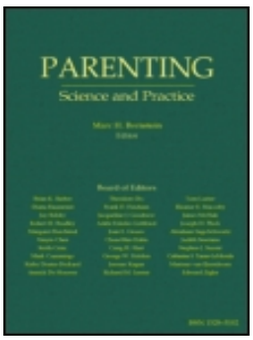

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Patrilocal Residence and Father–Child Resemblance Beliefs in Relation to Paternal Investment

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SYNOPSIS

Objective. The present study investigated the moderating effect of patrilocality—whether a child's mother lives with paternal grandparents—on the relation between father–child resemblance belief and paternal investment. ***Design and Results.*** On the basis of 341 children and their parents from rural China, belief in paternal resemblance was found to be related to higher paternal warmth toward the child, higher paternal marital satisfaction, and stronger relations of perceived paternal autonomy granting and paternal psychological control to child life satisfaction. The differences between high and low paternal resemblance beliefs were attenuated by patrilocality. ***Conclusions.*** These findings demonstrate the compensatory roles of *paternal resemblance belief* (a behavioral adaptation) and *patrilocal residence* (a cultural adaptation) in serving the same function of calming paternity uncertainty and procuring paternal investment to children.

INTRODUCTION

The fact that ovulation and insemination are concealed in human females (as well as in other mammals) presents a special reproductive challenge to human males; namely, paternity uncertainty. In other words, fathers cannot be 100% certain that their children are truly their own, whereas mothers can. Paternity uncertainty results in lower and more variable parental investment in the offspring from fathers than mothers (Trivers, 1972). Larger paternal investment variations in part reflect different approaches and different extents by which human parents resolve paternity uncertainty (Geary & Flinn, 2001). The current biological and psychological literatures suggest that humans have mostly opted for behavioral and cultural adaptations to reduce paternity uncertainty. One extensively studied behavioral adaptation is the father-favoring parent–child resemblance belief. Existing research shows that mothers, maternal relatives, and people in general perceive and promote a stronger child resemblance to fathers than to mothers (Daly & Wilson, 1982; McLain, Setters, Moulton, & Pratt, 2000; Regalski & Gaulin, 1993), and father–child resemblance belief contributes to paternal investment (Burch & Gallup, 2000; Platek, Burch, Panyavin, Wasserman, & Gallup, 2002). However, there are other cultural and behavioral adaptations to ease paternity uncertainty. Some of the cultures and customs that serve the same function of enhancing paternity certainty may include patrilocality (married couple living with the husband's extended family; Murdock, 1982), legal and common practice of naming offspring after paternal family names, and penal laws and traditions showing double standards about adultery (Daly, Wilson, & Weghorst, 1982). The extent to which a particular paternity

easing adaptation contributes to paternal investment may depend on whether there exist other behavioral or cultural adaptations that aim to solve the same question.

Patrilocality has been the predominant and long-lasting postmarital residence method in most human societies, including hunting and gathering societies (Murdock, 1967; Service, 1962; Steward, 1955). DNA analysis reveals prehistorical evidence of patrilocality. Maternal mitochondrial polymorphisms were found to be geographically more widely spread than corresponding Y-chromosome variations, suggesting that ancestral females rather than males used to leave their birth places possibly to take residence in their spouses' homes (Jorde et al., 2000; Kittles et al., 1999; Seielstad, Minch, & Cavalli-Sforza, 1998). The patrilocal residence rule as a defining feature of human societies (M. J. Baker & Jacobsen, 2007) ultimately reflects mating and parenting and other adaptive strategies (e.g., building kin-based coalitions) of the people living in them (Draper & Harpending, 1982). It is likely that patrilocality has resulted from human couples trying to resolve paternity uncertainty, in addition to other adaptations such as male alliance building (Geary & Flinn, 2001). In turn, the consequent postmarital residence custom facilitates paternal investment. Patrilocality, but not matrilocality, persisted even though maternal grandparents—especially grandmothers—are more invested in their grandchildren compared with paternal grandparents (e.g., DeKay, 1995; Hoffman, 1980; Pashos, 2000). Enhancing paternity certainty and procuring parental commitment from the father are a unique challenge within the human mating system that humans overcome in part by coresiding with paternal rather than maternal relatives. Thus, patrilocality may moderate the extent of parents' father-favoring parent–child resemblance belief, and the extent to which such belief contributes to paternal investment.

