

**(Un)making occupational gender segregation:  
Intergenerational reproduction of gender-(a)typical occupational aspirations in China**

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**Conflict of interest**

The authors declare no potential conflict of interest with respect to the authorship and/or publication of this article.

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**Data availability statement**

The China Family Panel Studies is conducted by the Institute of Social Science Survey at Peking University, in collaboration with the Population Studies Center at the University of Michigan, and the data were retrieved from the Institute of Social Science Survey, Peking University (<https://www.issp.pku.edu.cn/cfps/en/>). The authors are solely responsible for the analysis and interpretation of the data presented in this article.

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#### **Abstract**

Occupational gender segregation can be traced back to gender-typed occupational aspirations formed early in life. Analyzing nationally representative data from the 2010–2018 China Family Panel Studies ( $N = 2,410$  adolescents aged 10–19), we examine the relationships between parents' occupations, their gender-(a)typical occupational expectations, and adolescents' gender-(a)typical occupational aspirations. Our research makes three distinctive contributions. First, we clarify how gender-role modeling works by distinguishing adolescents' direct imitation of parents' occupations from their indirect gender-role learning based on the gender orientation of parents' occupations. Second, we propose and test a new theory of “gender boundary-setting” to understand how the opposite-sex parent's gender-typed occupation can erect gender boundaries that reinforce their children's gender-typed aspirations. Third, we examine the role of parents' gender-(a)typical occupational expectations in shaping adolescents' gendered aspirations and how such expectations relate to adolescents' social learning based on parents' occupations. We find that girls' gendered occupational aspirations are shaped by direct occupational imitation, indirect gender-role learning, gender boundary-setting, and parents' gendered expectations, whereas boys' aspirations are only shaped by direct imitation. Parents' expectations and adolescents' social learning operate independently of each other. Our findings provide new insights into the supply-side mechanisms underpinning the intergenerational reproduction of occupational gender segregation.

**Keywords:** Adolescents, gender, intergenerational relations, occupation.

## 1. INTRODUCTION

Despite a long-term increase in women's labor force participation, occupational gender segregation persists across many parts of the world.<sup>1</sup> Since China's 1978 socialism-to-market economic reform, occupational gender segregation – particularly outside the agricultural sector and in cities – has increased sharply (He & Wu, 2017). In a gender-segregated labor force, people tend to work in gender-typical occupations composed mainly of peers of the same sex rather than gender-atypical occupations dominated by individuals of the opposite sex. Occupational gender segregation is not only a major form of gender inequality in itself (England et al., 2020), it also exacerbates gender gaps in wage, employee well-being, and work satisfaction (Autor et al., 2008; Okamoto & England, 1999; Qian & Fan, 2019).

While much research focuses on demand-side explanations for occupational gender segregation (e.g., workplace and labor market structure and policies), on the supply side such segregation can also be traced back to the gendered occupational aspirations people form early in life. Indeed, research has demonstrated that adolescents' occupational aspirations strongly predict their subsequent occupations (Ashby & Schoon, 2010; Busch-Heizmann, 2015; Cochran et al., 2011; Hitlin, 2006; Okamoto & England, 1999). This literature shows that despite structural barriers to realizing one's early-life aspirations, the long arm of gendered occupational aspirations reaches well beyond early adulthood into mid-life (Ashby & Schoon, 2010; Cochran et al., 2011; Schoon, 2001; Schuette et al., 2012).

The family is a “gender depot” (Goffman, 1977) and parents function as key gender socialization agents for their children (Hu, 2015; Law & Schober, 2021). Gottfredson (1981) shows that although broad career aspirations begin to form in early childhood, adolescence – defined by the United Nations Children's Fund as ages 10–19 (UNICEF, 2019) – represents a crucial phase when individuals form more concrete and often gendered occupational aspirations. Existing research has examined how parents' gendered occupational

characteristics and expectations shape adolescents' gender-typed occupational aspirations, showing notable intergenerational associations (Hitlin, 2006; Hou & Leung, 2011; Law & Schober, 2021; Liu et al., 2015; Polavieja & Platt, 2014; Schoon, 2001; Schuette et al., 2012). While such associations contribute to reproducing occupational gender segregation across generations, our understanding of the mechanisms driving these associations is limited in three crucial respects, all of which we aim to remedy in this research.

First, existing research has drawn closely on Bandura's (1977) role modeling theory to examine the intergenerational transmission of occupational aspirations, but little is known about how role modeling actually operates. The research of Polavieja and Platt (2014) is a rare exception that distinguished between direct imitation and indirect gender-role learning. The former refers to children's direct imitation of parents' occupations. The latter refers to a process in which children make sense of and learn from the gender norms and structural constraints and opportunities embodied in parents' occupations, which is "more complex and cognitively demanding than simple imitation" (Polavieja & Platt, 2014, p. 35). As these two mechanisms represent distinct ways in which parents' occupations matter for children's aspirations, our first objective is to test and disentangle them in a systematic fashion.

Second, while role modeling theory strongly emphasizes homo-lineal father-son and mother-daughter relations, hetero-lineal relations between parents and children of opposite sexes remain under-theorized and are often characterized by a weaker form or absence of role modeling (Bandura, 1977; McGinn et al., 2018; Simpson, 2003). Drawing on theories that underline the relational construction of gender (Ferree et al., 1999), however, we contend that opposite-sex parents can erect gender boundaries by reinforcing the association between their sex and occupational characteristics. As a result, children may learn to veer away from the opposite-sex parent's occupation and the gender orientation it embodies. Our second objective, therefore, is to conceptualize and empirically test this new "gender boundary-

setting” theory to better understand how intergenerational relations operate in a gendered way to shape adolescents’ gender-(a)typical occupational aspirations.

Third, in addition to learning from parents’ occupations (Bandura, 1977; Polavieja & Platt, 2014), children draw on parents’ occupational expectations to formulate their aspirations. This may be particularly relevant in China where parents invest heavily in their children’s occupational development and often explicitly express occupational expectations for their offspring (Hou & Leung, 2011). In broader theoretical terms, parents’ expectations are widely assumed to be a key driver of and pathway for children’s occupational learning and gender-role modeling (Bandura, 1977; Paa & McWhirter, 2011; Chakraverty & Tai, 2013), but this assumption is yet to be tested empirically. Thus, our final objective is to examine the association in gender-(a)typicality between parents’ occupational expectations and adolescents’ aspirations, as well as the extent to which parents’ expectations explain the link between their gendered occupations and their children’s gender-(a)typical aspirations.

Our empirical analysis draws on data from the 2010–2018 China Family Panel Studies. In doing so, we provide the first nationally representative evidence of gendered occupational aspirations among adolescents aged 10–19 in two-parent Chinese families. Our study goes beyond identifying the intergenerational associations between parents’ gendered occupations and adolescents’ gender-(a)typical occupational aspirations to systematically uncover the mechanisms underlying these associations. Our findings provide new insights into the intergenerational reproduction of gender segregation in the labor market.

## **2. LITERATURE REVIEW AND THEORETICAL CONSIDERATIONS**

### **2.1. Gendered occupational aspirations: Focusing on adolescents**

In her groundbreaking work, Gottfredson (1981) posited that occupational aspiration reflects individuals’ self-concept of their personality, preferences, interests, and understanding of

labor market opportunity structures. Gendered occupational aspirations are thus shaped by individual, interpersonal, and social forces as they evolve over the life course. As early as 3–5 years of age, children start recognizing adults’ occupational roles and forming early aspirations (Gottfredson, 1981). By 6–8 years, they begin to develop career-related gender stereotypes (Auger et al., 2005). During adolescence, young people further develop an awareness of the social status, gendered power, and structural barriers associated with different occupations (Cochran et al., 2011). Compared with occupational aspirations at earlier life stages, aspirations during adolescence are more predictive of subsequent actual occupations, and are thus particularly relevant as a supply-side explanation for occupational gender segregation (Busch-Heizmann, 2015; McGinn et al., 2018).

## **2.2. Intergenerational reproduction of gendered occupational aspirations**

Over recent decades, researchers have built up a substantial body of theory and empirical evidence on the intergenerational reproduction of gendered occupational aspirations (Hitlin, 2006; Law & Schober, 2021; Liu et al., 2015; Polavieja & Platt, 2014). Building on and extending existing theories and evidence, this section develops a conceptual framework and systematic hypotheses to flesh out the mechanisms underpinning the intergenerational processes, as summarized in Figure 1. Recognizing both children’s and parents’ initiative, our framework integrates the two-way traffic of adolescents’ social learning from their parents and parents’ imparting of occupational expectations to their adolescent children.

[Insert Figure 1 Here]

### **2.2.1. Gender-role modeling: *Disentangling direct imitation from indirect gender learning***

Building on Bandura’s (1977) social learning theory, the notion of role modeling posits that children emulate and learn from their parents’ roles and behaviors. Although role modeling

has been widely cited to explain the associations between parents' gender-typed occupations and the gender typicality of children's occupational aspirations (Auger et al., 2005; Busch-Heizmann, 2015; Cochran et al., 2011; Law & Schober, 2021), how role modeling actually works remains ambiguous. As a rare exception, Polavieja and Platt (2014) clearly distinguished between *direct occupational imitation* and *indirect gender-role learning*.

On the one hand, in its simplest form, role modeling operates through children's direct like-for-like imitation of their parents' occupations (Bussey & Bandura, 1999). There is abundant empirical evidence of direct occupational imitation in various settings ranging from agricultural occupations in Zambia (Ogunjimi et al., 2021) to engineering careers in the United States (Jacobs et al., 2017). Most existing theories and evidence emphasize that direct occupational imitation is primarily driven by innate gender identification (Polavieja & Platt, 2014) and is thus limited to homo-lineal connections between mothers (fathers) and daughters (sons) (Bussey & Bandura, 1999; McGinn et al., 2018; Simpson, 2003). But some recent evidence also shows occupational imitation between parents and children of opposite sexes, particularly when such imitation leads to status and pecuniary gains (Jacobs et al., 2017). Thus, insofar as parents' occupations are gender-typed, direct occupational imitation is likely to lead to gendered-typed aspirations among adolescents, as specified in Hypothesis 1A:

**Hypothesis 1A** (direct occupational imitation): Adolescents' direct imitation of the same-sex parent's occupation is positively associated with gender-typical aspirations; and their direct imitation of the opposite-sex parent's occupation is positively associated with gender-atypical aspirations.

