Social Science Research 77 (2019) 115–129

Contents lists available at ScienceDirect

Social Science Research

journal homepage: www.elsevier.com/locate/ssresearch

Discrimination experience, family relations, and generalized trust in China

Xinguang Fan

Department of Sociology, University of Washington, Room 272, Savery Hall, Seattle, WA, 98195, USA

ARTICLE INFO

Keywords:
Discrimination experience
Generalized trust
Family relation
Spillover impact
China

ABSTRACT

Building upon how experiential learning theory explains sources of generalized trust, this study argues that discrimination experiences of others in individual's social network, especially those in close social ties, can have spillover influence on one's generalized trust. Empirically, this study focuses on family relations and examines whether another family member's discrimination experiences may shape an adult individual's generalized trust. Using husband–wife and parent–child linked data from the adult sample of China Family Panel Studies (CFPS) in 2012, this study confirms findings that an individual's discrimination experiences negatively impact their own level of generalized trust. Additionally, net of one's own experiences of discrimination, the disorder experienced by closely related others also affects generalized trust. This is true for effects that travel from husband to wife and wife to husband. However, these impacts are not found in parent–child relationships. The results of this study extend previous literature on sources of generalized trust by suggesting an additional mechanism whereby family members' experiences with discrimination spillover to affect generalized trust for closely related adults.

1. Introduction

Generalized trust facilitates coordinated actions that improve the efficiency of society, and is thus an important type of social capital for social and economic development in societies (Algan and Cahuc, 2010; Bjørnskov, 2012; Knack and Keefer, 1997; Knack and Zak, 2003). Scholars argue that political-institutional factors, such as fair legal systems and effective governance, are central to fostering a social environment in which individuals are more likely to behave honestly in social interactions and thus anticipate the trustworthiness of unfamiliar others (Freitag and Bühlmann, 2009; Lipset and Schneider, 1983; Robbins, 2012). Corrupted and unfair institutions may lead to experiences of discrimination and drive the decline of social capital, particularly in a diverse society (Rothstein and Stolle, 2008). According to these studies, discrimination experiences, or unfair treatment, are recognized as a crucial mediating mechanism linking the macro-level institutions with micro-level generalized trust.

Despite its importance, how discrimination experiences affect generalized trust is not clearly understood (Dinesen and Bekkers, 2017). Scholars propose two competing theoretical perspectives in terms of this relationship. On the one hand, cultural transmission theory[1] argues that generalized trust, as a moral or cultural value, is inherited from parents through early socialization and exposure to a cultural milieu that reinforces those values. It is independent of adult life experiences, including exposure to discrimination experiences (Claibourn and Martin, 2000; Uslaner, 2002). On the other hand, experiential learning theory posits that individuals' generalized trust is shaped by life experiences and observations during adulthood (Glanville and Paxton, 2007; Dinesen, 2010; Dinesen and Hooghe, 2010). Empirical findings are mixed when it comes to substantiating these two opposing theoretical

E-mail address: xfan@uw.edu.

[1] Some recent studies (e.g., Hiraishi et al., 2008; Sturgis et al., 2009) also suggest a genetic transmission of trust value across generations.

https://doi.org/10.1016/j.ssresearch.2018.10.009
Received 22 November 2017; Received in revised form 14 October 2018; Accepted 16 October 2018
Available online 17 October 2018
0049-089X/

expectations. Some empirical research finds a negative influence of discrimination experiences on generalized trust in most Western countries (Dinesen and Hooghe, 2010; Douds and Wu, 2018), but some studies only find a negligible relationship among certain social groups or in specific regions (Dinesen, 2010). Two issues exist in previous literature. First, scholars exclusively focus on the direct influence of discrimination experiences on generalized trust but pay few attentions to other channels through which such experiences shape generalized trust. Second, most of empirical research on this question rely on data from advanced society and thus hamper our understanding of this relationship completely. It is necessary to revisit this relationship in non-Western or developing countries.

Building upon the experiential learning theory, I advance the literature on discrimination and generalized trust by exploring an understudied mechanism of discrimination experiences that impacts generalized trust: spillover effects of discrimination experienced by family members. The experiential perspective emphasizes the importance of adult and contemporary social interactions in shaping trust throughout the life course. However, previous literature exclusively focuses on the influence of individuals' own experiences on their generalized trust but ignores the possibility of spillover influence, that is, how experiences of other within the social network may shape one's generalized trust. Such spillover influence may be important especially when individuals have a close social relationship and frequent social interactions. By studying the influence of family members' discrimination experiences, I show that family interactions play a role in shaping adults' generalized trust through incorporation of another family member's discriminatory experiences. Investigating this mechanism not only highlights the experiential perspective on generalized trust, but also suggests the important role of social relations in the relationship between life experiences and generalized trust.

To examine the propositions, I employ a household survey which collects detailed information on generalized trust and discrimination experiences of each family member. This provides a rare opportunity of examining the spillover influence. Moreover, the survey is conducted in China, a context without an effective system of justice, a type of context rarely addressed in previous research. Examining the relationship in such a context is particularly important for understanding inconsistent findings in previous literature. For empirical findings in some Western European countries, scholars argue that null findings are likely due to efficient systems of justice, which may help mitigate the psychological consequences of negative life experiences and thus hide its influence on generalized trust (Bauer, 2015). If this is the case, what might be expected is that experiences of discrimination should be negatively related to generalized trust in a context without an efficient system of justice, such as China, because individuals with such negative life experiences cannot rely on institutional arrangements to mitigate psychological consequences. However, until now, very little academic attention has been devoted to such contexts because of limited data availability.

The empirical analysis in this study uses a nationally representative household survey in China, *The China Family Panel Studies*. In its 2012 wave, adult family members in each household were asked to about both their level of generalized trust and their experiences of discrimination over the past year. This dataset enables me to construct dyad-level (husband–wife) and triad-level (father–mother–child) data with detailed personal characteristics about all nodes. To account for factors associated with an individual's discrimination experience, empirical analyses control for demographic and socioeconomic factors of nodes in the dyad/triad and include county-level fixed-effects to eliminate potential bias due to confounding county-level factors. To account for possible selection bias in experiencing discrimination, I perform a robustness check based on inverse probability weighting from a propensity score and show the findings are consistent after reducing this potential source of bias.

I begin by reviewing the literature on sources of generalized trust and summarize the theoretical debate on the relationship between discrimination experiences and generalized trust. Building upon this previous literature, I propose that discrimination may be shared within social networks and affects others' generalized trust. Next, I briefly discuss the context of China with an emphasis on a context different from Western society, which previous studies exclusively focus upon, and valuable to revisit the link between discrimination and trust. After introducing the data, measures, and modelling strategy used in this study, I present the main results and robustness check. I close with a discussion of the theoretical and empirical implications of these findings.

2. Theoretical background

2.1. Perspectives on sources of generalized trust

The cultural transmission theory emphasizes the importance of early socialization in the formation of generalized trust and argues that levels of generalized trust are independent of individual life experiences during adulthood (Uslaner, 2002). The basis of this perspective is that generalized trust, as distinct from political trust or specific interpersonal trust, is a moral value or a cultural trait (Uslaner, 2002). As Uslaner puts it, trust must be learned rather than earned (Uslaner, 2002). This value is learned during early stages of childhood development, generally from parents who are the primary socialization agents and exert the largest influence on children's attitude formation (Adriani and Sonderegger, 2009; Glass et al., 1986; Maccoby, 2007). Once generalized trust is formed, it is relatively stable across the life course of an individual and is not affected by adult life experiences. Note that this perspective does not deny that collective experiences may lead to the dynamic change of generalized trust at the aggregate level (Dinesen and Bekkers, 2017): the long-term change in levels of generalized trust in a society could be driven by social changes or collective experiences among certain social groups.

In contrast, experiential learning theory argues that generalized trust changes over the life course in response to both positive and negative life experiences and observations. A substantial body of literature in political sociology has found some evidence for durable changes in generalized trust in response to durable adult life experiences including civic engagement (Coleman, 1990; Ingen and Bekkers, 2015; Putnam, 1994) and neighborhood diversity (Abascal and Baldassarri, 2015; Dinesen and Sønderskov, 2015; Stolle et al., 2008; Sturgis et al., 2011). Scholars have also found that traumatic life experiences lead individuals to adjust their trust value.