There are two ways by which patrilocality may work in easing paternity uncertainty. One is through elevating such behavioral indicators of paternal investment as paternal warmth toward the child and, indirectly, as paternal marital satisfaction. The other way is through strengthening the kinship bond between the father and his child, so that child behavior is responsive to the perceived paternal parenting behavior. The special action-reaction contingency response between parenting and child behavior is dependent on the blood relation between the two parties. The fact that this contingency response is, in general, weaker for fathers than for mothers (e.g., Acock & Bengtson, 1978; Lamb, Pleck, Charnov, & Levine, 1987) also points to the evolutionary effect of paternity uncertainty. By reducing paternity uncertainty, father–child resemblance belief and living with paternal grandparents should strengthen the response contingency between child reaction and perceived paternal action.

The purpose of the present study was to examine the relation between perceived father–child resemblance, reported by both parents, and paternal investment as a function of patrilocal residence. We defined patrilocality as living with paternal grandparents. We defined paternal investment as individual differences in paternal parenting and in children's perceptions of paternal parenting behavior. Specifically, we examined paternal warmth toward child as a direct indicator of paternal investment and paternal marital satisfaction as an indirect indicator. We also obtained children's perceptions of paternal autonomy granting as a positive parenting behavior and paternal psychological control as a negative parenting behavior. These variables were examined in relation to the child's report of life satisfaction. We hypothesized that fathers who reported high paternal resemblance of their child would show higher paternal marital satisfaction and higher paternal warmth toward their child compared to the fathers who reported low paternal resemblance. We also hypothesized that, for the former

group of (high resemblance) fathers, the relation between their child's perception of paternal autonomy granting and paternal psychological control, and the child's life satisfaction would be stronger than that for the latter group of (low resemblance) fathers. Furthermore, we hypothesized that the effects of paternal resemblance beliefs on parenting would be attenuated by living with paternal grandparents, because the latter serve the same function of diminishing paternity uncertainty as paternal resemblance belief. These hypotheses were investigated in a sample of 341 Chinese families (i.e., parents and their children) from a rural area in central eastern China.

METHODS

Sample

A large number of families in China consists of three generations with parents, grandparents, and children living in one location. The proportions of families living with grandparents were 19.50%, 18.97%, and 20.89% for the years 1982, 1990, and 2000, respectively ("Population Census," 1985, 1993, 2002). According to the 2000 census report, these proportions were higher in rural (22.21%) than in urban areas (15.89%). Although none of the census reports distinguishes paternal grandparents from maternal grandparents, it is believed that the majority live with paternal grandparents; a recent survey of 16,042 senior citizens across 22 provinces showed that, among the seniors living with their married children, 86.95% in rural areas and 78.15% in urban areas lived with sons (Zeng, 2004).

The present sample of 341 families was taken in 2008 from a rural area in central eastern China, where the proportion of three-generation families is similar to the national average. By oversampling through school and neighborhood referrals, we obtained 139 (40.8% of the sample) patrilocal families who also were living with paternal grandparents when the participating child was first born and 202 nuclear families. Parental consent for each child's participation in the study was obtained. Families were given small gifts for their participation. Each of the two parents filled out a short questionnaire at home regarding their child. Children who were in primary schools (on average, 6 years old or older; $n = 159$) filled out a short questionnaire about their fathers. Children younger than school age ($n = 182$) did not fill out this questionnaire. Most of the children were only children. However, participants were not asked to report the number of children in their family because violators of the Chinese one-child policy were sensitive about such questions. The mean age of the children was 6.96 years ($SD = 1.82$). The gender composition was 42% female. The mean age of fathers was 35.19 years ($SD = 4.35$) and of mothers was 34.62 years ($SD = 4.14$). The majority of the fathers (65%) and mothers (67%) had middle school education. (Compulsory education in China includes 6 years of primary school and 3 years of middle school.) A total of 21% of fathers and 12% of mothers completed high school, and 10% of fathers and 18% of mothers had only primary school education. A total of 10 fathers and 3 mothers attended college.

