and paternity certainty: How does evolution explain human behavior toward close relatives? *Cross-Cultural Research*, *51*, 263-284.
- Pashos, A., & McBurney, D. H. (2008). Kin relationships and the caregiving biases of grandparents, aunts, and uncles. *Human Nature*, *19*, 311-330.
- Perry, G., & Daly, M. (2017). A model explaining the matrilineal bias in alloparental investment. *Proceedings of the National Academy of Sciences*, *114*, 9290-9295.
- Pundir, P., & Bansal, I. (2015). Exploring grandparents and adolescent relationships in urban and rural settings. *Utopia of Global Education*, *1*, 87-91.
- Quah, S. R. (Ed.). (2015). *Routledge handbook of families in Asia*. Abingdon, UK: Routledge.
- Ramirez Barranti, C. C. (1985). The grandparent/grandchild relationship: Family resources in an era of voluntary bonds. *Family Relations: An Interdisciplinary Journal of Applied Family Systems*, *34*, 343-352.
- Roopnarine, J. L., & Gielen, U. P. (Eds.). (2005). *Families in global perspective*. Boston, MA: Pearson/Allyn and Bacon.
- Ross, A. D. (1961). *The Hindu family in its urban setting*. Toronto, Ontario, Canada: University of Toronto Press.
- Samanta, T., Chen, F., & Vanneman, R. (2014). Living arrangements and health of older adults in India. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *70*, 937-947.
- Sear, R., & Mace, R. (2008). Who keeps children alive? A review of the effects of kin on child survival. *Evolution and Human Behavior*, *29*, 1-18.
- Seymour, S. C. (1999). *Women, family, and child care in India: A world in transition*. Cambridge, UK: Cambridge University Press.
- Shah, A. M. (1998). *The family in India: Critical essays*. Hyderabad, India: Orient Blackswan.
- Shenk, M. K., & Scelza, B. A. (2012). Paternal investment and status-related child outcomes: Timing of father's death affects offspring success. *Journal of Biosocial Science*, *44*, 549-569.
- Shwalb, D. W., & Hossain, Z. (Eds.). (2017). *Grandparents in cultural context*. New York, NY: Routledge.
- Singh, J. P. (2005). The contemporary Indian family. In B. N. Adams, & J. Trost (Eds.), *Handbook of world families* (pp. 129-166). Thousand Oaks, CA: Sage.
- Singh, T., Sharma, S., & Nagesh, S. (2017). Socio-economic status scales updated for 2017. *International Journal of Research in Medical Sciences*, *5*, 3264-3267.
- Somary, K., & Stricker, G. (1998). Becoming a grandparent: A longitudinal study of expectations and early experiences as a function of sex and lineage. *Gerontologist*, *38*, 53-61.

- Sooryamoorthy, R. (2012). The Indian family: Needs for a revisit. *Journal of Comparative Family Studies*, 43, 1-9.
- Srinivas, M. N. (1995). *Social change in modern India*. Hyderabad, India: Orient Blackswan.
- Voland, E., Chasiotis, A., & Schiefenhövel, W. (Eds.). (2005). *Grandmotherhood: The evolutionary significance of the second half of female life*. New Brunswick, NJ: Rutgers University Press.

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