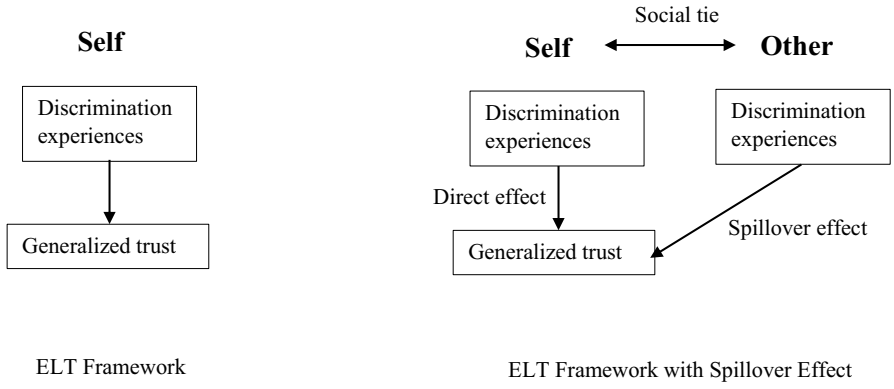

Fig. 1. Proposed elaboration of experiential learning theory (ELT) framework.

Negative experiences, such as crime victimization (Brehm and Rahn, 1997; Smith, 1997), family dissolution (King, 2002), and discrimination experiences or perceptions (Dinesen and Hooghe, 2010), potentially negatively impact individuals by increasing their insecurity perception of insecurity.

2.2. Institutions, discrimination experiences and generalized trust

Within the experiential perspective, a key line of research emphasizes the importance of institutions and individuals' interactions with institutions, such as perceptions of institutional fairness and discrimination as the potential source of trust. A central topic in sociology, discrimination is recognized as an important social consequence of social inequality and unfair institutional arrangements (Feagin and Eckberg, 1980; Pager and Shepherd, 2008). Further, previous studies have identified experiences with discrimination as an important factor explaining the gap in trust between different social groups (Avery, 2006; Rothstein and Stolle, 2008).

Institutional theory posits that a “good” institutional arrangement encourages individuals to maintain rules during interactions and create incentives for trustworthy behaviors (Farrell and Knight, 2003; Rothstein and Stolle, 2003, 2008). In the ideal setting, actors anticipate reciprocal behaviors when interacting with each other because betrayal will be detected and punished by efficient and fair institutions (Levi, 1996). However, government enforcement alone is too costly and inefficient to secure trust in society (Robbins, 2012). Rather, political institutions may promote generalized trust by providing a universal welfare system where benefits are distributed according to rules of equity and fairness (Delhey and Newton, 2005; Kumlin and Rothstein, 2007; Rothstein and Uslaner, 2011).

Institutional arrangements have been linked to generalized trust at the macro level through micro level analyses of the role of exposure to and experiences of discrimination. Rothstein and Stolle (2008) emphasize citizen's feeling of safety and protection, their inferences from elites' and from fellow citizens' behavior, as well as their own experiences with discrimination, as the causal linkages from institutional arrangements to generalized trust. Institutional quality at the macro level brings individuals positive interactions with political institutions, which increase their institutional trust and influence their generalized trust (Sønderskov and Dinesen, 2016). Particularly, as Rothstein and Stolle (2008: 446) posited, “corrupt and unfair institutions, for example, might lead to experiences of discrimination and injustice, which negatively influence generalized trust”.

Similarly, Dinesen and Hooghe (2010) find that an individual's perception of being discriminated against had a negative influence on generalized trust based on data from multiple European countries. Likewise, Douds and Wu (2018) show that perceived racial discrimination negatively affected generalized trust in the United States. There are also some studies (Dinesen, 2012) that find a negligible relationship between discrimination experience and generalized trust in specific contexts, such as Denmark. When unfair or untrustworthy institutions exist, differential treatment may be the collective experience of disadvantaged groups, thereby reducing their trust in political actors and general others as well. In this situation, discrimination is not limited to a personal life experience but rather becomes a consciousness of certain social groups, accounting for lower trust levels relative to other groups (Avery, 2006; Nannestad, 2008).

2.3. Family members' discrimination experiences and individuals' generalized trust

Beyond the direct effect of discrimination experiences on generalized trust, research in the experiential learning tradition largely ignores spillover or indirect influence, focusing instead only on the influence of one's own life experiences on trust. And yet, individuals do not live in a vacuum: rather they may be aware of discrimination experiences indirectly through their social interactions, and adjust their own belief accordingly. Drawing on the socialization literature that emphasizes family relations, I argue that the spillover impact of discrimination experiences on generalized trust is likely to be strangest within families (see Fig. 1).

Prior research on the family emphasizes that marital and parent–child interactions transfer emotions or attitudes among family members and result in a channel of spillover impact within family relations (Demerouti, 2012; Bakker and Demerouti, 2013;

Grzywacz and Marks, 2000). An example is the spillover-crossover model of work-family relations (Bakker and Demerouti, 2013) in which individuals influence their spouse's emotions by bringing experiences or feelings of their workplace to family life (Bakker et al., 2008; Shimada et al., 2013). Based on this model, one partner's workplace experiences may shape the other partner's emotions and attitudes toward the household labor division. In terms of parent–child relation, Ojeda and Hatemi (2015) proposed a perception-adoption model to explain the homophily of political party identification between parents and children in which children first perceived and then decided to adopt the party identification of their parents. This model advances the literature on intergenerational transmission of beliefs and values by emphasizing the importance of children's perception of their parent's beliefs and values.

In this study, I integrate previous research into a framework in which an individual's generalized trust is shaped by social interactions during adulthood, as the experiential perspective suggests, and that consistent with the cultural transmission perspective, the experiences of those one is closest to are an important source of information that builds or shapes generalized trust. The idea is that adults are likely to observe and internalize others' experiences of discrimination, even if they do not directly experience discrimination themselves. This model emphasizes both parent–child and marital relations of adults, two important types of close social ties.

This framework leads to distinct hypotheses, one concerning parent-child relations, the other concerning marital relations. On the one hand, parents may still share their life experiences and values with adult children. On the other hand, adult children not only learn values and experiences from parents, but also share their own experiences with parents and hence influence parents' values (Knafo and Galansky, 2008). If generalized trust is changeable over the life course, such sharing of discrimination experiences and observations between parents and children may lead both to reshape their trust. Hence, I expect that *discrimination experiences of parents/children negatively impact generalized trust of children/parents*.

Transition to adult roles, such as getting married or becoming parents, makes parent–child interactions weaker because adult children are more independent of their parents given their new family roles (Aquilino, 1997). David-Barrett et al. (2016) analyzed the life-course patterns of communication based on mobile calls in a European country. They found that, during young adulthood, interactions with partners are far more frequent than with parents. As parents get older, the frequency of parent–child calls increases, especially when children are more than 50 years of age. Based on such a pattern, marital interaction could be a more important channel for molding generalized trust, even if parents are still important for trust of adult children. Hence, I also expect that *discrimination experiences of one's spouse will negatively impact an individual's generalized trust.*

3. Examining the relationship in China

Building on the institutional theory, some scholars offer an explanation for the mixed empirical results, arguing that individuals livening in highly developed countries do not transform negative life experiences into lower levels of generalized trust because they can rely on efficient systems of justice (Bauer, 2015). For instance, while there is little support for the experiential perspective in terms of negative impacts of discrimination experiences on trust among immigrants in Denmark (Dinesen, 2010), positive experiences with institutions increase generalized trust, especially for immigrants (Kumlin and Rothstein, 2007). Hence, it is likely that the relationship between discrimination experiences and generalized trust is moderated in contexts with fair institutions. By implication, however, this relationship should be more evident where efficient systems of justice are absent (Bauer, 2015). Unfortunately, most previous studies have exclusively focused on West Europe and the United States and have not adequately accounted for variability in this aspect of the institutional context.

To fill the gap in our understanding of the sources of generalized trust, I study China, which provides an appropriate context different from Western countries. The lack of efficient or just institutional arrangements makes China an ideal setting to examine the relationship between discrimination experience and generalized trust and therefore a valuable contrast to the body of research on Western countries.

Since the 1980's, China has undergone a massive change in economic structures as state policies transformed the economy to a market-oriented one (Nee, 1989; Wu and Treiman, 2004, 2007). The rapid market transition has resulted in uneven distribution of the benefits of economic development to be unevenly distributed across geographic regions (Hauser and Xie, 2005; Nee and Cao, 2004), with numerous studies revealing a large and persistent rural-urban earnings gap (Liu, 2005), as well as gender differences in earnings and job mobility (Shu, 2005; Shu and Bian, 2003).