Measures

Parental facial and personality resemblance belief. Both parents were asked to indicate on a 6-point Likert-type scale ranging from 1 (*not at all resemble*) to 6 (*very much resemble*) the extent to which they believe their child looks like the father and mother and the extent to which they believe their child's personality is like the father's and mother's.

Paternal marital dissatisfaction. Fathers filled out the 12-item Marital Problem Questionnaire (Shek, 1995) on a 6-point Likert-type scale ranging from 1 (*never*) to 6 (*all the time*). Sample items included "How often do you and your spouse have fights?" and "How often do you and your spouse feel resenting each other?" Internal consistency reliability (Cronbach's α) estimate was .79 for the present study.

Paternal warmth. Fathers filled out 16 parental warmth items from the Parental Acceptance Rejection Questionnaire (Rohner, 1986). Sample items included "I listen to my child." and "I talk to my child with warmth." Cronbach's α estimate was .82. The questions were presented on a 4-point Likert-type scale ranging from 1 (*never like this*) to 4 (*always like this*).

We measured *perceived paternal autonomy granting* by 8 items compiled from the literature and used by Wang, Pomerantz, and Chen (2007). Sample items included "My father allows me to make decisions." and "My father encourages me to give my opinions." The questions were presented on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*very true*). Cronbach's α was.71. For this and the following measure, we modified the wording slightly to better fit our age group and changed the corresponding target from "my parents" to "my father."

We assessed *perceived paternal psychological control* by an 18-item instrument originally derived from Kerr and Stattin (2000) and later modified by Wang et al. (2007). The questions were presented on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*). Sample items included "My father will ignore me if I don't do things his way." and "My father will bring up my past mistakes when unhappy with me." Cronbach's α estimate was .83.

We assessed *children's life satisfaction* by the 8-item Students Life Satisfaction Scale (Huebner, 1991; Terry & Huebner, 1995), which was reported on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*very true*). Sample items included "My life is going well." and "I am happy with my life." Cronbach's α estimate was .62, after the data were normalized by log transformation.

RESULTS

Table 1 presents resemblance ratings provided by the mothers and fathers, respectively. Overall, both fathers and mothers perceived higher paternal than maternal resemblance. However, when describing paternal resemblance by itself, mothers and fathers were not significantly different in their resemblance perceptions. Patrilocality affected resemblance beliefs in several ways. First, higher paternal facial resemblance ($M = 3.98$, $SD = 1.34$) was reported by the fathers whose families resided with paternal grandparents than those whose families did not ($M = 3.65$, $SD = 1.46$), $t(312) = 2.15$, $p = .032$. Self-perceived maternal facial resemblance did not show the difference between living ($M = 2.82$, $SD = 1.12$) and not living with paternal grandparents ($M = 2.99$, $SD = 1.27$), $t(328) = -1.28$, *ns*. Second, whereas fathers perceived higher paternal ($M = 3.78$, $SD = 1.41$) than maternal facial resemblance ($M = 3.01$, $SD = 1.28$), $t(333) = -7.23$, $p < .001$, this difference was more pronounced when living with paternal grandparents ($d = 1.09$) than not living with paternal grandparents ($d = .56$), $t(339) = 2.48$, $p = .014$. Mothers perceived higher paternal ($M = 3.81$, $SD = 1.34$) than maternal facial resemblance ($M = 2.92$, $SD = 1.20$), $t(340) = 8.55$, $p < .001$, across