On the other hand, indirect gender-role learning goes beyond direct imitation to posit that children learn about the labor market's gender structure and norms by observing their parents' occupations (Eagly et al., 2000). Children may not directly copy their parents' occupations but, as they infer broader information from such occupations, they will form



socialized “expectations about the costs and benefits of deviating from sex-typical behavior” (Polavieja & Platt, 2014, p. 35). As a result, adolescents learn from and follow the gender orientation of the same-sex parent’s occupation. Parents’ gender-typical occupations are likely to reflect normative values, social constraints, and risks associated with “gender transgression” at work; by contrast, their gender-atypical occupations may signal a liberation from rigid gender norms and the opportunity to achieve such liberation (Eagly et al., 2000). Evidence on the association in gender orientation between adolescents’ occupational aspirations and the same-sex parent’s occupation has been widely reported to support indirect gender-role learning (Hitlin, 2006; Law & Schober, 2021; Liu et al., 2015), but without controlling for direct occupational imitation (except for Polavieja & Platt, 2014). If indirect gender-role learning shapes adolescents’ gendered occupational aspirations over and above direct imitation, Hypothesis 1B will hold:

**Hypothesis 1B** (indirect gender-role learning): Net of direct occupational imitation, adolescents are more likely to have gender-typical (and less likely to have gender-atypical) occupational aspirations when the same-sex parent’s occupation is more (rather than less) gender-typed.

### ***2.2.2. Re-theorizing the role of the opposite-sex parent: Gender boundary-setting***

Current understanding of the role of the opposite-sex parent in children’s gender socialization is largely characterized by theoretical framing developed for the role of the same-sex parent, in terms of a weak form or absence of gender-role modeling in hetero-lineal intergenerational relations (Bandura, 1977; Bussey & Bandura, 1999; Hu, 2015; Martin et al., 2002; McHale et al., 2003). Surprisingly little has been done to fully conceptualize and empirically test why adolescents only loosely follow or even contradict the opposite-sex parent’s behaviors.

To remedy this important gap, we propose a new theory of “gender boundary-setting.” This theory contends that as adolescents distinguish their gender from that of the opposite-sex parent, the opposite-sex parent’s occupation – particularly gender-typed ones that align with and thus embody normative expectations – may erect gender boundaries that could influence children’s occupational aspirations. As children infer gender norms, structural constraints, and gendered opportunities from their parents’ occupations (Eagly et al., 2000; Polavieja & Platt, 2014), the opposite-sex parent’s more (as opposed to less) gender-typed occupation may be perceived to reflect rigid norms of occupational gender differentiation and a lack of reward or opportunity for crossing the gender divide. Thus, the opposite-sex parent’s gender-typed occupation may function as a counter role model that deters their children from aspiring to occupations of a similar gender orientation.

While our gender boundary-setting theory is new, particularly in the context of occupational gender segregation, its conception builds on well-established gender and psychological theories. Gender has long been recognized as a relational construct (Ferree et al., 1999), and “doing gender” is as much about performing the gender one identifies with as about understanding and “doing (gender) difference” (Fenstermaker & West, 2002). Meanwhile, it is widely recognized that social norms are established and maintained through both positive (i.e., what one is and should do) and negative (i.e., what one is not and should not do) reinforcements (Carter & McCloskey, 1984). Thus, it is through self-reflexive and relational interactions with people not just of the same sex but also of the opposite sex that individuals establish and validate their gender identity and positionality (Risman et al., 2018).

Broader evidence on gender-role socialization lends support to the notion of gender boundary-setting. For example, in China and the UK, daughters tend to do more housework when their fathers do less, while boys spend less time on housework as their mothers’ housework time increases (Gimenez-Nadal et al., 2018; Hu, 2015). Moreover, fathers’

traditional views on the gendered division of housework reinforce girls' traditional gender attitudes (Platt & Polavieja, 2016). Conversely, the opposite-sex parent's less gender-typed behaviors help erase the gender boundary. For example, fathers' greater contribution to childcare and housework and mothers' greater employment attachment are associated with their opposite-sex children's more egalitarian gender attitudes (Canos & Hofmeister, 2022). Together, existing evidence thus shows that the opposite-sex parent's gender-typed views and behaviors provide crucial clues for children to understand the rigidity of gender boundaries. If the gender orientation of the opposite-sex parent's occupation similarly informs children's occupational aspirations, Hypothesis 2 will hold.

**Hypothesis 2** (gender boundary-setting): Adolescents are more likely to aspire to gender-typical (and less likely to aspire to gender-atypical) occupations when the opposite-sex parent's occupation is more (rather than less) gender-typed.

### ***2.2.3. Parents' gendered occupational expectations***

While the above mechanisms highlight children's proactive social learning, parents frequently play an equally proactive role in imparting expectations and ambitions to their children. Parents' occupational expectations can be deliberately expressed or unconsciously conveyed (Hou & Leung, 2011). Such expectations shape how children perceive and understand different occupations and also affect the intergenerational transfer of occupational knowledge, interest, and material resources (Leung et al., 2011). According to expectancy-value theory (Eccles, 1983), children who do not follow their parents' expectations may receive less support or be directed to change their aspirations. Given the facilitative and disciplinary functions of parents' expectations, it is not surprising that Hou and Leung's Beijing study (2011) found that children's occupational aspirations closely mirror their parents' expectations in terms of occupational field, prestige, and sex type. If the same kinds

of intergenerational associations are found in the wider population of Chinese adolescents, Hypothesis 3A will hold *ceteris paribus*.

**Hypothesis 3A** (parents' expectation): Parents' gender-(a)typical occupational expectations are positively associated with adolescents' gender-(a)typical occupational aspirations.

Existing research seldom considers the two-way traffic of children's social learning and parents' expectations together in the intergenerational reproduction of gendered occupational aspirations. Consequently, whether the two operate independently or are mutually constitutive remains unclear. However, it is crucial to scrutinize the relationship between the two, to clarify whether adolescents' social learning is (partly) "dictated" by their parents' will and the extent to which adolescents' gender learning goes beyond their parents' directive. As parents at least partly draw on their own gendered occupational experiences to formulate their expectations for children (Hou & Leung, 2011; Leung et al., 2011), we expect such expectations to mediate adolescents' direct occupational imitation, indirect gender-role learning, and intergenerational gender boundary-setting, as specified in Hypothesis 3B. If the two processes operate independently, however, Hypothesis 3B will not be supported.

**Hypothesis 3B** (mediating role of parents' expectations): Adolescents' direct occupational imitation, indirect gender-role learning, and gender boundary-setting are mediated by parents' gender-(a)typical occupational expectations.

#### **2.2.4. Differences by adolescents' gender**

Whereas the above theories do not explicitly specify how the intergenerational reproduction of gender-(a)typical occupational aspirations may differ by adolescents' gender, research situating intergenerational relations in broader social contexts provides crucial clues regarding potential differences between girls and boys. Parents are not the only source for

children's gender learning. With their growing agency, adolescents also relate to broader contextual norms beyond the family to make sense of their gender (Hu, 2015). As parental influence and contextual norms constitute alternative sources for children's gender learning (Crouter et al., 1993; McHale et al., 2003), adolescents may be particularly likely to draw on their parents' occupations and expectations in formulating their occupational aspirations in the absence of clear and consistent normative expectations regarding their future occupations. Prior research shows that as gender norms regarding housework are less clearly defined for men than for women (Crouter et al., 1993), boys are more likely than girls to take cues from parents' behaviors rather than contextual norms as they learn to perform domestic labor (Hu, 2015; McHale et al., 2003). The persistence of gender specialization emphasizing men's paid work means that gender norms regarding occupations may be more clearly defined for men than for women (England et al., 2020). If clear and consistent contextual norms substitute for parental influence in informing adolescents' gender learning, Hypothesis 4 will hold.

**Hypothesis 4** (difference by adolescents' gender): The intergenerational reproduction of adolescents' gender-(a)typical occupational aspirations is stronger among girls than boys.

### **2.3. The Chinese context**

Adolescents' gender-typed occupational aspirations and the intergenerational (re)production of these remain under-studied in China (but see Hou & Leung, 2011; Leung et al., 2011; Liu et al., 2015). However, compared with their European and North American counterparts, Chinese parents may exert a stronger influence on their children's occupational aspirations. The continuing strong adherence to the value of filial piety obliges Chinese children to respect parents as role models, submit to parents' authority, and closely follow parents' guidance and expectations (Hu & Scott, 2016). From the late 1970s and early 1980s, as the

country underwent its drastic socialism-to-market transitions, incomplete state provision of child welfare compelled Chinese parents to assume the primary responsibility for their children's social mobility and career development (Gao et al., 2020). Parental involvement in children's occupational development has been intensified due to the former one-child policy (Fong, 2004) and the rise of competitive individualism alongside the country's socialism-to-market transition (Yan, 2009). The standardization of curriculum and school regimes and tightening state control over extra-curricular activities (Morgan et al., 2017) further reinforce diverse family settings as crucial crucibles for adolescents' occupational aspirations.

Moreover, despite progress toward gender equality at work in socialist China (1949–1978), the post-socialist era has seen a notable decrease in women's labor force participation rate, resurgence of gender inequality in paid work, and intensifying tension in public opinion regarding women's paid work (Hu & Scott 2016; Ji et al., 2017). Given these trends, gender norms regarding work and occupation may be more clearly and consistently defined for men than for women in post-socialist China.