Accompanying the rise of social inequality, social development, especially institutional and social reform, lags behind China's economic achievement (Lewis and Litai, 2003). The cost of discriminating is low due to the lack of an efficient system of justice, and hence gender, region, and social class discrimination is common (Kuang and Liu, 2012; Liu et al., 2000). For instance, the household registration system facilitates discrimination based on residence since local household registration is a pre-requisite for local job opportunities, welfare, and other life opportunities (Liu, 2005). Gender discrimination is another important social issue given the persistence of traditional gender culture (Cao and Hu, 2007; He and Wu, 2017; Zhang, 2017). Although there are legal actions against gender discrimination, the prevalence of traditional gender attitudes and an ineffective justice system means that gender inequality in China persists and has even risen in recent decades (Sun and Chen, 2017). Thus, taken together, the Chinese institutional arrangement do little to diminish the negative consequences of discrimination.

4. Data, measures, and method

4.1. Data

The data used in this study comes from the China Family Panel Studies (CFPS) funded by the 985 Program of Peking University and carried out by the Institute of Social Science Survey of Peking University (Xie and Hu, 2014). As a (nearly) national probability sample of Chinese families, the 2012 wave of this survey project covers 34,447 adult respondents in 13,453 families from 25 provinces that make up 95% of the total Chinese population (Xie et al., 2014).[2] The CFPSS contains detailed information on demographic characteristics, socioeconomic status (e.g., income, education, and job status), family composition (e.g., cohabitation), and other personal activities and attitudes.

The advantage of CFPS is that it attempted to interview all available family members in the household. This provides a rare opportunity to identify marital and parent–child relations along with detailed information about unfair treatment experiences, trust values, and other individual characteristics. Given that this study focuses on the relationship between discrimination experience and generalized trust during adulthood, I only utilize data from adult household members aged over 16 years.

I identify couple dyads by linking the personal identification to the family roster, and then appending the individual information from the adult survey data to the linked dyad data. Each observation in a husband–wife dyad contains discrimination experience, trust values, and demographic and socioeconomic characteristics for each husband and wife. Although dyad-level analysis provides a direct examination of how the discrimination experience of one family member influences the trust of another, it is likely that the characteristics or experiences of other family members besides those included in the dyad confound the results of the analysis. This is particularly likely for parent-child relations, where, for instance, the influence of a father's discrimination experience on a child's generalized trust is likely affected by the mother's experience as well. Therefore, I construct father–mother–adult child triads rather than parent-child dyads in order to investigate the spillover impacts of discrimination experiences between parents and children.[3]

4.2. Measures

The outcome in this study is generalized trust. Consistent with the measure of generalized trust in other contexts (Nannestad, 2008), respondents in the 2012 wave of the CFPS were asked the following question: “In general, do you think that most people are trustworthy, or do you think we must be careful when getting along with others?” I recoded this into a dummy variable, with 1 indicating generalized trust and 0 indicating otherwise.

The key independent variable is self-reported discrimination experience in the past year. CFPS distinguished several types of unfair treatment, including “unfair treatment due to inequality between the rich and the poor,” “unfair treatment due to household registration status,” “unfair treatment due to gender discrimination,” and “unfair treatment by government officials.” I generated a dummy variable indicating whether a respondent experienced any of these types of unfair treatment.[4]

It is possible that unfair treatment due to inequality is substantively different from the other three types of unfair treatment, as individual perceptions of discrimination due to relatively low socioeconomic status may be more subjective. Moreover, unfair treatment due to inequality may be more likely to reflect respondents' attitudes towards inequality rather than their own life experiences. Hence, this type of treatment might not be an accurate measure of discrimination experience. In this study, I include this type of unfair treatment in the independent variable since social inequality has increased rapidly (Xie and Zhou, 2014) and has been an important source of discrimination in China (Lu and Wang, 2013). As a robustness check, however, I re-estimated the analyses excluding the measurement of unfair treatment from the variable of measuring discrimination. The results are not sensitive to whether this item was included as part of the primary independent variable of interest, the measurement of discrimination.

Following previous studies, I controlled for a series of demographic and socioeconomic characteristics of individuals that may influence the odds of a person experiencing unfair treatment or their level of generalized trust. Paxton (2007) shows that association membership is positively correlated with generalized trust across national contexts. Hence, I control for Communist Party membership for each node within the dyad or triad. Other covariates include educational levels, urban hukou status, and age, which are usually and positively associated with generalized trust, according to previous studies (Wu and Xie, 2014). Further, since earnings are one of the most important predictors of trust value across societies, I included logged earnings as a control variable.

Observations with missing data were excluded from the analysis sample. The vast majority of non-response related to the dependent variable, generalized trust (11.4% of the observations); the proportion of missing values for the independent variables was extremely low (altogether less than 1%). The final sample includes 31,445 adults. Among the final sample, there are 10,780 marital dyads and 4901 father-mother-child triads.

[2] Residents of Hainan, Inner Mongolia, Ningxia, Qinghai, and Xinjiang were excluded from the sample (Xie, 2012).

[3] Unfortunately, the design of the China Family Panel Study makes it difficult to match parents with children who live in different households, so the triadic sample consists only of parents and children who lived in the same household. In Confucian societies like China, daughters are expected to leave their parents and live with their husbands' families after marriage which explains the low proportion of female children in the triadic sample.

[4] I recognize that measuring unfair treatment or discrimination is a challenge since respondents may have their own criteria of what should be defined as unfair treatment or may not report their perceptions of unfair treatment or its interpersonal consequences. This means unfair treatment may be under- or over-reported (Kaiser and Major, 2006). However, I find no evidence in the CFPS of systematic bias in reporting of unfair treatment.

Table 1
Descriptive statistics.

Variables	Full Sample	Dyadic Data		Triadic Data		
		Husband	Wife	Father	Mother	Child
Generalized Trust	0.54	0.56	0.51	0.54	0.50	0.60
Discrimination Experience	0.17	0.19	0.15	0.19	0.16	0.17
Female	0.51	–	–	–	–	0.34
Married or in Cohabitation	0.80	–	–	–	–	0.41
Age	45.37 (16.67)	48.94 (13.89)	46.93 (13.59)	52.97 (9.36)	51.10 (8.89)	25.65 (7.79)
Urban Hukou	0.30	0.30	0.30	0.27	0.27	0.27
CCP membership	0.06	0.29	0.17	0.11	0.02	0.03
Educational Levels						
Primary and below	0.42	0.36	0.52	0.41	0.61	0.11
Secondary	0.33	0.40	0.30	0.39	0.27	0.36
High school	0.16	0.17	0.12	0.16	0.10	0.39
College and above	0.09	0.07	0.05	0.04	0.02	0.24
Having Occupation	0.67	0.82	0.68	0.82	0.71	0.63
Logged income	4.47 (4.82)	5.60 (4.91)	3.42 (4.55)	5.09 (4.89)	3.00 (4.35)	5.65 (4.77)
N	**31,445**	**10,780**		**4901**		

4.3. Analytical strategy

China is a fragmented society, not only in terms of the rural-urban disparity in life opportunities (Chan and Zhang, 1999; Wu and Treiman, 2004), but also due to its regional variation in social and economic development (Nee, 1989; Xie and Hannum, 1996). To consider the regional variation, I use county-level fixed-effect logit regression. I begin by estimating the direct influence of an individual's discrimination experience on their own generalized trust, with the following model:

$$Trust_{ij} = \alpha + \beta D_{ij} + \boldsymbol{\gamma X_{ij}} + \varepsilon_{ij} \quad (1)$$

Where $Trust_{ij}$ indicates whether individual (husband or wife) i in county j has generalized trust. D_{ij} indicates whether individual i in county j experienced discrimination last year. $\boldsymbol{X_{ij}}$ represents a series of control variables, including age, gender, marital status, urban hukou, occupational status, logged earnings last year, Communist Party membership, and educational level.

To investigate the spillover impacts of discrimination experience on generalized trust between husband and wife, the estimation equation is given as:

$$Trust_{ij} = \alpha + \zeta D_{1ij} + \beta D_{2ij} + \boldsymbol{\gamma X_{1ij}} + \boldsymbol{\sigma X_{2ij}} + \varepsilon_{ij} \quad (2)$$

Different from the baseline model estimating one's unfair treatment on self's trust, the coefficient of interest in this equation is ζ, which captures the impact of a spouse's discrimination experience (D_{1ij}) on individual trust. By controlling the discrimination experience of self (D_{2ij}), this model isolates how shared discrimination experiences within the couple affect the generalized trust. Given that this model is based on dyadic data, all covariates of both husband and wife are controlled.