TABLE 1
Paternal and Maternal Resemblance Ratings from Mothers and Fathers

	Resemble Father		Resemble Mother		
Variable	*M*	*SD*	*M*	*SD*	*t*(340)
Facial resemblance					
Mother report	3.81	1.34	2.92	1.20	8.55***
Father report	3.78	1.42	3.01	1.27	7.31***
Personality resemblance					
Mother report	3.46[a]	1.40	3.03[b]	1.29	3.58***
Father report	3.64[a]	1.38	3.25[b]	1.32	3.60***

*$p < .05$. **$p < .01$. ***$p < .001$.
[a]The two means are significantly different, $t(340) = -2.93$**.
[b]The two means are significantly different, $t(340) = -2.32$**.

residence conditions. Last, under patrilocal residence, mothers ($M = 3.87$, $SD = 1.28$) perceived slightly lower paternal facial resemblance than did fathers ($M = 3.98$, $SD = 1.34$). The difference score was $d = -.11$. Without patrilocal residence, mothers ($M = 3.77$, $SD = 1.39$) perceived higher paternal facial resemblance than did fathers ($M = 3.65$, $SD = 1.46$). The difference score was $d = .12$. These two difference scores were statistically different, $t(339) = 1.95$, $p = .05$. Fathers ascribed more facial resemblance to sons ($M = 3.93$, $SD = 1.43$) than to daughters ($M = 3.58$, $SD = 1.39$), $t(339) = 2.24$, $p = .026$, whereas there was no gender difference in mothers' ratings of paternal resemblance ($M = 3.89$, $SD = 1.36$, for sons; $M = 3.71$, $SD = 1.32$, for daughters). Mothers ascribed marginally more paternal facial resemblance to children 6 years of age or younger ($M = 3.95$, $SD = 1.26$) than to older children ($M = 3.69$, $SD = 1.41$), $t(339) = 1.81$, $p = .071$.

To test the hypothesis that fathers ascribing to paternal resemblance were higher on paternal warmth and own marital satisfaction, we used the median split to divide the four resemblance belief variables each into two groups of high resemblance and low resemblance, and conducted *t*-tests to compare the group means. Table 2 shows the means of paternal warmth toward child and paternal marital satisfaction in groups differing on resemblance belief (high vs. low) and patrilocality (living with paternal grandparents vs. not living with paternal grandparents). Consistent with our prediction that paternal resemblance should enhance paternal parenting, paternal warmth toward child was significantly higher in families where either parent reported high rather than low paternal resemblance. Indirectly related to our hypothesis, paternal marital satisfaction was also significantly higher for fathers having high, rather than low, resemblance to their child.

To test the prediction that patrilocality served the same function of soothing paternity uncertainty as paternal resemblance, we conducted planned comparisons of four group means on paternal warmth toward child. The four groups were high versus low paternal resemblance groups living with paternal grandparents and high versus low resemblance groups not living with grandparents. As predicted, when not living with grandparents, the high-resemblance group had significantly higher paternal warmth than did the low-resemblance group. When living with grandparents, the two resemblance groups were not found to differ in paternal warmth, suggesting that patrilocality may serve the same paternity enhancing function as paternal resemblance belief. The results are reported in Table 3.

TABLE 2
Means of Paternal Warmth to Children and Paternal Marital Satisfaction for High Versus Low Paternal Resemblance Groups

		Paternal Warmth			Marital Satisfaction		
Variable		*M*	*SD*	*t*	*M*	*SD*	*t*
Father ratings of facial resemblance	High	47.51	6.78	3.56***	61.76	5.70	3.72***
	Low	44.85	6.53		59.29	6.33	
Father ratings of personality resemblance	High	47.50	6.89	3.24***	61.77	5.58	3.45***
	Low	45.11	6.44		59.51	6.46	
Mother ratings of facial resemblance	High	47.28	6.87	2.65**	61.66	5.87	3.17**
	Low	45.31	6.54		59.56	6.15	
Mother ratings of personality resemblance	High	47.44	6.95	2.61**	61.50	5.64	2.10*
	Low	45.53	6.52		60.13	6.41	

*$p < .05$. **$p < .01$. ***$p < .001$.