### **3. METHODS**

#### **3.1. Data and sample**

We used nationally representative data from the child and adult panels of the 2010, 2014, 2016, and 2018 China Family Panel Studies (CFPS, <https://www.issp.pku.edu.cn/cfps/en/>). The 2012 CFPS was not used because it lacks information on adolescents' occupational aspirations. Executed by the Institute of Social Science Survey at Peking University, the CFPS was conducted in collaboration with the Population Studies Center at the University of Michigan. Its multi-stage sampling was weighted in proportion to population structures at the administrative levels of county (or equivalent), village, and household. In the baseline 2010 wave, 16,000 households from 25 provinces were surveyed, with a household response rate

of 81.3%. Respondents were then re-interviewed every two years and new sample members were added to each wave to compensate for attrition (around 15%).

To construct our analytical sample,<sup>2</sup> we first limited the data to adolescents aged 10–19 (i.e., UNICEF’s definition of adolescents) living in two-parent families as the CFPS only collected occupational information from co-residing parents. Second, we limited our sample to the representative subsample of adolescents who were asked about their occupational aspirations and whose parents reported occupational expectations. Third, we limited our sample to families in which both parents have participated in formal contracted employment, self-employment, agricultural work, or casual work that generates market income and thus provided valid occupational information. Fourth, we deleted adolescents with missing information on all variables used. Little’s missing at random (MAR) tests showed that the covariates included in our analysis fully accounted for the missing patterns of listwise deletion (Li, 2013). Fifth, we eliminated cases where the adolescents reported ambiguous occupational aspirations or the parents reported ambiguous expectations (e.g., “work as an employee”). Finally, as some adolescents were observed more than once, we kept one random observation for each adolescent, yielding a final analytical sample of 2,410 adolescents.<sup>3</sup> Table 1 presents the descriptive statistics for the analytical sample and Online Supplementary Table S1 details our step-by-step sample construction.

[Insert Table 1 Here]

### **3.2. Dependent variable: Adolescents’ gender-(a)typical occupational aspirations**

The CFPS asked the adolescents “what specific occupation do you want to pursue when you grow up?”. The interviewers recorded adolescents’ original open-ended responses. The CFPS team then coded the responses into 23 occupation categories following the China Standard Classification of Occupations (CSCO, GB/T6565-2009) and three more ambiguous

categories – “study,” “serve the people,” and “work as an employee.” In creating the 23 occupation categories, the CFPS team aggregated smaller, lower-level categories similar in occupational status and gender composition into larger, higher-level ones in the CSCO scheme, to ensure sufficient cell sizes and substantive salience (see the CFPS Manual for further information: [www.issf.pku.edu.cn/cfps/xgxw/cfpsdt/1346445.htm](http://www.issf.pku.edu.cn/cfps/xgxw/cfpsdt/1346445.htm)).

Our analysis focuses on adolescents with non-ambiguous occupational aspirations, as it is not possible to ascertain the gender orientation of the ambiguous categories. To measure the gender orientation of adolescents’ aspired occupations, we first calculated the proportion of men in each of the 23 occupational categories based on respondents aged 25–54 (i.e., active working age) who reported valid occupational information in the 2010–2018 CFPS. As adolescents may only roughly distinguish occupations that are gender-(a)typical (Law & Schober, 2021), we then created two dummy variables to capture the adolescents’ gender-typical (i.e., > two-thirds [66.7%] of the adult labor force formed of the same gender as an adolescent) and gender-atypical (i.e., < one-third [33.3%] of the adult labor force formed of the same gender as an adolescent) aspirations. Our findings are robust to alternative cut-offs such as 70% and 30% (Law & Schober, 2021; Polavieja & Platt, 2014).

### **3.3. Key predictors**

#### ***3.3.1. Direct occupational imitation***

To measure adolescents’ direct occupational imitation, we created two dummy variables to capture whether an adolescent’s aspired occupation is the same as that of their father and mother, respectively. Given that some parents may have changed their primary occupations across the CFPS waves, direct imitation is operationalized as an adolescent’s aspired occupation being the same as any of their parents’ primary occupations observed across available CFPS waves up to when the aspirations were measured.<sup>4</sup>



### ***3.3.2. Parents' occupational gender composition***

To measure the gender orientation of parents' occupations, we calculated the proportion of each parent's primary occupation formed of men based on respondents aged 25–54 who reported valid occupational information in the 2010–2018 CFPS. To balance between sufficiently large cell sizes and fine-grained details, we classified the occupations using the CSCO scheme at the third level. Following Law and Schober (2021), parents' occupational gender composition was calculated as the mean of all observed values across available CFPS waves up to when adolescents' aspirations were measured.

### ***3.3.3. Parents' gender-(a)typical occupational expectations***

The CFPS asked one parent for each adolescent “what specific occupation do you want the child to pursue when he/she grows up?”. Open-ended responses were similarly collected and coded by the CFPS team into the same 23 CSCO categories as those for adolescents' aspirations. Following the same procedure for measuring adolescents' aspirations, we calculated the gender composition in the active adult labor force for each of the 23 categories, based on which we created two dummy variables to capture parents' gender (a)typical occupational aspirations. Early in our research, we experimented with controlling for which parent reported the expectation. But as this measure was not associated with adolescents' gender-(a)typical occupational aspirations (at the 10% level of statistical significance), did not affect the results for our key predictors, and did not contribute to the overall model fit, we did not include it in our final analysis.

## **3.4. Control variables**

Building on previous research (e.g., Hitlin, 2006; Hou & Leung, 2011; Law & Schober, 2021; Liu et al., 2015; Polavieja & Platt, 2014), we controlled for a series of variables that may

confound the relationships between parents' occupational gender composition, occupational expectations for their children, and adolescents' gendered occupational aspirations. Given the gendered occupational hierarchy (He & Wu, 2017), we controlled for parents' occupational status using the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom et al., 1992) included in the CFPS data. The ISEI ranges from 16 to 90, with a higher score indicating higher occupational status. Parents' occupational status was calculated as the mean of all observed values across available CFPS waves up to when adolescents' aspirations were measured.

We controlled for the mother's share of parents' total paid work time and parents' weekly paid work hours to capture parents' relative degree of work participation. We also controlled for parents' domestic gender roles (Law & Schober, 2021), including the mother's contribution to parents' total housework time and parents' weekly housework hours. In the CFPS, the definition of housework includes chores such as cooking, housekeeping, laundry, and grocery shopping, but excludes care provision. Although the CFPS used stylized time-use measures, the measures are found to be reasonably reliable in the absence of time-diary data (Hu, 2015). Parents' paid work and housework time was measured using the mean values across available CFPS waves up to when adolescents' aspirations were measured.

We controlled for adolescents' age. Given China's vast rural-urban differences, we also distinguished between rural and urban residents, and we used a further dummy variable to distinguish rural-to-urban migrant adolescents who resided in an urban area but did not have an urban *hukou* (household registration) (Hu, 2015). In our preliminary analysis, we used a series of dummy variables to control for the presence of younger sisters, elder sisters, younger brothers, and elder brothers, respectively (Hu, 2018). These were subsequently discarded as there was little evidence that they influenced adolescents' gendered occupational aspirations. We thus controlled for whether an adolescent is the only child in the family.

Parents' education plays a crucial role in shaping their children's occupational aspirations (Hou & Leung, 2011; Liu et al., 2015), which we controlled for using each parent's years of education. We used the log form of *per capita* household income to capture the adolescents' family socioeconomic status. We also controlled for survey year.

Finally, as our analysis focused on adolescents with non-ambiguous aspirations and whose parents have non-ambiguous expectations, we calculated and controlled for the inverse Mills' ratio (IMR) for sample selection into having non-ambiguous aspirations and parental expectations, using all the key predictors and control variables introduced above as predictors in the selection model. As we analyzed female and male adolescents separately throughout our research, the IMRs were calculated separately for girls and boys (see Online Supplementary Table S2).

Early in this research, we also experimented with including adolescents' ethnic minority status, the quadratic term of adolescents' age, each parent's age, parents' educational assortative mating, each parent's Chinese Communist Party membership, the co-residence of maternal and paternal grandparents, and the interaction of parents' occupational gender composition. As these variables were not associated with adolescents' gendered aspirations and their inclusion did not affect our main results, they were excluded from the final analysis. We did not control for parents' marital status as our sample contains only two-parent families and it is rare for unmarried or divorced parents to cohabit or remarry (both < 1%).

### **3.5. Analytical strategy**

Due to a lack of nationally representative evidence, we first describe the gendered patterns of adolescents' occupational aspirations and parents' occupational expectations. Then, to test our hypotheses, we fitted a series of binomial logit regression models predicting adolescents'

gender-(a)typical occupational aspirations, separately for girls and boys. We estimated robust standard errors clustered at the household level to account for the potential presence of multiple adolescents in the same household (Freedman, 2006). The models were built in three steps: (1) including adolescents' direct imitation of their mother's and father's occupations and control variables; (2) adding parents' occupational gender compositions; and (3) adding parents' gender-(a)typical occupational expectations. This stepwise modeling strategy allows us to examine potential mediation between different intergenerational mechanisms shaping adolescents' gender-(a)typical aspirations. To aid the interpretation of results, we standardized all continuous measures except for the IMR before entering them into the models. Given potential occupational assortative mating between the mother and the father, we conducted further robustness checks by adding each parent's occupational gender composition to the model at a time. These checks yielded results that are consistent with our main tables (for details see Supplementary Table S3).

## 4. FINDINGS

### 4.1. Descriptive results: Adolescents' occupational aspirations and parents' occupational expectations

As Table 1 shows, Chinese adolescents' occupational aspirations and parents' occupational expectations are clearly gender-typed. While the majority of girls (61%) and boys (63%) aspired to gender-typical occupations (i.e., > two-thirds of the adult workforce share one's gender; gender difference:  $F = 0.38, p = 0.54$ ), a slightly larger proportion of girls (32%) than boys (27%) aspired to gender-atypical occupations (i.e., < one-third of the adult workforce share one's gender;  $F = 3.59, p = 0.06$ ). The results also show that adolescents are unlikely to directly imitate their parents' occupations. Only 2% of girls aspired to their mothers' and

fathers' occupations, respectively, whereas 3% of boys aspired to their fathers' occupations and 1% aspired to their mothers' occupations.