The possibility of parent–child spillover is another important mechanism that could shape generalized trust. Equation [3] is modified based on equation [2] by specifying the discrimination experiences of father, mother, and child in the right part:

$$Trust_{ij} = \alpha + \tau F\_D_{ij} + \theta M\_D_{ij} + \beta C\_D_{ij} + \boldsymbol{\gamma X_{ij}} + \boldsymbol{\sigma Y_{ij}} + \boldsymbol{\phi Z_{ij}} + \varepsilon_{ij} \quad (3)$$

Here, $Trust_{ij}$ indicates the generalized trust of child, father, or mother separately in the empirical analysis. For all of separate analyses, discrimination experiences of father (F_D_{ij}), mother (M_D_{ij}), and child (C_D_{ij}) are included in the model. This ensures control of the channel that shared discrimination experiences within family affect the generalized trust of any family member. Across three dependent variables, demographic characteristics and socioeconomic status of three nodes ($\boldsymbol{X_{ij}}$, $\boldsymbol{Y_{ij}}$ and $\boldsymbol{Z_{ij}}$) were controlled.

5. Results

5.1. Descriptive statistics

Table 1 presents descriptive statistics for the main variables. The first column reports the statistics for the full sample while the next two columns report the statistics of husbands and wives in the sample of marital dyads. The overall rate of generalized trust is 0.54, which is very close to the estimate from the World Value Survey (2007) (Hu, 2015). Approximately 17% of all respondents reported experiencing at least one type of unfair treatment. Compared with husbands, wives report lower rates of generalized trust and fewer experiences of discrimination. For other variables, wives are less likely to have jobs, have less educational levels, and earn less than husbands overall. The last three columns present the statistics of fathers, mothers, and children from triadic sample. Children hold the highest level of generalized trust, whereas the rate of discrimination is below the reporting rate of the father and above the rate of the mother. In terms of other characteristics, the educational levels and earnings of children are higher than those of parents overall. Appendix A1 and A2 report the distribution by status of generalized trust or discrimination experiences among couple

Table 2
County fixed-effect logit model coefficient estimates of generalized trust on unfair treatment.

Variables	Model 1	
	Coefficient	SE
Unfair Treatment	−0.34***	0.03
Urban Hukou	0.03	0.04
Logged Income	0.00	0.00
Female	−0.09***	0.02
CCP membership	0.27***	0.06
Educational Levels (Primary School and below as Ref.)		
Secondary School	0.35***	0.03
High School	0.72***	0.04
College and above	1.12***	0.05
Age	0.01***	0.00
Having occupation	−0.11***	0.03
Married or in Cohabitation	−0.08*	0.03
Observations	31,445	
Number of counties	165	

Standard errors in parentheses.
***p < 0.001, **p < 0.01, *p < 0.05.

dyads and father-mother-child triads.

5.2. Discrimination experience and generalized trust

In this section, I examine the direct influence of discrimination experience on one's trust values. Table 2 presents coefficient estimates from equation [1]. Results show that individuals reporting experiences of unfair treatment in the last year are less likely to believe that most others are trustworthy than those who did not report unfair treatment by 28.9% ($= e^{-0.34} - 1$), which is statistically significant ($p < 0.05$). This reflects the expected negative relationship between experiencing discrimination and generalized trust in China.

5.3. Spillover impact of discrimination experience in marital relation

I now turn to examine the spillover impact in marital relation. Models reported in Table 3 estimate the impact of the spouse's experience of discrimination on husbands' (Model 2) and wives' (Model 3) generalized trust. The results reveal slightly different spousal impacts for men and women. That is, the impact magnitude of a wife's unfair treatment on her husband's trust (Model 2) is −18.9% ($= e^{-.21} - 1$), whereas the effect is smaller for a husband's unfair treatment on his wife's trust (model 3), −13.1% ($= e^{-.14} - 1$). Both coefficient estimates are statistically significant ($p < 0.05$). The results thus provide support for the spillover of negative influence within marital relations.

5.4. Spillover impacts of discrimination experience in Parent–Child relation

Table 4 presents the results from the triadic sample based on the parent–child relation. Models 4, 6, and 8 predict the trust of adult children, mothers, and fathers respectively. Model 4 controls the demographic and socioeconomic variables of child, mother, and father, and the dummy variables of whether the child cohabits with his/her mother/father. The results show that the influence of the parents' unfair treatment on a child's trust is negligible. Both coefficients of a father's and mother's discrimination experience last year are not statistically significant.

Models 6 and 8 further explore whether a child's discrimination experiences impact his/her parent's generalized trust. Model 6 uses father's generalized trust as the dependent variable and his child's discrimination experiences as the independent variable, controlling for the demographic and socioeconomic variables of the child, mother, and father and the discrimination experiences of the mother and father. Similar to findings in Model 4, the impact from the child's experience to his/her father's trust is also minimal and statistically insignificant. Model 8 takes a similar modelling strategy as Model 6 and shows a negligible impact from a child's experience to his/her mother's generalized trust.

If parent–child interaction plays a key role in determining the spillover impacts in the parent–child relation, it is reasonable to expect that the spillover impacts may vary by living arrangement. Models 5, 7, and 9 add the interaction terms of discrimination experiences and a dummy variable[5] of whether the child was cohabitating with his/her father or/and mother at the time of

[5] Because CFPS is a household panel survey, the parent-child triads exclusively consist of parents and children who lived in the same household. The proportion of parent-child living together is very high (for father and children, the proportion of living together is 96.6% and for mother and children, the proportion is 97.5%). Those parents and children who lived in the different households are undermined in this sample.

Table 3
County fixed-effect logit model coefficient estimates of generalized trust on unfair treatment of husband and wife.

Variables	Model 2	Model 3
	Husband's Trust	Wife's Trust
Unfair Treatment	−0.30***	−0.24***
	(0.05)	(0.06)
Unfair Treatment (Spouse)	−0.22***	−0.14**
	(0.05)	(0.05)
Urban *Hukou*	−0.08	0.11
	(0.07)	(0.07)
Logged Income	0.01	0.00
	(0.00)	(0.01)
CCP membership	0.30***	−0.15
	(0.07)	(0.15)
Educational Levels (Primary School and below as Ref.)		
Secondary School	0.32***	0.35***
	(0.05)	(0.05)
High School	0.52***	0.67***
	(0.07)	(0.08)
College and above	0.72***	1.32***
	(0.11)	(0.13)
Age	−0.00	0.02**
	(0.01)	(0.00)
Having occupation	−0.14*	0.02
	(0.06)	(0.05)
Age (Spouse)	0.01	−0.01*
	(0.01)	(0.01)
CCP membership (Spouse)	−0.15	0.01
	(0.14)	(0.07)
Educational Levels (Spouse) (Primary School and below as Ref.)		
Secondary School	0.11*	0.04
	(0.05)	(0.05)
High School	0.23**	−0.04
	(0.08)	(0.07)
College and above	0.55***	0.19
	(0.13)	(0.11)
Having occupation (Spouse)	−0.06	−0.09
	(0.05)	(0.06)
Logged Income (Spouse)	−0.00	−0.01
	(0.01)	(0.00)
Observations	10,780	10,780
Number of counties	165	165

Standard errors in parentheses; Ref. = Reference Group.
***p < 0.001, **p < 0.01, *p < 0.05.

interviewing. Model 5 interacts the father/mother's discrimination experiences with whether the child cohabited with father/mother. I found no statistically significant interaction effects for both father's and mother's discrimination experiences. For the child-to-parent direction, Models 7 and 9 also reveal null findings on the interaction effects.

Taken together, the analysis has the following findings. First, discrimination experiences have a negative impact on adults' generalized trust. This finding is consistent with the experiential perspective, which argues that the relationship between discrimination experiences and generalized trust should be more evident in a less developed context. Second, I find different patterns of spillover impacts for marital relations and parent–child relations. Within marriage, the analysis finds strong evidence of the impact of spouse's discrimination experiences on one's generalized trust. Though the magnitude of the effect differs slightly, spillover impacts are found both from husband-to-wife and wife-to-husband. However, results from parent–child analysis indicate minimal and statistically insignificant spillover in the parent–to-child and child–to-parent relations. Even after adding an interaction between discrimination experiences and parent–child living arrangements, the analysis finds no evidence for the spillover impacts for this relation.