TABLE 3
Means of Paternal Warmth to Children by Paternal Resemblance and Patrilocality Groupings

		Father Ratings of Paternal Warmth		
Variable		*M*	*SD*	*t*
Participants living with paternal grandparents				
Father ratings of facial resemblance	High	47.09	6.74	1.66
	Low	45.13	5.95	
Father ratings of personality resemblance	High	47.04	7.26	1.23
	Low	45.66	5.35	
Mother ratings of facial resemblance	High	47.14	7.00	1.63
	Low	45.27	5.53	
Mother ratings of personality resemblance	High	46.99	7.07	.93
	Low	45.96	6.01	
Participants not living with paternal grandparents				
Father ratings of facial resemblance	High	47.85	6.83	3.23**
	Low	44.71	6.85	
Father ratings of personality resemblance	High	47.81	6.64	3.15**
	Low	44.73	7.12	
Mother ratings of facial resemblance	High	47.39	6.80	2.09*
	Low	45.33	7.12	
Mother ratings of personality resemblance	High	47.73	6.89	2.59*
	Low	45.22	6.90	

*$p < .05$. **$p < .01$. ***$p < .001$.

To test the hypothesis that paternal resemblance belief affected parenting behavior, we conducted multiple regression analyses using the two perceived paternal parenting variables, paternal power granting ($M = 3.91$, $SD = .73$) and paternal psychological control ($M = 3.43$, $SD = .72$), as predictors, and children's report of their life satisfaction ($M = 3.85$, $SD = .59$) as the outcome variable. Table 4 shows the results. Among children perceived by either parent to bear high paternal resemblance, paternal power granting was a reliable predictor of child life satisfaction. It was either not significant or reduced

TABLE 4
Standardized Regression Coefficients With Child Report of Life Satisfaction as the Outcome Variable

Variable		*n*	Child Perceived Autonomy Granting β	Child Perceived Autonomy Granting *t*	Child Perceived Psychological Control β	Child Perceived Psychological Control *t*
Father ratings of facial resemblance	High	94	.49	5.42***	−.19	−2.10*
	Low	55	.24	1.75	.07	.51
Father ratings of personality resemblance	High	89	.53	5.69***	−.20	−1.53
	Low	60	.23	1.77	−.06	−.62
Mother ratings of facial resemblance	High	88	.40	4.16***	−.20	−2.05*
	Low	61	.38	3.10**	.01	.08
Mother ratings of personality resemblance	High	77	.49	4.80***	−.12	−1.19
	Low	72	.31	2.68*	−.10	−.82

*$p < .05$. **$p < .01$. ***$p < .001$.

in strength as a predictor for children perceived to bear low paternal resemblance. Results for the perceived paternal psychological control variable were in a similar pattern. These results suggest that the transference of parenting influence on children works in part because of the blood relation that enables close action and reaction contingency between the two parties. Without paternity certainty, paternal resemblance belief serves to facilitate or hinder the channeling of paternal parenting (i.e., paternal resources) to children.

We conducted additional regression analyses to examine the regression of perceived paternal parenting on child life satisfaction as functions of patrilocality (living with paternal grandparents vs. not living with paternal grandparents) and of paternal resemblance belief (high resemblance vs. low resemblance). To illustrate some of these results, we computed and plotted simple slopes (for procedures, see Aiken & West, 1991) for fathers' ratings of facial resemblance across the two groups of living and not living with paternal grandparents (Figure 1). Take perceived paternal autonomy granting, for example: For families not residing with paternal grandparents, the standardized regression on child life satisfaction was .58 at 1 *SD* above the mean of paternal facial resemblance (i.e., high resemblance), and it was .13 at 1 *SD* below the mean of paternal facial resemblance. For patrilocal families, the regression was .27 and .25, respectively, at 1 *SD* above and 1 *SD* below the mean of paternal facial resemblance. These results show that patrilocality attenuated the effect of paternal resemblance belief on the relation between paternal parenting and child experience. Because patrilocality already served to authenticate paternity, facial resemblance belief made little difference in channeling paternal parenting to children. However, without the additional paternity insurance from patrilocality, paternal parenting could be facilitated by a different authentication mechanism—that of paternal resemblance belief.