Compared with adolescents' aspirations, gender segregation in parents' occupational expectations is more pronounced for girls but less prominent for boys. For girls, 74% of parents had gender-typical occupational expectations, while only 16% had gender-atypical expectations. For boys, 46% of parents, a much lower proportion, had gender-typical expectations, compared with 38% with gender-atypical aspirations. The gender difference may be partly because low-status occupations tend to be male-dominated (He & Wu, 2017). Thus, parents' expectation of high occupational status for boys may have entailed moving away from some male-dominated gender-typical occupations such as manufacturing and maintenance.

[Insert Table 2 Here]

Table 2 further delineates the distribution and gender composition of adolescents' occupational aspirations and parents' expectations. Overall, teaching (24.8%), medical (14.6%), literature and arts (9.6%) professions, and business enterprise leaders (7.6%) are the most popular occupations among Chinese adolescents. Similarly, parents are most likely to expect their children to work as medical (21.0%) and teaching (34.3%) professionals. The results further show that compared with gender segregation in adolescents' occupational aspirations (i.e., the proportion of male adolescents aspiring to an occupational category), gender segregation in the adult labor force skewing toward female domination is more prominent in medical, financial, and catering, travel and recreational service occupations. By contrast, the degree of male domination is more prominent in the adult labor force than in adolescents' aspirations in almost all male-dominated occupations in the adult labor force, apart from engineering and manufacturing and maintenance personnel in mechanical, electrical, and power supply parts.

In sum, as adolescents' occupational aspirations and parents' expectations are crucial predictors of adolescents' subsequent occupations (Hou & Leung, 2011; Polavieja & Platt, 2014; Schoon, 2001), the descriptive results provide a strong supply-side explanation for gender segregation in the adult workforce in China. The results from Table 2 further illustrate that labor market and workplace configurations play a role in exacerbating gender segregation in some occupations over and above adolescents' gendered aspirations.

## **4.2. Regression results: Intergenerational reproduction of gendered occupational aspirations**

Table 3 presents the results for the key predictors from binomial logit regression models predicting adolescents' gender-(a)typical occupational aspirations. As results for the control variables changed little across the models, those from the full models 5A, 6A, 5B, and 6B are presented in Appendix Table A1.

[Insert Table 3 Here]

### **4.2.1. Direct occupational imitation**

As the coefficients for direct occupational imitation changed little across all models, we interpret the results from the full models. Among girls, the results from Models 5A and 6A support Hypothesis 1A that adolescents who directly imitate the same-sex parent's occupation are likely to have gender-typical occupational aspirations. Compared with girls who do not directly imitate their mothers' occupations, girls aspiring to their mothers' occupations are 3.7 times more likely to have gender-typical aspirations ( $\exp(1.309)$ ,  $p < 0.05$ ) and 92% less likely to have gender-atypical ones ( $1 - \exp(-2.503)$ ,  $p < 0.05$ ). However, Hypothesis 1A is not supported among boys (Models 5B and 6B), whose direct imitation of fathers' occupations does not have a bearing on their gender-(a)typical occupational

aspirations. This gender difference is consistent with Hypothesis 4 that direct imitation of the same-sex parent's occupations is more prominent among girls than among boys.

When it comes to the opposite-sex parent, Hypothesis 1A is partly supported in that adolescents' direct imitation of the opposite-sex parent's occupation likely leads to gender-atypical aspirations. Compared with girls who do not aspire to their fathers' occupations, girls who do are more likely to have gender-atypical aspirations (M6A) and less likely to have gender-typical ones (M5A). However, these results are not statistically significant at the 10% level, perhaps because low-status occupations tend to be male-dominated in China (He & Wu, 2017), and girls may thus avoid directly imitating their fathers' low-status work. By contrast, supporting Hypothesis 1A, boys who aspired to their mothers' occupations are 3.2 times more likely to have gender-atypical aspirations (M6B:  $\exp(1.166)$ ,  $p < 0.05$ ) and 96% less likely to have gender-typical ones (M5B:  $1 - \exp(-3.168)$ ,  $p < 0.01$ ), compared with boys who do not aspire to their mothers' occupations. This result runs counter to the difference between girls and boys specified in Hypothesis 4, which we will discuss in the concluding section.

#### ***4.2.2. Homo-lineal indirect gender-role learning***

Hypothesis 1B about adolescents' broader, indirect gender-role learning based on the same-sex parent's occupation, over and above direct occupational imitation, is supported among girls but not boys. Again, as the coefficients for parents' occupational gender composition changed little across the models, we interpret results from the full models. On the one hand, girls' occupational aspirations are more likely to be gender-atypical rather than gender-typical when their mothers' occupations are more male-oriented. With every one-standard-deviation increase in the proportion of mothers' occupations constituted of men, girls are 17% less likely to have gender-typical aspirations (M5A:  $1 - \exp(-0.188)$ ,  $p < 0.10$ ) and 1.3

times more likely to have gender-atypical ones (M6A:  $\exp(0.290)$ ,  $p < 0.05$ ). However, indirect gender-role learning is not found among boys. In Models 5B and 6B, the tiny coefficients for fathers' occupational gender composition indicate that there is hardly any association between fathers' occupational gender orientation and the gender-(a)typicality of boys' occupational aspirations. The girl-boy difference is consistent with Hypothesis 4 that compared with boys, girls are more likely to draw on the same-sex parent's occupation as a source of gender-role learning.

#### ***4.2.3. Hetero-lineal gender boundary-setting***

Although prior research suggests a weak form of role modeling between parents and children of opposite sexes (e.g., Bandura, 1977; Bussey & Bandura, 1999; Martin et al., 2002; McHale et al., 2003), we have not found any evidence in support of this contention. Rather, on the contrary, the results support Hypothesis 2 among girls. This hypothesis was derived from our new gender boundary-setting theory which posited that the opposite-sex parent's gender-typed occupation erects and reinforces gender boundaries for their children to develop gender-typical rather than gender-atypical aspirations. With every one-standard-deviation increase in the proportion of fathers' occupations constituted of men, girls are 16% less likely to aspire to gender-atypical male-dominated occupations (M6A:  $1 - \exp(-0.173)$ ,  $p < 0.05$ ). As Model 5A shows, in line with Hypothesis 2, the gender-typicality of fathers' occupations, as reflected in the proportion of such occupations constituted of men, is also positively associated with girls' aspirations to gender-typical occupations, though the association is not statistically significant at the 10% level. By contrast, there is little evidence of gender boundary-setting between mothers and sons, as there is no statistically significant association between mothers' occupational gender composition and the gender-(a)typicality of boys' aspirations. Again, the gender difference between girls and boys supports Hypothesis 4 in



emphasizing the opposite-sex parent's occupation as a key source of gender learning for girls but not boys.

#### ***4.2.4. The role of parents' gender-(a)typical expectations***

Hypothesis 3A predicted a positive association in gender-(a)typicality between parents' occupational expectations and adolescents' aspirations, which again is only supported among girls but not boys as specified in Hypothesis 4. On the one hand, compared with adolescent girls whose parents do not have gender-atypical expectations, those girls with parents who do are 38% less likely to have gender-typical (M5A:  $1 - \exp(0.480)$ ,  $p < 0.10$ ) and 2.3 times more likely to have gender-atypical aspirations (M6A:  $\exp(0.813)$ ,  $p < 0.01$ ). Substantively consistent with Hypothesis 3A, parents' gender-typical aspirations are positively associated with girls' gender-typical and negatively associated with their gender-atypical aspirations, but the associations are not statistically significant at the 10% level. On the other hand, while the directions of association in gender-(a)typicality between parents' occupational expectations and boys' aspirations are consistent with Hypothesis 3A, these associations are not statistically significant at even the 10% level.

According to Hypothesis 3B, had parents' occupational expectations worked as a channel through which their occupations shape their children's occupational aspirations, the inclusion of parents' expectations would have mediated at least part of the association between parents' occupational gender composition and adolescents' gender-(a)typical aspirations. However, there is little evidence supporting this hypothesis – the inclusion of parents' expectations hardly affected the coefficients for parents' occupational gender composition. Thus, children's social learning and parents' expectations seem to operate as independent channels for the intergenerational reproduction of gendered occupational aspirations.

## 5. CONCLUSIONS AND DISCUSSION

Despite ongoing efforts at promulgating gender equality in the labor market, occupational gender segregation remains one of the most stubborn forms and causes of gender inequalities at work in China and across many regions of the world (England et al., 2020; He & Wu, 2017; Qian & Fan, 2019). Against this backdrop, our research has provided the first nationally representative evidence on adolescents' gendered occupational aspirations and the intergenerational reproduction of these aspirations in contemporary China. Moreover, our theoretical development and findings extend and enrich existing understanding of the intricate supply-side mechanisms underpinning occupational gender segregation in at least three distinctive ways.

First, our findings show that adolescents' direct imitation of parents' occupations and indirect gender-role learning based on parents' occupational gender orientations represent two distinct channels of gender-role modeling (cf. Polavieja & Platt, 2014). We find that direct imitation of mothers' occupations leads to girls' gender-typical rather than gender-atypical aspirations and it leads to boys' gender-atypical rather than gender-typical aspirations. Polavieja and Platt (2014) argued and found in the UK that direct occupational imitation is driven primarily by innate gender identification and thus limited to parents and children of the same sex. But our additional analysis (Supplementary Table S4) indicates that both Chinese girls' and boys' direct imitation of mothers' occupations was strongly driven by the high status of maternal occupations rather than just innate gender identification. Over and above direct imitation, we find that girls more broadly learn from and follow the gender orientation of their mothers' occupations. As mothers work in occupations with a larger proportion of men, girls become more likely to aspire to gender-atypical rather than gender-typical occupations. Together, these results suggest that adolescents infer and learn from the

gender norms, structural constraints, opportunities, and costs and rewards embodied in their parents' occupations, even when seemingly straightforward direct imitation is concerned.