5.5. Sensitivity analysis

In this section, I describe two sensitivity analyses that show the robustness of these results. The first evaluates whether selectivity in the experience of discrimination confounds the main results. Although the county-level fixed-effect model address the confounding effect of unobserved regional variation on the results, it is possible that unobserved individual or family characteristics drive both the discrimination experience and the value of generalized trust. The second sensitivity analysis evaluates whether the results are sensitive to the specification of the independent variable. As suggested earlier, discrimination due to inequality might be qualitatively

Table 4
County fixed-effect logit model coefficient estimates of generalized trust on unfair treatment for father-mother-child triads.

Variables	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	Child's Trust		Father's Trust		Mother's Trust	
Unfair Treatment (Child)	−0.47***	−0.47***	0.01	0.32	0.11	0.32
	(0.08)	(0.08)	(0.08)	(0.47)	(0.08)	(0.60)
Unfair Treatment (Father)	0.05	−0.32	−0.19*	−0.19*	−0.20*	−0.20*
	(0.08)	(0.42)	(0.08)	(0.08)	(0.08)	(0.08)
Unfair Treatment (Mother)	−0.14	−0.23	−0.25**	−0.25**	−0.26**	−0.26**
	(0.09)	(0.49)	(0.09)	(0.09)	(0.09)	(0.09)
Cohabitating with Father	0.14	0.05	−0.02	0.05	−0.30	−0.31
	(0.28)	(0.30)	(0.28)	(0.30)	(0.28)	(0.28)
Cohabitating with Mother	−0.60	−0.55	0.02	−0.01	0.19	0.22
	(0.33)	(0.35)	(0.32)	(0.32)	(0.32)	(0.33)
Unfair Treatment (Father)* Cohabitating with Father		0.39				
		(0.43)				
Unfair Treatment (Mother)* Cohabitating with Mother		0.09				
		(0.50)				
Unfair Treatment (Child)* Cohabitating with Father				−0.32		
				(0.48)		
Unfair Treatment (Child)* Cohabitating with Mother						−0.21
						(0.60)
Urban Hukou (Child)	−0.12	−0.12	−0.11	−0.11	0.20	0.20
	(0.11)	(0.11)	(0.10)	(0.10)	(0.12)	(0.10)
Logged Income (Child)	−0.01	−0.01	0.00	0.01	−0.00	−0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Female (Child)	−0.08	−0.08	0.07	0.07	−0.00	−0.00
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
CCP membership (Child)	0.16	0.16	−0.11	0.11	−0.26	−0.26
	(0.21)	(0.21)	(0.19)	(0.19)	(0.19)	(0.19)
Educational Levels (Primary School and below as Ref.)						
Secondary School	0.64***	0.64***	0.10	0.10	−0.22	−0.22
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
High School	1.22***	1.22***	0.14	0.14	−0.08	−0.08
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
College and above	1.36***	1.36***	0.23	0.23	−0.09	−0.09
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Age (Child)	0.03***	0.03**	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Having occupation (Child)	−0.19*	−0.19*	−0.19*	−0.19*	−0.14	−0.14
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Married or in Cohabitation (Child)	−0.14	−0.14	0.04	0.04	−0.04	−0.04
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Age (Father)	0.02	0.02*	−0.00	−0.00	−0.01	−0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
CCP membership (Father)	0.24*	0.24*	0.28**	0.29**	0.22*	0.22*
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Educational Levels (Father) (Primary School and below as Ref.)						
Secondary School	−0.10	−0.10	0.28***	0.28***	0.02	0.02
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
High School	−0.13	−0.13	0.43***	0.43***	−0.03	−0.03
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
College and above	−0.10	−0.10	0.12	0.12	0.09	0.09
	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)
Having occupation (Father)	0.05	0.04	−0.17	−0.17	−0.06	−0.06
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Logged Income (Father)	−0.01	−0.01	0.01	0.01	−0.01	−0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age (Mother)	−0.03**	−0.03**	0.01	0.01	0.02	0.02
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
CCP membership (Mother)	−0.22	−0.22	0.04	0.04	0.01	0.02
	(0.23)	(0.23)	(0.22)	(0.22)	(0.10)	(0.10)
Educational Levels (Mother) (Primary School and below as Ref.)						
Secondary School	0.06	0.06	0.11	0.11	0.30***	0.30***
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
High School	0.05	0.05	0.17	0.17	0.77***	0.77***
	(0.13)	(0.13)	(0.12)	(0.12)	(0.12)	(0.13)
College and above	0.16	0.16	0.83**	0.82**	1.44***	1.44***
	(0.30)	(0.30)	(0.30)	(0.30)	(0.31)	(0.31)

(*continued on next page*)

Table 4 (*continued*)

Variables	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	Child's Trust		Father's Trust		Mother's Trust	
Having occupation (Mother)	0.07	0.07	0.05	0.05	0.16	0.16
	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)	(0.08)
Logged Income (Mother)	0.00	0.00	0.01	0.01	−0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	4901	4901	4901	4901	4901	4901
Number of counties	165	165	165	165	165	165

Standard errors in parentheses.
***p < 0.001, **p < 0.01, *p < 0.05.

Table 5
Summary results of sensitivity analysis.

Coefficients	Model Specification		
	Logit Model with County-level Fixed Effects	Logit Model with IPW	Logit Model with Alternative Measure of Discrimination
Direct Influence	−0.34***	−0.34***	−0.33***
	(0.03)	(0.04)	(0.04)
Wife - > Husband	−0.22***	−0.29***	−0.30***
	(0.06)	(0.07)	(0.06)
Husband - > Wife	−0.14**	−0.15*	−0.12
	(0.05)	(0.06)	(0.06)
Father - > Child	0.05	0.03	0.15
	(0.09)	(0.12)	(0.10)
Child - > Father	0.01	−0.05	0.13
	(0.08)	(0.10)	(0.10)
Mother - > Child	−0.14	−0.10	−0.14
	(0.09)	(0.10)	(0.10)
Child - > Mother	0.11	0.11	0.14
	(0.09)	(0.10)	(0.10)

Standard errors in parentheses.
***p < 0.001, **p < 0.01, *p < 0.05.

different from other types of discrimination. It is possible that responses to this question are more subjective, because individuals may mix their general feelings about inequality with their actual experiences of unfair treatment in social interactions. In this sensitivity analysis, I drop this type of unfair treatment from the independent variable and conduct replicate the analysis using the alternative measure. I present the comparison of the coefficients from the main results and two sensitivity analyses in Table 5.[6]

5.5.1. Selection bias

To account for possible selection bias in the experience of discrimination, I conduct a sensitivity analysis using inverse probability weighting (IPW) via the propensity score method (Lunceford and Davidian, 2004). Following Li et al. (2013) and Robins et al. (1995), I adjust the fixed-effect models with weighting based on a propensity score for experiencing discrimination, where the propensity score is obtained by probit regressions on the set of covariates potentially related to the experience of discrimination. After obtaining the propensity scores, I weighted each observation by the inverse of the probability of receiving the treatment (experiencing discrimination) given the covariates. This method creates a synthetic sample in which the distribution of measured baseline covariates (such as age, educational levels) is independent of discrimination experience (Austin, 2011) and is therefore similar to adjusting survey weights to represent specific populations. The propensity score method relies on the ignorable treatment assumption of no unobserved confounders (Rosenbaum and Rubin, 1983). Under this assumption, given measured covariates, respondents are randomly assigned to experience discrimination, which approximate random setting experiments.

The first two columns of Table 5 compare the coefficient estimates from the original county-level fixed-effect models with estimates based on a propensity score approach and show the robustness of the earlier findings to the possibility of selection into discrimination. The coefficients associated with the direct effect of experiencing discrimination are nearly identical and suggest that the negative influence of experiencing discrimination last year on generalized trust is quite robust in China. In terms of spillover impacts, the results are substantively and statistically similar in the fixed-effect models and IPW-adjusted models: the spillover effects

[6] Full results of all these models are available by request.

for marital relation are statistically significant and negative, while there is no evidence of spillover effects in parent–child relations.