DISCUSSION

Daly and Wilson (1982) were among the first to demonstrate paternal bias in parent–child resemblance belief, later replicated by Regalski and Gaulin (1993) and McLain et al.

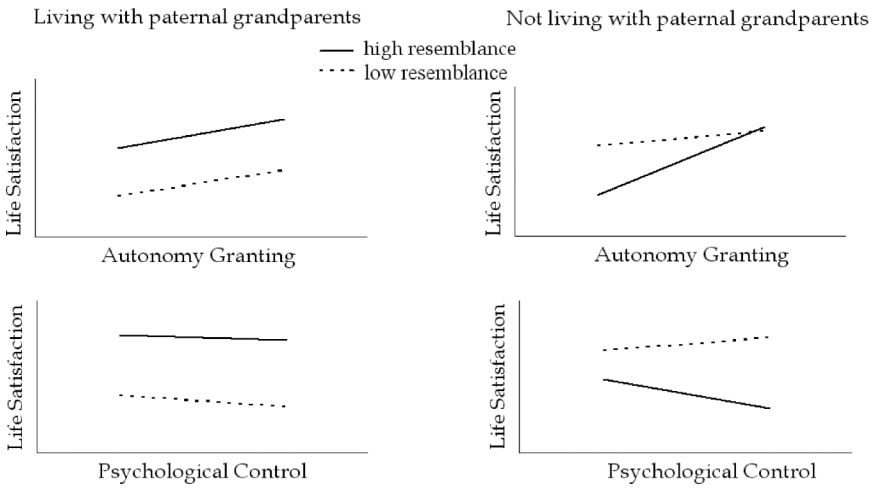

FIGURE 1
Regression slopes at +1 *SD* (high resemblance) and −1 *SD* to the mean of paternal facial resemblance.

(2000). Two subsequent strands of empirical work followed. One strand studied actual parent–child resemblance and yielded conflicting results on whether infants and young children actually resemble their fathers more than mothers (Christenfeld & Hill, 1995) or not (Bredart & French, 1999; McLain et al., 2000), and whether they resemble their parents more than unrelated strangers (Alvergne, Fauriea, & Raymond, 2007; Bressan & Grassi, 2004) or not (Pagel, 1997; Stoppard, 1989). The affirmative paternal resemblance findings support the hypothesis that it is adaptive for children to resemble fathers honestly, so as to extract paternal investment. The negative resemblance findings suggest that concealing paternal resemblance is beneficial for mothers to engage in cuckoldry, as well as for all children so that they can be reared by any father (Bressan, 2002; Pagel, 1997).

The other strand of research investigated father–child resemblance belief, as Daly and Wilson (1982) originally proposed. Effort has been put on finding the association between paternal resemblance belief and paternal investment. Two separate studies had convicted wife abusers (Burch & Gallup, 2000) and male passengers at an airport and train station (Apicella & Marlowe, 2004) report on their resemblance to and relationship with their children. Four other studies measured paternal investment either as hypothetical adoption decisions (Platek et al., 2002; Volk & Quinsey, 2002) or as reaction time taken to process similar hypothetical situations (Platek et al., 2003) and their underlying brain activity (Platek, Keenan, & Mohamed, 2005). All these studies reported a positive association between father–child resemblance belief and paternal investment.

The present study joins these existing studies by providing additional empirical evidence that are novel in four ways. First, no previous research has examined the relation between father–child resemblance belief and other cultural and behavioral adaptations that also function to ease paternity uncertainty. The present study demonstrated how patrilocality complemented parent–child resemblance belief in affecting paternal investment in children.