Second, we have developed and tested the new theory of gender boundary-setting to re-think the role of the opposite-sex parent in intergenerational gender reproduction. Existing theories emphasized the importance of homo-lineal role modeling between parents and children of the same sex (Bandura, 1977; Bussey & Bandura, 1999). The role the opposite-sex parent's occupation plays in shaping children's gendered occupational aspirations remains under-theorized and has often been characterized by a weak form or absence of gender-role modeling (Law & Schober, 2021; Martin et al., 2002; McGinn et al., 2018; McHale et al., 2003). As "doing difference" is core to the relational construction of gender (Fenstermaker & West, 2002), we contended that the opposite-sex parent's gender-typed occupation can be viewed by their children as a counter role model that reflects rigid norms and constraints of occupational gender differentiation as well as a lack of opportunity and reward to cross the gender divide. Our findings support this contention: when fathers work in occupations with a larger proportion of men, girls are far less likely to aspire to gender-atypical male-dominated occupations. Therefore, our new theory and findings reveal the crucial role of the opposite-sex parent in erecting gender boundaries for their children, though gender differences were found between girls and boys (as we will discuss below). They highlight that hetero-lineal parent-child relations operate by a considerably different logic from homo-lineal ones.

Third, our findings provide new insights into how parents' gendered occupational expectations shape the gender-(a)typicality of adolescents' occupational aspirations. We found a strong link between parents' gender-atypical occupational expectations and girls' aspirations to gender-atypical rather than gender-typical occupations. These findings add to existing evidence emphasizing the importance of parental expectations in intergenerational

gender reproduction (e.g., Hou & Leung, 2011; Leung et al., 2011). Considering parents' occupational expectations alongside children's occupational gender learning – an attempt rarely made in existing research – also clarifies that the two operate independently in the intergenerational reproduction of gendered occupational aspirations. This is an important discovery as it shows that in a context such as China, where parents are believed to have great authority over their children (Hou & Leung, 2011; Hu & Scott, 2016), adolescents' gender learning is not necessarily dictated by their parents' expectations. Thus, the intergenerational reproduction of gendered occupational aspirations follows a relational, two-way process, which combines adolescents' social learning from their parents with parents' implicit or explicit expression of expectations.

Notably, our research has also uncovered considerable differences in the intergenerational reproduction of gendered occupational aspirations between girls and boys. While parents' occupations and expectations play prominent roles in shaping girls' gender-(a)typical occupational aspirations, they seem to be largely tangential in shaping the gender-(a)typicality of boys' aspirations. This result is not entirely surprising given that social norms regarding gender and occupation are more clearly established for men, and such clarity may well substitute for the necessity of parents' occupations and expectations as a source for boys' social learning (Hu, 2015; McHale et al., 2003). Conversely, due to the flux of traditional gender specialization, the socialist legacy of gender egalitarianism, and the resurgence of gender inequality in post-socialist China (Ji et al., 2017), the less clearly established and sometimes conflicting norms regarding women's occupations may have given rise to parents as a crucial source of influence on girls' gendered occupational aspirations.

The limitations of our research suggest several important directions for future exploration. First, our cross-sectional analysis shows only associations but not causality, although there is little reason to think that adolescents' gender-typed occupational aspirations

may shape their parents' occupations. Second, while we used broad occupational categories for adolescents' aspirations, the granularity of our measures could be improved with a larger sample. Finally, while we conceptualize the role contextual norms may have played in shaping our findings and their interpretation, future research could more fully theorize, measure, and model the contextual embeddedness of the intra-family processes analyzed here.

Despite these limitations, this research provides new, comprehensive, and in-depth insights into the intricate intergenerational mechanisms that shape adolescents' gendered occupational aspirations. Of all the mechanisms examined, parents' expectations seem to exert the strongest influence on girls' gendered occupational aspirations, followed by direct occupational imitation and then parents' occupational gender composition (see Online Supplementary Table S5). For boys, their gendered occupational aspirations are primarily shaped by direct imitation of their parents' occupations. Nonetheless, this result needs to be considered in the context that direct occupational imitation occurs only rarely among Chinese adolescents. Taken together, our findings provide a useful roadmap for the development of interventions in multiple areas to mitigate the reproduction of occupational gender segregation by cultivating gender-egalitarian occupational aspirations early in the life course.

## ENDNOTES

1. Although gender is widely recognized as a non-binary construct, we operationalize gender in terms of male and female. This is due to data limitations and the scarcity of evidence on the ways in which non-binary gender identification may shape adolescents' occupational aspirations.
2. Time-invariant information was imputed across waves to minimize sample loss.

3. Although it is theoretically possible to leverage the longitudinal design of the CFPS to conduct fixed-effects analysis, the small number of adolescents observed more than once means that such analysis is not practicable.
4. As the CFPS did not collect data on parents' full occupational history, parents' occupational history was left-censored. Although using alternative measures based on parents' occupations at the time when adolescents reported their aspirations yielded substantively consistent findings, using all available information allows us to build a fuller picture of children's exposure to parental influence (Law & Schober, 2021). Heterogeneity in left-censoring patterns was accounted for by adolescents' age and survey year.

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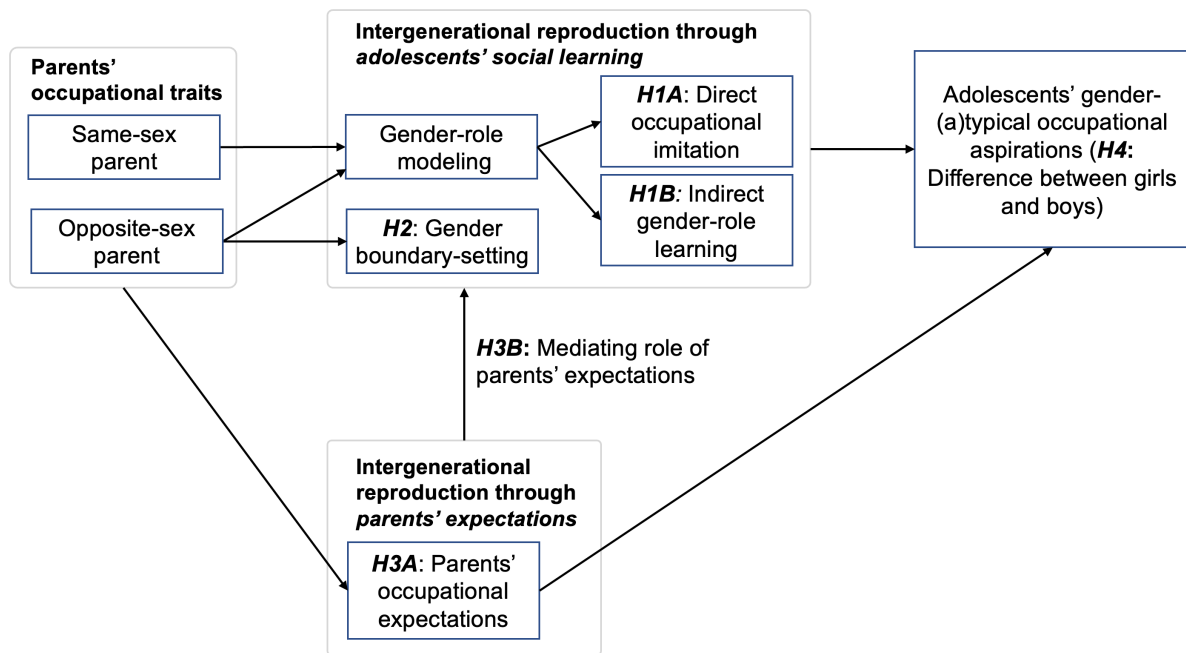
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**Figure 1.** Conceptual framework, key intergenerational mechanisms, and hypotheses

**Table 1.** Sample characteristics

|  |         |         | Girls<br>(N = 1,169) | Boys<br>(N = 1,241) |
|--|---------|---------|----------------------|---------------------|
|  | Minimum | Maximum | Mean/Proportion      | Mean/Proportion     |
| Dependent variables  |         |         |                      |                     |
| Gender-typical occupational aspiration   | 0       | 1       | 0.61                 | 0.63                |
| Gender-atypical occupational aspiration  | 0       | 1       | 0.32                 | 0.27                |
| Key predictors   |         |         |                      |                     |
| Aspiration same as mother's occupation   | 0       | 1       | 0.02                 | 0.01                |
| Aspiration same as father's occupation   | 0       | 1       | 0.02                 | 0.03                |
| Mother's occupation (proportion of men)  | 0.00    | 1.00    | 0.42<br>(0.12)       | 0.43<br>(0.11)      |
| Father's occupation (proportion of men)  | 0.00    | 1.00    | 0.60<br>(0.21)       | 0.60<br>(0.21)      |
| Parents' gender-typical expectation  | 0       | 1       | 0.74                 | 0.46                |
| Parents' gender-atypical expectation   | 0       | 1       | 0.16                 | 0.38                |
| Control variables  |         |         |                      |                     |
| Mother's occupational status (ISEI)  | 16      | 88      | 32.51<br>(11.30)     | 33.37<br>(12.06)    |
| Father's occupational status (ISEI)  | 20      | 90      | 33.98<br>(12.22)     | 34.10<br>(11.60)    |
| Mother's share of paid work time   | 0.00    | 1.00    | 0.40<br>(0.18)       | 0.43<br>(0.17)      |
| Parents' total weekly paid work hours <sup>a</sup>                                     | 0       | 168     | 86.70<br>(29.77)     | 87.54<br>(31.36)    |
| Mother's share of housework time   | 0.00    | 1.00    | 0.72<br>(0.19)       | 0.71<br>(0.19)      |
| Parents' total weekly housework hours <sup>a</sup>                                     | 0       | 94      | 24.98<br>(13.04)     | 25.44<br>(14.42)    |
| Age  | 10      | 19      | 14.02<br>(2.75)      | 14.19<br>(2.72)     |
| Urban residence (ref. = rural)   | 0       | 1       | 0.59                 | 0.58                |
| Rural-to-urban migrant (ref. = no)   | 0       | 1       | 0.36                 | 0.33                |
| Only child (ref. = no)   | 0       | 1       | 0.27                 | 0.37                |
| Mother's education (year) <sup>a</sup>   | 0       | 16      | 7.63<br>(4.42)       | 7.66<br>(4.47)      |
| Father's education (year) <sup>a</sup>   | 0       | 16      | 8.41<br>(3.81)       | 8.82<br>(3.85)      |
| Household income <i>per capita</i> (log) <sup>a b</sup>                                | 4.62    | 11.29   | 8.87<br>(0.88)       | 8.82<br>(0.90)      |
| Survey year  |         |         |                      |                     |
| 2010   | 0       | 1       | 0.13                 | 0.15                |
| 2014   | 0       | 1       | 0.06                 | 0.07                |
| 2016   | 0       | 1       | 0.38                 | 0.31                |
| 2018   | 0       | 1       | 0.43                 | 0.47                |
| Inverse Mills' ratio (adolescents/parents with non-ambiguous aspirations/expectations) | 0.19    | 0.98    | 0.47<br>(0.09)       | 0.54<br>(0.14)      |

*Note:* Ref. = Reference category. ISEI = International Socio-Economic Index of Occupational Status. Column proportions may not add up to 1 due to rounding. Standard deviations in brackets for continuous variables. Dummy variables have a minimum value of 0 and a maximum value of 1. Full probit models for calculating the Inverse Mills' ratios are presented in Online Supplemental Table S2. Weighted statistics.