5.5.2. Alternative measure of discrimination experience

The third column in Table 5 presents coefficient estimates based on the alternative specification of discrimination experiences. Here again, the results for the direct influence of discrimination are nearly the same as in the fixed-effect models. In terms of spillover impacts in marital relation, the impact of a wife's discrimination experiences on her husband's generalized trust is statistically significant, just as it is in the main results, however the magnitude of the effect has dropped somewhat (-0.304). Interestingly, for the husband-to-wife direction, although the coefficient estimate based on the alternative measure is very similar to the estimate in the fixed-effect model, it is no longer statistically significant. For the parent–child relation, there is still no evidence of spillover impacts.

6. Discussion and conclusion

How individuals develop generalized trust is a long-debated question in social science literature. The cultural transmission theory argues for the stable nature of generalized trust during adulthood, whereas the experiential learning theory argues for the mutability of generalized trust as a result of adult life experiences. This study proposes a channel of spillover influence on the relationship between discrimination experiences and generalized trust. Relying on a unique data containing information on generalized trust and discrimination experiences of family members within a household, it empirically provides the support to the channel by showing spillover influence exists among spouse dyads but does not find evidence among parent-child relations. In addition, this study also contributes to the literature by providing the first empirical examination of the relationship in China, a context different from Western society.

This study confirms experiential learning theory, which argues that generalized trust is not necessarily stable over the life course, and that the relationship between negative life experiences and generalized trust will be more evident in contexts without efficient systems of justice. Moreover, the results show family relations are important influencers of individuals' generalized trust, even during adulthood. Surprisingly, the analysis only detects the spillover impact within marital relations, and not within parent–child relationships. If family members are still important agents for adults to mold their trust values, my analysis indicates that spouses are more important than parents or children. It is reasonable to expect that spouses share, internalize and react to each other's experiences of discrimination. However, the results for parent–child relation are somewhat in conflict with the cultural perspective, which argues for the importance of parents in trust value transmission during childhood.

One possible explanation for these divergent results is differences in communication patterns between spouses and parents and their adult children, particularly in China. While marital relationship represents a horizontal tie within the same generation, parent–child relationships are vertical and intergenerational. It is likely that parents may conceal negative life experiences from their children more than their spouses (Day and Schoenrade, 2000). From the perspective of family interactions, family members may conceal negative experiences or stigma due to the feeling that these experiences may bring pressure on family members (McKeown et al., 2010). Similarly, children, particularly adult children, may not share such experiences, fearing that their negative experiences may have a negative influence on their parents. If this is true, the influence of a parent's or a child's unfair treatment on one's own trust may be less significant. Future studies should examine this explanation in different contexts.

Several limitations are worth noting in the current study. First, the measure of discrimination experience is measured as a retrospective and self-reported item. A large body of literature, especially by social psychologists, shows that reporting one has been the victim of unfair treatment is not equivalent to being treated unfairly. It is possible both that individuals experience unfair treatment in reality but prefer not to share such an experience (under-reporting), and that individuals report unfair treatment but in fact have not been treated unfairly according to social norms (over-reporting) (Kaiser and Major, 2006). In this study, CFPS only included retrospective questions on whether respondents experienced various unfair treatment in the past year but did not include more details. The results in this study thus only indicate the relationship between self-reported unfair treatment and trust. However, self-reporting of unfair treatment is actually more appropriate for the analysis of spillover influence. If family interaction is the most likely explanation for the existence of spillover influence, first perceiving unfair treatment and then sharing it with family members is one of the most reasonable channels for the spillover of the negative influence of experiencing discrimination. The sensitivity analysis based on an alternative measure of discrimination experience also confirms the robustness of the main findings.

Second, given the design of CFPS, I am not able to include those parent-child triads who lived in different households. Future studies may find more appropriate data to revisit this question and more adequately examine the role of cohabitation. Third, although this study has examined the spillover impact of discrimination experiences for close ties via marriage and parent-child ties, future studies may investigate whether discrimination experiences within a broader social network of friends, co-workers, and acquaintances have contagious impacts on generalized trust across nodes. Lastly, it is possible that the spillover impacts that this study reveals may only exist in China. Future studies should examine whether the conclusions hold in different contexts, such as the United States.

Despite these limitations, this study provides evidence consistent with the experiential learning theory by showing a negative relationship between the experience of discrimination and generalized trust in China. Some scholars have argued that prior null findings observed in some contexts should be attributed to the existence of efficient systems of justice in democratic countries. This study focuses on a non-democratic context and shows that discrimination experiences indeed negatively impact generalized trust. Moreover, this study extends our knowledge by revealing how discrimination experiences of family members, particularly partners, impact individuals' generalized trust. On the one hand, it shows that individuals mold their generalized trust during adulthood, as experiential learning theory indicates. On the other hand, this study also offers a potential direction for understanding the

heterogeneity of trust values among social groups. For instance, scholars have found that, in the United States, African Americans have a lower level of trust compared with other social groups. From the perspective of social interactions, two possible mechanisms may explain the erosion of trust values of social groups with disadvantages. First, if social disadvantage persists across generations in most cases, individuals from these families who are more likely to receive unfair treatment may have a spillover influence on their family members through the sharing of such experiences. This spillover influence could be either from parents to children or between spouses in the context of the United States. Hence, feelings of discrimination may be enhanced within such socially disadvantaged groups. Future research may explore this question deeply. Second, given the homophily of social networks, the friends of individuals from socially disadvantaged families are more likely to come from a similarly disadvantaged background. For such networks with a high risk of experiencing unfair treatment, social interactions may cause a spillover of the negative influence on generalized trust within the network, eroding the possibility of generalized trust within socially disadvantaged groups.

Acknowledgement

The paper benefits from the comments of Jennifer Branstad, Sara Curran, René Flores, Guangye He, Connor Gilroy, Lanu Kim, Stephanie Lee, Raphael Mondesir, Katherine Stovel, Bernd Wurpts, and Yongjun Zhang. I am grateful to the editor and the anonymous reviewers for exceptional comments and guidance that greatly improved the paper.

Appendix

Table A1
Descriptive Table for Generalized Trust and Discrimination Experiences of Husbands and Wives.

Panel 1. Generalized Trust				
		0	1	Total
Wife				
	0	2979 (27.63%)	1808 (16.77%)	4787 (44.41%)
Husband				
	1	2281 (21.16%)	3712 (34.43%)	5993 (55.59%)
	Total	5260 (48.79%)	5520 (51.21%)	10,780 (100%)
Panel 2. Discrimination Experiences				
		0	1	Total
Wife				
	0	7794 (72.3%)	919 (8.53%)	8713 (80.83%)
Husband				
	1	1373 (12.74%)	694 (6.44%)	2067 (19.17%)
	Total	9167 (85.04%)	1613 (14.96%)	10,780 (100%)

Table A2
Descriptive Table for Generalized Trust and Discrimination Experiences of Fathers, Mothers, and Children.

Panel 1. Generalized Trust.						
						Total
	Father	0	0	1	1	
	Mother	0	1	0	1	
0		733 (14.95%)	335 (6.83%)	435 (8.87%)	452 (9.22%)	1955 (39.87%)

(*continued on next page*)

Table A2 (*continued*)

Panel 1. Generalized Trust.

						Total
Child						
	1	681 (13.89%)	513 (10.47%)	601 (12.26%)	1152 (23.5%)	2947 (60.13%)
	Total	1414 (28.84%)	848 (17.30%)	1046 (21.13%)	1604 (32.72%)	4902 (100%)

Panel 1. Discrimination Experiences

						Total
		Father	0	0	1	1	
		Mother	0	1	0	1	
	0		3078 (62.79%)	318 (6.49%)	454 (9.26%)	215 (4.39%)	4065 (82.93%)
Child							
	1		453 (9.24%)	123 (2.51%)	139 (2.84%)	122 (2.49%)	837 (17.07%)
	Total		3,531, (72.03%)	441 (9.00%)	593 (12.10%)	337 (6.88%)	4902 (100%)

References

Abascal, M., Baldassarri, D., 2015. Love thy neighbor? Ethnoracial diversity and trust reexamined. Am. J. Sociol. 121, 722–782. https://doi.org/10.1086/683144.

Adriani, F., Sonderegger, S., 2009. Why do parents socialize their children to behave pro-socially? An information-based theory. J. Publ. Econ. 93, 1119–1124. https://doi.org/10.1016/j.jpubeco.2009.08.001.

Algan, Y., Cahuc, P., 2010. Inherited trust and growth. Am. Econ. Rev. 100, 2060–2092. https://doi.org/10.1257/aer.100.5.2060.