Second, the present study defined paternal investment in terms of actual paternal parenting behavior. This operationalization, which is common in mainstream parenting

research in developmental science, helps to reveal real parenting variations as a function of paternal resemblance belief.

Third, by obtaining both paternal and maternal resemblance perceptions from both parents, we were able to draw the conclusion that, whereas mothers perceived child resemblance to their spouse more than to themselves, when describing paternal resemblance by itself, mothers and fathers were overall more consistent than different. If it is true that mother's bias toward believing in paternal resemblance of their children is an adaptation to reduce paternity uncertainty especially when the child is young, then, as the child grows older, fathers who have stayed in the marriage and continued with child investment may have come to ascribe to the same father-favoring paternal resemblance belief as mothers. We also found mothers to ascribe higher paternal facial resemblance to children 6 years of age or younger than to older children, consistent with the literature, which suggests that mothers ascribe more paternal resemblance to newborns and young children but not to older children (Alvergne et al., 2007).

Last, this study was based on Chinese participants. Apart from a Japanese study (reported by Oda, Matsumoto-Oda, & Kurashima, 2002, 2005), existing work in this area has been based entirely on Caucasian populations. Caucasians differ among themselves in eye and hair color, and these features serve as salient identification cues for actual parent–child resemblance, especially for older children. However, there is little, if any, variation in eye and hair color among Asians. That there are fewer resemblance cues for Asians makes Asians ideal participants for a study of resemblance beliefs. Furthermore, because of China's one-child policy, most children tested in the present study were only children (first-born children who, compared with later-born children, made their paternity a more salient issue for their parents; Schacht & Gershowitz, 1963).

The present study provides additional support for the view that father-favoring parent–child resemblance belief, but not actual parent–child resemblance, was selected as an adaptation (Bressan, 2002; Pagel, 1997; Stoppard, 1989). In fact, resemblance belief is evolutionarily meaningful only when actual parent–child resemblance is ambiguous, just as reported in the literature, but not when actual resemblance is unambiguous, either in the direction of "honest resemblance" (Christenfeld & Hill, 1995; Johnstone, 1997) or in that of "concealed resemblance" (Bressan, 2002; Pagel, 1997). In other words, a belief system about clear-cut physical features could not have evolved. This is partly why, for example, parents do not talk about whether they believe their child looks more like a boy or a girl, because there is no ambiguity about gender identification. Nor would parents try to match their fingerprints with their child's, because fingerprints are unambiguous but unique. Unlike fingerprints and gender identification, parent–child resemblance ambiguity enables the mother, the father, and the child to perceive paternal resemblance, and such perception or belief benefits all parties (Bressan, 2002).

Two limitations of the present study exist. First, small variations and small effect estimates are expected from a homogenous population of intact families because, except for cuckoldry—which is estimated to be about 10% in the West (R. R. Baker & Bellis, 1995), but probably lower in a Chinese rural context—all fathers who stay in a marriage are expected to have adopted the same or similar mating and parenting strategies. Therefore, some of the results in this study were not statistically robust and had smaller effect sizes than expected. Future research can target more heterogeneous populations. Second, we studied older children instead of newborns. In some ways, however, older children continue to demand parental investment or more so than at an earlier age due to increasing food consumption, increased need for learning, expanded exploratory

activities, broadened territories to explore, and the associated heightened predatory and accidental injury risks especially during the ancestral past. The selection pressure to prevent mate desertion may also be stronger as children get older than when they are first born, because physical attraction that best serves to reduce paternity doubt and mate desertion decreases rapidly with time (e.g., Sternberg, 1986). Despite these limitations, the present study demonstrated the moderating effect of patrilocality on the association between father–child resemblance belief and paternal parenting behavior. The findings shed light on both of these potential adaptations to ease paternity uncertainty to procure paternal investment.

AFFILIATIONS AND ADDRESSES

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