<sup>a</sup> Top-coded at the 99<sup>th</sup> percentile to minimize the influence of outlier cases.

<sup>b</sup> Bottom-coded at the 1<sup>st</sup> percentile to minimize the influence of outlier cases.

**Table 2.** Gender composition of adolescents' occupational aspirations and parents' occupational expectations

| Occupational category   | % boys<br>aspiring to<br>the<br>occupation | %<br>adolescents<br>aspiring to<br>the<br>occupation | Parents'<br>expectation:<br>% of boys | Parents'<br>expectation:<br>%<br>adolescents | Gender<br>composition<br>in adult labor<br>force:<br>% men <sup>a</sup> |
|---|--|--|---------------------------------------|--|---|
| Medical personnel   | 32.2                                       | 14.6   | 40.4                                  | 21.0   | 20.4 <sup>b</sup>   |
| Press, publishing, and culture personnel  | 27.0                                       | 2.1  | 2.4                                   | 0.2  | 29.6 <sup>b</sup>   |
| Teaching professionals  | 28.8                                       | 24.8   | 30.9                                  | 34.3   | 30.7 <sup>b</sup>   |
| Financial personnel   | 48.2                                       | 2.3  | 40.6                                  | 1.1  | 32.9 <sup>b</sup>   |
| Catering, travel, and recreation service staff  | 59.5                                       | 2.8  | 100.0                                 | 0.2  | 38.3  |
| Social and community service staff  | 37.5                                       | 1.7  | 41.1                                  | 0.8  | 40.7  |
| Agricultural workers  | 83.2                                       | 0.3  | 65.6                                  | 0.6  | 45.7  |
| Administrative personnel  | 64.9                                       | 3.8  | 62.1                                  | 10.6   | 48.3  |
| Equipment/machinery operators (other facilities)  | 83.2                                       | 0.4  | 62.1                                  | 0.6  | 64.0  |
| Transportation services staff   | 33.8                                       | 0.5  | 0.9                                   | 0.4  | 69.1 <sup>c</sup>   |
| Personnel for literature and arts professionals   | 30.4                                       | 9.6  | 43.5                                  | 2.3  | 72.7 <sup>c</sup>   |
| Engineers   | 88.4                                       | 6.1  | 81.3                                  | 4.1  | 75.8 <sup>c</sup>   |
| Manufacturing and maintenance personnel in mechanical, electrical, and power supply parts | 100.0                                      | 1.1  | 100.0                                 | 0.5  | 76.0 <sup>c</sup>   |
| Other specialized technical personnel   | 49.7                                       | 1.9  | 59.5                                  | 0.1  | 77.0 <sup>c</sup>   |
| Leading cadres: state organizations, CCP and mass organizations, public enterprises       | 69.0                                       | 2.2  | 84.0                                  | 3.5  | 81.5 <sup>c</sup>   |
| Leading cadres of business enterprises  | 69.8                                       | 7.6  | 69.7                                  | 4.5  | 85.0 <sup>c</sup>   |
| Security guards and firefighters  | 73.7                                       | 4.0  | 81.7                                  | 4.4  | 91.5 <sup>c</sup>   |
| Equipment/machinery operators (transport facilities)                                      | 100.0                                      | 1.1  | 100.0                                 | 0.7  | 95.7 <sup>c</sup>   |
| Science researchers   | 80.1                                       | 4.8  | 80.3                                  | 2.8  | 99.9 <sup>c</sup>   |
| Personnel for sports  | 87.5                                       | 1.7  | 55.7                                  | 0.3  | 100.0 <sup>c</sup>  |
| Military personnel  | 79.7                                       | 4.6  | 85.7                                  | 5.1  | 100.0 <sup>c</sup>  |
| Legal professionals   | 50.3                                       | 1.6  | 46.4                                  | 1.9  | 100.0 <sup>c</sup>  |
| Aircraft and ship technical staff   | 78.4                                       | 0.7  | 100.0                                 | 0.3  | 100.0 <sup>c</sup>  |

Note:  $N = 2,410$  adolescents. CCP = Chinese Communist Party. Weighted statistics.

<sup>a</sup> Calculated based on 56,432 prime working-age CFPS 2010–2018 respondents (25–54), and the statistics are used to define gender-(a)typical occupational aspirations and expectations.

<sup>b</sup> Female-dominated occupations with < 33.3% men in the adult labor force.

<sup>c</sup> Male-dominated occupations with > 66.7% men in the adult labor force.

**Table 3.** Logit regression models predicting adolescents' gender-(a)typical occupational aspirations

|  | M1A                 | M2A                 | M3A                 | M4A                 | M5A                 | M6A                 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|  | Gender-<br>typical  | Gender-<br>atypical | Gender-<br>typical  | Gender-<br>atypical | Gender-<br>typical  | Gender-<br>atypical |
|  | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       |
| <b>Girls (<i>N</i> = 1,169)</b>                      |                     |                     |                     |                     |                     |                     |
| Aspiration same as mother's occupation               | 1.296*<br>(0.590)   | -2.496*<br>(1.066)  | 1.265*<br>(0.581)   | -2.469*<br>(1.052)  | 1.309*<br>(0.559)   | -2.503*<br>(0.982)  |
| Aspiration same as father's occupation               | -0.361<br>(0.523)   | 0.354<br>(0.562)    | -0.370<br>(0.539)   | 0.344<br>(0.594)    | -0.316<br>(0.534)   | 0.282<br>(0.596)    |
| Mother's occupation (proportion of men)              |                     |                     | -0.189+<br>(0.105)  | 0.287*<br>(0.117)   | -0.188+<br>(0.105)  | 0.290*<br>(0.117)   |
| Father's occupation (proportion of men)              |                     |                     | 0.087<br>(0.077)    | -0.174*<br>(0.081)  | 0.081<br>(0.078)    | -0.173*<br>(0.082)  |
| Parents' gender-typical expectation                  |                     |                     |                     |                     | 0.289<br>(0.224)    | -0.059<br>(0.247)   |
| Parents' gender-atypical expectation                 |                     |                     |                     |                     | -0.480+<br>(0.255)  | 0.813**<br>(0.273)  |
| Pseudo- <i>r</i> <sup>2</sup> (controls only: 0.024) | 0.028               | 0.028               | 0.030               | 0.033               | 0.045               | 0.053               |
|  | M1B                 | M2B                 | M3B                 | M4B                 | M5B                 | M6B                 |
|  | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       | <i>B (SE)</i>       |
| <b>Boys (<i>N</i> = 1,241)</b>                       |                     |                     |                     |                     |                     |                     |
| Aspiration same as mother's occupation               | -3.194**<br>(1.101) | 1.172+<br>(0.617)   | -3.214**<br>(1.110) | 1.168+<br>(0.605)   | -3.168**<br>(1.107) | 1.166*<br>(0.589)   |
| Aspiration same as father's occupation               | -0.243<br>(0.457)   | -0.085<br>(0.522)   | -0.301<br>(0.468)   | -0.137<br>(0.516)   | -0.275<br>(0.458)   | -0.095<br>(0.506)   |
| Mother's occupation (proportion of men)              |                     |                     | -0.131<br>(0.114)   | -0.146<br>(0.124)   | -0.138<br>(0.115)   | -0.123<br>(0.125)   |
| Father's occupation (proportion of men)              |                     |                     | -0.017<br>(0.076)   | 0.011<br>(0.081)    | -0.013<br>(0.076)   | 0.001<br>(0.081)    |
| Parents' gender-typical expectation                  |                     |                     |                     |                     | 0.284<br>(0.182)    | -0.207<br>(0.200)   |
| Parents' gender-atypical expectation                 |                     |                     |                     |                     | -0.017<br>(0.182)   | 0.236<br>(0.195)    |
| Pseudo- <i>r</i> <sup>2</sup> (controls only: 0.017) | 0.029               | 0.021               | 0.030               | 0.022               | 0.033               | 0.029               |

Note: SE = Robust standard errors clustered at the household level. Continuous predictors are standardized. Control variables are included in all models. As results for the control variables changed little across the models, those from the full Models 5A, 6A, 5B, and 6B are presented in Appendix Table A1.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$  (two-tailed).