Aquilino, W.S., 1997. From adolescent to young adult: a prospective study of parent-child relations during the transition to adulthood. J. Marriage Fam. 59, 670–686. https://doi.org/10.2307/353953.

Austin, P.C., 2011. An introduction to propensity score methods for reducing the effects of confounding in observational studies. Multivar. Behav. Res. 46, 399–424. https://doi.org/10.1080/00273171.2011.568786.

Avery, J.M., 2006. The sources and consequences of political mistrust among African Americans. Am. Pol. Res. 34, 653–682. https://doi.org/10.1177/1532673X06286366.

Bakker, A.B., Demerouti, E., 2013. The spillover-crossover model. New Front. Work Family Res. 54–70.

Bakker, A.B., Demerouti, E., Dollard, M.F., 2008. How job demands affect partners' experience of exhaustion: integrating work-family conflict and crossover theory. J. Appl. Psychol. 93, 901.

Bauer, P.C., 2015. Negative experiences and trust: a causal analysis of the effects of victimization on generalized trust. Eur. Socio Rev. 31, 397–417. https://doi.org/10.1093/esr/jcu096.

Bjørnskov, C., 2012. How does social trust affect economic growth? South. Econ. J. 78, 1346–1368. https://doi.org/10.4284/0038-4038-78.4.1346.

Brehm, J., Rahn, W., 1997. Individual-level evidence for the causes and consequences of social capital. Am. J. Pol. Sci. 41, 999–1023. https://doi.org/10.2307/2111684.

Cao, Y., Hu, C.-Y., 2007. Gender and job mobility in postsocialist China: a longitudinal study of job changes in six coastal cities. Soc. Forces 85, 1535–1560. https://doi.org/10.1353/sof.2007.0065.

Chan, K.W., Zhang, L., 1999. The hukou system and rural-urban migration in China: processes and changes. China Q. 818–855.

Claibourn, M.P., Martin, P.S., 2000. Trusting and joining? An empirical test of the reciprocal nature of social capital. Polit. Behav. 22, 267–291. https://doi.org/10.1023/A:1010688913148.

Coleman, J.S., 1990. Foundation of Social Theory. Press of Harvard University Press, Belknap Cambridge, Massachusetts: London.

David-Barrett, T., Kertesz, J., Rotkirch, A., Ghosh, A., Bhattacharya, K., Monsivais, D., Kaski, K., 2016. Communication with family and friends across the life course. PloS One 11, e0165687. https://doi.org/10.1371/journal.pone.0165687.

Day, N.E., Schoenrade, P., 2000. The relationship among reported disclosure of sexual orientation, anti-discrimination policies, top management support and work attitudes of gay and lesbian employees. Person. Rev. 29, 346–363. https://doi.org/10.1108/00483480010324706.

Delhey, J., Newton, K., 2005. Predicting cross-national levels of social trust: global pattern or Nordic exceptionalism? Eur. Socio Rev. 21, 311–327. https://doi.org/10.1093/esr/jci022.

Demerouti, E., 2012. The spillover and crossover of resources among partners: the role of work–self and family–self facilitation. J. Occup. Health Psychol. 17, 184.

Dinesen, P.T., 2010. Upbringing, early experiences of discrimination and social identity: explaining generalized trust among immigrants in Denmark. Scand. Polit. Stud. 33, 93–111. https://doi.org/10.1111/j.1467-9477.2009.00240.x.

Dinesen, P.T., 2012. Parental transmission of trust or perceptions of institutional fairness: generalized trust of non-Western immigrants in a high-trust society. Comp. Polit. 44 (3), 273–289. https://doi.org/info:doi/10.5129/001041512800078986.

Dinesen, P.T., Bekkers, R., 2017. The foundations of individuals' generalized social trust: a review. In: In: Van Lange, P.A.M., Rockenbach, B., Yamagishi, T. (Eds.), Trust in Social Dilemmas. Series in Human Cooperation, vol. 2 Oxford University Press, Oxford.

Dinesen, P.T., Hooghe, M., 2010. When in Rome, do as the Romans do: the acculturation of generalized trust among immigrants in Western Europe. Int. Migrat. Rev. 44, 697–727. https://doi.org/10.1111/j.1747-7379.2010.00822.x.

Dinesen, P.T., Sønderskov, K.M., 2015. Ethnic diversity and social trust: evidence from the micro-context. Am. Sociol. Rev. 80, 550–573. https://doi.org/10.1177/