**Appendix Table A1.** Results for control variables from binomial logit regression models predicting adolescents' gender-(a)typical occupational aspirations

| Control variables                        | Girls ( <i>N</i> = 1,169)                 |  | Boys ( <i>N</i> = 1,241)                  |  |
|--|---|--|---|--|
|  | Gender-typical<br>(continues from<br>M5A) | Gender-atypical<br>(continues from<br>M6A) | Gender-typical<br>(continues from<br>M5B) | Gender-atypical<br>(continues from<br>M6B) |
|  | <i>B</i> ( <i>SE</i> )                    | <i>B</i> ( <i>SE</i> )                     | <i>B</i> ( <i>SE</i> )                    | <i>B</i> ( <i>SE</i> )                     |
| Mother's occupational status (ISEI)      | −0.101<br>(0.102)                         | 0.120<br>(0.106)                           | 0.097<br>(0.088)                          | −0.039<br>(0.094)                          |
| Father's occupational status (ISEI)      | 0.078<br>(0.140)                          | −0.115<br>(0.154)                          | −0.001<br>(0.105)                         | 0.058<br>(0.114)                           |
| Mother's share of paid work              | −0.229<br>(0.168)                         | 0.209<br>(0.179)                           | −0.157*<br>(0.068)                        | 0.117<br>(0.074)                           |
| Parents' total paid work hours           | 0.166<br>(0.132)                          | −0.099<br>(0.141)                          | −0.005<br>(0.061)                         | 0.001<br>(0.065)                           |
| Mother's share of housework              | −0.258+<br>(0.133)                        | 0.225<br>(0.143)                           | −0.021<br>(0.123)                         | −0.017<br>(0.131)                          |
| Parents' total housework hours           | 0.182<br>(0.112)                          | −0.206+<br>(0.122)                         | 0.025<br>(0.133)                          | 0.146<br>(0.140)                           |
| Age                                      | 0.017<br>(0.042)                          | −0.067<br>(0.045)                          | 0.011<br>(0.037)                          | −0.024<br>(0.039)                          |
| Urban residence (ref. = rural)           | −0.003<br>(0.239)                         | −0.244<br>(0.260)                          | 0.084<br>(0.358)                          | 0.354<br>(0.379)                           |
| Rural-to-urban migrant (ref. = no)       | −0.449<br>(0.278)                         | 0.560+<br>(0.301)                          | −0.058<br>(0.536)                         | −0.678<br>(0.572)                          |
| Only child (ref. = no)                   | 0.524<br>(0.500)                          | −0.388<br>(0.544)                          | 0.238<br>(0.324)                          | 0.096<br>(0.349)                           |
| Mother's education (year)                | 0.013<br>(0.030)                          | −0.003<br>(0.033)                          | 0.037+<br>(0.020)                         | −0.032<br>(0.021)                          |
| Father's education (year)                | 0.004<br>(0.032)                          | 0.005<br>(0.034)                           | 0.006<br>(0.025)                          | 0.026<br>(0.027)                           |
| Household income <i>per capita</i> (log) | −0.199*<br>(0.081)                        | 0.141<br>(0.087)                           | 0.026<br>(0.167)                          | −0.244<br>(0.178)                          |
| Year of survey (ref. = 2010)             |   |  |   |  |
| 2014                                     | 0.563+<br>(0.334)                         | 0.046<br>(0.355)                           | 0.236<br>(0.400)                          | 0.072<br>(0.444)                           |
| 2016                                     | 0.842+<br>(0.482)                         | −0.575<br>(0.521)                          | −0.110<br>(0.193)                         | 0.199<br>(0.207)                           |
| 2018                                     | 1.371<br>(0.880)                          | −1.129<br>(0.959)                          | 0.268<br>(0.403)                          | 0.279<br>(0.434)                           |
| Inverse Mills' ratio                     | 4.873<br>(3.863)                          | −5.460<br>(4.220)                          | 0.853<br>(1.854)                          | 1.520<br>(1.969)                           |
| Intercept                                | −2.369<br>(2.354)                         | 2.371<br>(2.559)                           | −0.618<br>(1.563)                         | −1.443<br>(1.658)                          |

*Note:* SE = Robust standard errors clustered at the household level. Ref. = Reference category. ISEI = International Socio-Economic Index of Occupational Status. Continuous predictors, except for Inverse Mills' ratio, are standardized.

+  $p < 0.10$ , \*  $p < 0.05$  (two-tailed).



**Supplementary Materials**  
**for**  
**(Un)making occupational gender segregation:**  
**Intergenerational reproduction of gender-(a)typical occupational aspirations in China**

**Table S1.** Steps of analytical sample construction

**Table S2.** Probit models for calculating inverse Mills' ratio for selection into adolescents having non-ambiguous occupational aspirations and parents having non-ambiguous occupational expectations

**Table S3.** Stepwise inclusion of mothers' and fathers' occupational gender composition (robustness check for systematic occupational pairing between the mother and father)

**Table S4.** Binomial logit regression models predicting adolescents' direct occupational imitation and parents' gender-(a)typical occupational expectations

**Table S5.** Partial- $r^2$  analysis comparing the relative importance of different sources of intergenerational influence

**Table S1.** Steps of analytical sample construction

| Step | Sample restriction   | Remaining sample   |
|------|--|--|
| 0    | CFPS 2010, 2014, 2016, and 2018 sample of adolescents aged 10–19 who completed the self-completion questionnaire (CFPS 2012 did not collect information on adolescents' occupational aspirations)  | $N = 19,286$ person-years  |
| 1    | Delete respondents without coresident mother/father (i.e., without valid record for the mother/father)   | $N = 14,530$ person-years  |
| 2    | Delete cases with no information on occupational aspiration (only a representative subsample of all adolescents were asked this question) and parents' occupational expectation (only a representative subsample of all parents were asked this question)  | $N = 7,410$ person-years   |
| 3    | Listwise delete respondents with missing information, in the following order (Little's missing at random (MAR) test indicates that covariates included fully account for and explain the missing patterns): <ul style="list-style-type: none"> <li>• 48 rural/urban residence</li> <li>• 45 rural-to-urban migrant status</li> <li>• 74 mother's education</li> <li>• 78 father's education</li> <li>• 94 family income</li> <li>• 633 mother's occupation gender composition (including missing due to no work and missing data)</li> <li>• 120 father's occupation gender composition (including missing due to no work and missing data)</li> <li>• 298 mother's ISEI occupational status (including missing due to no work and missing data)</li> <li>• 147 father's ISEI occupational status (including missing due to no work and missing data)</li> <li>• 624 both parents' housework time</li> <li>• 77 both parents' paid work time</li> <li>• 47 weight</li> </ul> | $N = 5,125$ person-years<br><b>(sample for calculating the inverse Mills' ratio for selection into adolescents having clear occupational aspiration and parents having clear occupational expectation)</b> |
| 4    | Delete cases with ambiguous occupational aspirations and ambiguous parental occupational expectations  | $N = 3,519$ person-years   |
| 5    | Randomly select 1 observation for each adolescent  | $N = 2,410$ adolescents ( <b>final analytical sample</b> )   |

**Table S2.** Probit models for calculating inverse Mills' ratio for selection into adolescents having non-ambiguous occupational aspirations and parents having non-ambiguous occupational expectations

| Predictor                                | Girls<br>( <i>N</i> = 2,453) | Boys<br>( <i>N</i> = 2,672) |
|--|------------------------------|-----------------------------|
|  | <i>B</i> ( <i>SE</i> )       | <i>B</i> ( <i>SE</i> )      |
| Mother's occupation (% men)              | −0.292<br>(0.237)            | −0.553*<br>(0.232)          |
| Father's occupation (% men)              | 0.073<br>(0.146)             | 0.100<br>(0.140)            |
| Mother's occupational status             | −0.001<br>(0.003)            | 0.002<br>(0.003)            |
| Father's occupational status             | 0.004<br>(0.003)             | 0.004<br>(0.003)            |
| Mother's share of paid work              | −0.332*<br>(0.161)           | −0.076<br>(0.157)           |
| Parents' total paid work hours           | 0.001<br>(0.001)             | −0.000<br>(0.001)           |
| Mother's share of housework              | −0.237<br>(0.147)            | −0.378**<br>(0.140)         |
| Parents' total housework hours           | 0.002<br>(0.002)             | 0.007**<br>(0.002)          |
| Age                                      | 0.013<br>(0.011)             | 0.020*<br>(0.010)           |
| Urban residence (ref. = rural)           | 0.038<br>(0.101)             | 0.232*<br>(0.098)           |
| Rural-to-urban migrant (ref. = no)       | −0.074<br>(0.099)            | −0.376***<br>(0.095)        |
| Only child (ref. = no)                   | 0.190*<br>(0.078)            | 0.223***<br>(0.066)         |
| Mother's education (year)                | 0.009<br>(0.009)             | −0.003<br>(0.008)           |
| Father's education (year)                | −0.009<br>(0.010)            | 0.010<br>(0.009)            |
| Household income <i>per capita</i> (log) | −0.010<br>(0.040)            | −0.126***<br>(0.037)        |
| Year of survey (ref. = 2010)             |                              |                             |
| 2014                                     | 0.011<br>(0.128)             | 0.170<br>(0.140)            |
| 2016                                     | 0.152+<br>(0.082)            | 0.030<br>(0.078)            |
| 2018                                     | 0.326***<br>(0.083)          | 0.264***<br>(0.080)         |
| Intercept                                | 0.372<br>(0.383)             | 1.121**<br>(0.359)          |
| Pseudo- <i>r</i> <sup>2</sup>            | 0.016                        | 0.030                       |

Notes: SE = Robust standard errors clustered at the household level. Ref. = Reference category.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed).

**Table S3.** Stepwise inclusion of mothers' and fathers' occupational gender composition (robustness check for systematic occupational pairing between the mother and father)

|  | Gender-typical |               | Gender-atypical |               |
|--|----------------|---------------|-----------------|---------------|
|  | <i>B (SE)</i>  | <i>B (SE)</i> | <i>B (SE)</i>   | <i>B (SE)</i> |
| <b>Female adolescents (<i>N</i> = 1,169)</b> |                |               |                 |               |
| Mother's occupation (proportion of men)      | -0.175+        |               | 0.212*          |               |
|  | (0.100)        |               | (0.105)         |               |
| Father's occupation (proportion of men)      |                | 0.047         |                 | -0.102        |
|  |                | (0.077)       |                 | (0.079)       |
| <b>Male adolescents (<i>N</i> = 1,241)</b>   |                |               |                 |               |
| Mother's occupation (proportion of men)      | -0.166+        |               | -0.112          |               |
|  | (0.100)        |               | (0.109)         |               |
| Father's occupation (proportion of men)      |                | -0.056        |                 | -0.047        |
|  |                | (0.069)       |                 | (0.074)       |

*Note:* SE = Robust standard errors clustered at the household level. Continuous predictors are standardized. Control variables are included in all models.