0003122415577989.
Douds, K., Wu, J., 2018. Trust in the Bayou City: do racial segregation and discrimination matter for generalized trust? Soc. Race Ethnicity. 4, 567–584. https://doi.org/10.1177/2332649217717741.
Farrell, H., Knight, J., 2003. Trust, institutions, and institutional change: industrial districts and the social capital hypothesis. Polit. Soc. 31, 537–566. https://doi.org/10.1177/0032329203256954.
Feagin, J.R., Eckberg, D.L., 1980. Discrimination: motivation, action, effects, and context. Annu. Rev. Sociol. 6, 1–20. https://doi.org/10.1146/annurev.so.06.080180.000245.
Freitag, M., Bühlmann, M., 2009. Crafting trust: the role of political institutions in a comparative perspective. Comp. Polit. Stud. 42, 1537–1566. https://doi.org/10.1177/0010414009332151.
Glanville, J.L., Paxton, P., 2007. How do we learn to trust? A confirmatory tetrad analysis of the sources of generalized trust. Soc. Psychol. Q. 70, 230–242.
Glass, J., Bengtson, V.L., Dunham, C.C., 1986. Attitude similarity in three-generation families: socialization, status inheritance, or reciprocal influence? Am. Sociol. Rev. 51, 685–698. https://doi.org/10.2307/2095493.
Grzywacz, J.G., Marks, N.F., 2000. Reconceptualizing the work–family interface: an ecological perspective on the correlates of positive and negative spillover between work and family. J. Occup. Health Psychol. 5, 111–126. https://doi.org/10.1037/1076-8998.5.1.111.
Hauser, S.M., Xie, Y., 2005. Temporal and regional variation in earnings inequality: urban China in transition between 1988 and 1995. Soc. Sci. Res. 34, 44–79. https://doi.org/10.1016/j.ssresearch.2003.12.002.
He, G., Wu, X., 2017. Marketization, occupational segregation, and gender earnings inequality in urban China. Soc. Sci. Res. 65, 96–111. https://doi.org/10.1016/j.ssresearch.2016.12.001.
Hiraishi, K., Yamagata, S., Shikishima, C., Ando, J., 2008. Maintenance of genetic variation in personality through control of mental mechanisms: a test of trust, extraversion, and agreeableness. Evol. Hum. Behav. 29, 79–85. https://doi.org/10.1016/j.evolhumbehav.2007.07.004.
Hu, A., 2015. A loosening tray of sand? Age, period, and cohort effects on generalized trust in Reform-Era China, 1990–2007. Soc. Sci. Res. 51, 233–246. https://doi.org/10.1016/j.ssresearch.2014.09.008.
Ingen, E. van, Bekkers, R., 2015. Generalized trust through civic engagement? Evidence from five national panel studies. Polit. Psychol. 36, 277–294. https://doi.org/10.1111/pops.12105.
Kaiser, C.R., Major, B., 2006. A social psychological perspective on perceiving and reporting discrimination. Law Soc. Inq. 31, 801–830. https://doi.org/10.1111/j.1747-4469.2006.00036.x.
King, V., 2002. Parental divorce and interpersonal trust in adult offspring. J. Marriage Fam. 64, 642–656. https://doi.org/10.1111/j.1741-3737.2002.00642.x.
Knack, S., Keefer, P., 1997. Does social capital have an economic payoff? A cross-country investigation. Q. J. Econ. 112, 1251–1288.
Knack, S., Zak, P.J., 2003. Building trust: public policy, interpersonal trust, and economic development. Supreme Court Econ. Rev. 10, 91–107.
Knafo, A., Galansky, N., 2008;al.,. The influence of children on their parents' values. Soc. Personal. Psychol. Compass 2, 1143–1161. https://doi.org/10.1111/j.1751-9004.2008.00097.x.
Kuang, L., Liu, L., 2012. Discrimination against rural-to-urban migrants: the role of the hukou system in China. PloS One 7, e46932. https://doi.org/10.1371/journal.pone.0046932.
Kumlin, S., Rothstein, B., 2007. Minorities and mistrust: the cushioning impact of informal social contacts and political-institutional fairness. In: European Consortium for Political Research Joint Session of Workshops, Helsinki, pp. 12.
Levi, M., 1996. Social and unsocial capital: a review essay of Robert Putnam's making democracy work. Polit. Soc. 24, 45–55. https://doi.org/10.1177/0032329296024001005.
Lewis, J.W., Litai, X., 2003. Social change and political reform in China: meeting the challenge of success. China Q. 176, 926–942. https://doi.org/10.1017/S0305741003000559.
Li, F., Zaslavsky, A.M., Landrum, M.B., 2013. Propensity score weighting with multilevel data. Stat. Med. 32, 3373–3387. https://doi.org/10.1002/sim.5786.
Lipset, S.M., Schneider, W., 1983. The decline of confidence in American institutions. Polit. Sci. Q. 98, 379–402. https://doi.org/10.2307/2150494.
Liu, P.W., Meng, X., Zhang, J., 2000. Sectoral gender wage differentials and discrimination in the transitional Chinese economy. J. Popul. Econ. 13, 331–352. https://doi.org/10.1007/s001480050141.
Liu, Z., 2005. Institution and inequality: the hukou system in China. J. Comp. Econ. 33, 133–157. https://doi.org/10.1016/j.jce.2004.11.001.
Lu, Y., Wang, F., 2013. From general discrimination to segmented inequality: migration and inequality in urban China. Soc. Sci. Res. 42, 1443–1456. https://doi.org/10.1016/j.ssresearch.2013.06.006.
Lunceford, J.K., Davidian, M., 2004. Stratification and weighting via the propensity score in estimation of causal treatment effects: a comparative study. Stat. Med. 23, 2937–2960. https://doi.org/10.1002/sim.1903.
Maccoby, E.E., 2007. Historical overview of socialization research and theory. Handb. Social.: Theor. Res. 13–41.
McKeown, E., Nelson, S., Anderson, J., Low, N., Elford, J., 2010. Disclosure, discrimination and desire: experiences of Black and South Asian gay men in Britain. Cult. Health Sex. 12, 843–856. https://doi.org/10.1080/13691058.2010.499963.
Nannestad, P., 2008. What have we learned about generalized trust, if anything? Annu. Rev. Pol. Sci. 11, 413–436. https://doi.org/10.1146/annurev.polisci.11.060606.135412.
Nee, V., 1989. A theory of market transition: from redistribution to markets in state socialism. Am. Sociol. Rev. 663–681.
Nee, V., Cao, Y., 2004. Market transition and the firm: institutional change and income inequality in urban China. Manag. Organ. Rev. 1, 23–56. https://doi.org/10.1111/j.1740-8784.2004.00003.x.
Ojeda, C., Hatemi, P.K., 2015. Accounting for the child in the transmission of party identification. Am. Sociol. Rev. 80, 1150–1174. https://doi.org/10.1177/0003122415606101.
Pager, D., Shepherd, H., 2008. The sociology of discrimination: racial discrimination in employment, housing, credit, and consumer markets. Annu. Rev. Sociol. 34, 181–209. https://doi.org/10.1146/annurev.soc.33.040406.131740.
Paxton, P., 2007. Association memberships and generalized trust: a multilevel model across 31 countries. Soc. Forces 86, 47–76. https://doi.org/10.1353/sof.2007.0107.
Putnam, R.D., 1994. Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press.
Robbins, B.G., 2012. A blessing and a curse? Political institutions in the growth and decay of generalized trust: a cross-national panel analysis, 1980–2009. PloS One 7, e35120. https://doi.org/10.1371/journal.pone.0035120.
Robins, J.M., Rotnitzky, A., Zhao, L.P., 1995. Analysis of semiparametric regression models for repeated outcomes in the presence of missing data. J. Am. Stat. Assoc. 90, 106–121. https://doi.org/10.1080/01621459.1995.10476493.
Rosenbaum, P.R., Rubin, D.B., 1983. The central role of the propensity score in observational studies for causal effects. Biometrika 70, 41–55.
Rothstein, B., Stolle, D., 2008. The state and social capital: an institutional theory of generalized trust. Comp. Polit. 40, 441–459. https://doi.org/10.2307/20434095.
Rothstein, B., Stolle, D., 2003. Social capital, impartiality and the welfare state: an institutional approach. In: Generating Social Capital. Palgrave Macmillan, New York, pp. 191–209. https://doi.org/10.1057/9781403979544_10.
Rothstein, B., Uslaner, E.M., 2011. All for all: equality, corruption, and social trust. World Polit. 58, 41–72. https://doi.org/10.1353/wp.2006.0022.
Shimada, K., Shimazu, A., Demerouti, E., Bakker, B., A, Kawakami, N., 2013. Work engagement versus workaholism: a test of the spillover-crossover model. J. Manag. Psychol. 29, 63–80. https://doi.org/10.1108/JMP-05-2013-0148.
Shu, X., 2005. Market transition and gender segregation in urban China. Soc. Sci. Q. 86, 1299–1323. https://doi.org/10.1111/j.0038-4941.2005.00347.x.
Shu, X., Bian, Y., 2003. Market transition and gender gap in earnings in urban China. Soc. Forces 81, 1107–1145. https://doi.org/10.1353/sof.2003.0070.
Smith, T.W., 1997. Factors relating to misanthropy in contemporary American society. Soc. Sci. Res. 26, 170–196. https://doi.org/10.1006/ssre.1997.0592.
Sønderskov, K.M., Dinesen, P.T., 2016. Trusting the state, trusting each other? The effect of institutional trust on social trust. Polit. Behav. 38, 179–202. https://doi.org/10.1007/s11109-015-9322-8.

Stolle, D., Soroka, S., Johnston, R., 2008. When does diversity erode trust? Neighborhood diversity, interpersonal trust and the mediating effect of social interactions. Polit. Stud. 56, 57–75. https://doi.org/10.1111/j.1467-9248.2007.00717.x.
Sturgis, P., Brunton-Smith, I., Read, S., Allum, N., 2011. Does ethnic diversity erode trust? Putnam's 'Hunkering Down' thesis reconsidered. Br. J. Polit. Sci. 41, 57–82. https://doi.org/10.1017/S0007123410000281.
Sturgis, P., Read, S., Hatemi, P.K., Zhu, G., Trull, T., Wright, M.J., Martin, N.G., 2009. A genetic basis for social trust? Polit. Behav. 32, 205–230. https://doi.org/10.1007/s11109-009-9101-5.
Sun, S., Chen, F., 2017. Women's employment trajectories during early adulthood in urban China: a cohort comparison. Soc. Sci. Res. 68, 43–58. https://doi.org/10.1016/j.ssresearch.2017.09.005.
Uslaner, E.M., 2002. The Moral Foundations of Trust. Cambridge University Press.
Wu, Q., Xie, Y., 2014. The effects of contextual and individual-level factors on Chinese adults' attitudes toward social environments. Chin. Sociol. Rev. 47, 84–102.
Wu, X., Treiman, D.J., 2004. The household registration system and social stratification in China: 1955-1996. Demography 41, 363–384. https://doi.org/10.1353/dem.2004.0010.
Wu, X., Treiman, D.J., 2007. Inequality and equality under Chinese socialism: the hukou system and intergenerational occupational mobility. Am. J. Sociol. 113, 415–445. https://doi.org/10.1086/518905.
Xie, Y., Hannum, E., 1996. Regional variation in earnings inequality in Reform-Era urban China. Am. J. Sociol. 101, 950–992.
Xie, Y., 2012. China Family Panel Studies, User's Manual for the 2010 Baseline Survey. Institute of Social Science Survey, Beijing Dec. 20. (In Chinese.).
Xie, Y., Hu, J., 2014. An introduction to the China family panel studies (CFPS). Chin. Sociol. Rev. 47, 3–29.
Xie, Y., Hu, J., Zhang, C., 2014. The China family panel studies: design and practice. Chin. J. Sociol. 34 (2), 1–32 (In Chinese).
Xie, Y., Zhou, X., 2014. Income inequality in today's China. Proc. Natl. Acad. Sci. Unit. States Am. 111, 6928–6933. https://doi.org/10.1073/pnas.1403158111.
Zhang, Y., 2017. Premarital cohabitation and marital dissolution in postreform China. J. Marriage Fam. 79, 1435–1449. https://doi.org/10.1111/jomf.12419.