+  $p < 0.10$ , \*  $p < 0.05$  (two-tailed).

**Table S4.** Binomial logit regression models predicting adolescents' direct occupational imitation and parents' gender-(a)typical occupational expectations

|  | Aspiration same as<br>mother's<br>occupation | Aspiration same as<br>father's<br>occupation | Parents' gender-<br>typical<br>expectation | Parents' gender-<br>atypical<br>expectation |
|--|--|--|--|---|
| <b>Girls (N = 1,169)</b>                 | <i>B (SE)</i>                                | <i>B (SE)</i>                                | <i>B (SE)</i>                              | <i>B (SE)</i>                               |
| Mother's occupation (proportion of men)  | -0.284<br>(0.430)                            | -0.465<br>(0.394)                            | -0.095<br>(0.111)                          | 0.058<br>(0.133)                            |
| Father's occupation (proportion of men)  | -0.322<br>(0.280)                            | -0.341<br>(0.308)                            | 0.159+<br>(0.083)                          | -0.029<br>(0.095)                           |
| Mother's occupational status (ISEI)      | 0.782**<br>(0.262)                           | -0.060<br>(0.306)                            | 0.083<br>(0.111)                           | -0.148<br>(0.140)                           |
| Father's occupational status (ISEI)      | 0.237<br>(0.468)                             | 1.696***<br>(0.475)                          | 0.140<br>(0.148)                           | -0.036<br>(0.171)                           |
| Mother's share of paid work              | 0.192<br>(0.630)                             | -1.502*<br>(0.651)                           | -0.308+<br>(0.183)                         | 0.146<br>(0.215)                            |
| Parents' total paid work hours           | 0.051<br>(0.481)                             | 0.688<br>(0.552)                             | 0.164<br>(0.140)                           | -0.048<br>(0.163)                           |
| Mother's share of housework              | 0.300<br>(0.541)                             | -1.271*<br>(0.509)                           | -0.120<br>(0.148)                          | -0.015<br>(0.178)                           |
| Parents' total housework hours           | 0.008<br>(0.478)                             | 0.383<br>(0.511)                             | 0.229+<br>(0.125)                          | -0.097<br>(0.137)                           |
| Age                                      | 0.163<br>(0.152)                             | 0.286+<br>(0.162)                            | 0.053<br>(0.044)                           | -0.046<br>(0.053)                           |
| Urban residence (ref. = rural)           | -1.460<br>(0.890)                            | 1.700+<br>(0.913)                            | -0.212<br>(0.262)                          | 0.138<br>(0.305)                            |
| Rural-to-urban migrant (ref. = no)       | 1.691+<br>(0.999)                            | -2.651*<br>(1.181)                           | -0.250<br>(0.301)                          | 0.026<br>(0.355)                            |
| Only child (ref. = no)                   | 0.264<br>(1.906)                             | 1.462<br>(1.649)                             | 0.436<br>(0.541)                           | -0.179<br>(0.635)                           |
| Mother's education (year)                | 0.078<br>(0.128)                             | 0.128<br>(0.131)                             | -0.004<br>(0.034)                          | 0.044<br>(0.040)                            |
| Father's education (year)                | 0.046<br>(0.142)                             | -0.010<br>(0.156)                            | -0.003<br>(0.035)                          | -0.008<br>(0.040)                           |
| Household income <i>per capita</i> (log) | 0.119<br>(0.306)                             | -0.383<br>(0.322)                            | 0.031<br>(0.088)                           | -0.115<br>(0.105)                           |
| Year of survey (ref. = 2010)             |  |  |  |   |
| 2014                                     | -0.639<br>(1.120)                            | 0.531<br>(1.166)                             | 0.516<br>(0.385)                           | -0.536<br>(0.510)                           |
| 2016                                     | -0.714<br>(1.878)                            | 2.742<br>(1.789)                             | 0.379<br>(0.538)                           | 0.167<br>(0.650)                            |
| 2018                                     | 0.024<br>(3.429)                             | 5.173+<br>(3.009)                            | 0.974<br>(0.973)                           | -0.286<br>(1.172)                           |
| Inverse Mills' ratio                     | -0.565<br>(16.121)                           | 27.392+<br>(14.574)                          | 3.612<br>(4.221)                           | -1.160<br>(5.095)                           |
| Intercept                                | -7.273<br>(9.366)                            | -22.778**<br>(8.738)                         | -1.356<br>(2.567)                          | -0.695<br>(3.116)                           |

| <b>Boys (<i>N</i> = 1,241)</b>          | <i>B (SE)</i>     | <i>B (SE)</i>      | <i>B (SE)</i>      | <i>B (SE)</i>       |
|---|-------------------|--------------------|--------------------|---------------------|
| Mother's occupation (proportion of men) | 0.080<br>(0.515)  | −0.639+<br>(0.339) | 0.082<br>(0.106)   | −0.264*<br>(0.107)  |
| Father's occupation (proportion of men) | −0.081<br>(0.376) | 0.433<br>(0.300)   | −0.054<br>(0.074)  | 0.132+<br>(0.075)   |
| Mother's occupational status (ISEI)     | 0.423<br>(0.292)  | 0.101<br>(0.255)   | −0.200*<br>(0.084) | 0.221**<br>(0.084)  |
| Father's occupational status (ISEI)     | −0.145<br>(0.421) | 0.982**<br>(0.345) | 0.092<br>(0.098)   | −0.052<br>(0.101)   |
| Mother's share of paid work             | 0.180<br>(0.381)  | −0.548*<br>(0.272) | −0.128+<br>(0.068) | 0.030<br>(0.066)    |
| Parents' total paid work hours          | 0.078<br>(0.354)  | 0.066<br>(0.309)   | 0.114+<br>(0.060)  | −0.063<br>(0.059)   |
| Mother's share of housework             | 0.256<br>(0.546)  | −0.504<br>(0.373)  | 0.096<br>(0.116)   | −0.234*<br>(0.114)  |
| Parents' total housework hours          | −0.517<br>(0.807) | 0.373<br>(0.509)   | −0.197<br>(0.121)  | 0.367**<br>(0.122)  |
| Age                                     | 0.041<br>(0.173)  | 0.234*<br>(0.115)  | −0.023<br>(0.035)  | 0.063+<br>(0.035)   |
| Urban residence (ref. = rural)          | −0.959<br>(1.817) | 1.552<br>(1.141)   | 0.116<br>(0.343)   | 0.325<br>(0.340)    |
| Rural-to-urban migrant (ref. = no)      | 2.023<br>(2.628)  | −2.484<br>(1.635)  | 0.222<br>(0.504)   | −0.910+<br>(0.499)  |
| Only child (ref. = no)                  | −1.424<br>(1.643) | 1.054<br>(1.016)   | −0.389<br>(0.304)  | 0.662*<br>(0.302)   |
| Mother's education (year)               | 0.222<br>(0.136)  | −0.095<br>(0.087)  | −0.005<br>(0.020)  | −0.002<br>(0.019)   |
| Father's education (year)               | −0.104<br>(0.134) | 0.117<br>(0.106)   | −0.050*<br>(0.024) | 0.083***<br>(0.024) |
| Household income per capita (log)       | 0.387<br>(0.887)  | −0.172<br>(0.588)  | 0.274+<br>(0.156)  | −0.430**<br>(0.156) |
| Year of survey (ref. = 2010)            |                   |                    |                    |                     |
| 2014                                    | 0.080<br>(0.515)  | −0.639+<br>(0.339) | 0.082<br>(0.106)   | −0.264*<br>(0.107)  |
| 2016                                    | −0.081<br>(0.376) | 0.433<br>(0.300)   | −0.054<br>(0.074)  | 0.132+<br>(0.075)   |
| 2018                                    | 0.423<br>(0.292)  | 0.101<br>(0.255)   | −0.200*<br>(0.084) | 0.221**<br>(0.084)  |
| Inverse Mills' ratio                    | −0.145<br>(0.421) | 0.982**<br>(0.345) | 0.092<br>(0.098)   | −0.052<br>(0.101)   |
| Intercept                               | 0.180<br>(0.381)  | −0.548*<br>(0.272) | −0.128+<br>(0.068) | 0.030<br>(0.066)    |

*Note:* SE = Robust standard errors clustered at the household level. Continuous predictors, except for inverse Mills' ratio, are standardized. Firth logit specification was used for the first two models due to the low proportion of event occurrence.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed).

**Table S5.** Partial- $r^2$  analysis comparing the relative importance of different sources of intergenerational influence

|  | Partial $r^2$ : Predicting<br>gender-typical aspirations | Partial $r^2$ : Predicting<br>gender-atypical aspirations |
|--|--|---|
| <b>Girls (<math>N = 1,169</math>)</b>    |  |   |
| Direct occupational imitation            | 0.0040   | 0.0084  |
| Parents' occupational gender composition | 0.0022   | 0.0053  |
| Parents' gender-(a)typical expectations  | 0.0154   | 0.0203  |
| <b>Boys (<math>N = 1,241</math>)</b>     |  |   |
| Direct occupational imitation            | 0.0116   | 0.0024  |
| Parents' occupational gender composition | 0.0016   | 0.0008  |
| Parents' gender-(a)typical expectations  | 0.0037   | 0.0069  |

*Note:* Calculated based on the full models presented in Table 3 in the main article. We compared the importance of different sets of predictors of adolescents' gender-(a)typical occupational aspirations using the partial- $r^2$  statistic. The partial  $r^2$  statistic reflects the proportion of variation in adolescents' gender-(a)typical occupational aspirations that is explained by given predictors in a regression model. As an example, the equation calculates the partial  $r^2$  for direct occupational imitation ( $d$ ), where  $r^2$  is for the full model and  $r^2_{-d}$  is for the model excluding measures for direct occupational imitation:  $\text{Partial } r^2 = \frac{r^2 - r^2_{-d}}{1 - r^2_{-d}}$ .