Effects of fathering style on social problem-solving among Chinese teenagers: The roles of masculine gender stereotypes and identity

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ABSTRACT

Using a sample of Chinese teenagers (368 males and 380 females) randomly selected from three middle schools, we integrated masculine gender stereotypes and identity into a structural model of the relationship between fathering style and children's social problem solving. Results showed that the data had a satisfactory fit to the proposed model (CFI = .96, RMSEA = .030, and SRMR = .0336), indicating that masculine gender stereotype and identity that children hold partially mediated the relationship between fathering style and children's social problem solving. Moreover, multi-group analyses indicated that the patterns of the mediation model did not differ across gender, except that more masculine stereotypes will lead to more masculine identity for boys than for girls. This finding indicated that positive fathering style can promote positive gender stereotype and identity that children have, which further promote their development of social problem solving.

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1. Introduction

The term *social problem-solving* refers to the process by which individuals attempt to discover and apply adaptive means of coping with the wide variety of stressful problems encountered in the course of everyday life (D'Zurilla & Nezu, 2007). Empirical studies showed that successful social problem-solving could help teenagers relieve interpersonal stress and reduce aggressive behavior (Blanchard-Fields, 2007; Frey, Hirschstein, & Guzzo, 2000). In contrast, teenagers with poor social problem-solving might have suicide behavior (Hirsch, Chang, & Jeglic, 2012), depressive symptoms (Anderson, Goddard, & Powell, 2011; Klein et al., 2011), and personality disorder in later adulthood (McMurran, Nezu, Nezu, Morgan, & Bhugra, 2012). Therefore, social problem-solving is of great significance to teenagers' social adaptation.

Previous studies have focused on the influence of parenting style on problem-solving (Mensah & Kuranchie, 2013). Compared to mothering style, fathering style has more close relationship with social development (Bögels, Stevens, & Majdandžić, 2011; Giallo, Treyvaud, Cooklin, & Wade, 2013; Somech & Elizur, 2012). Studies found that fathering of emotional warmth could reduce anti-social behavioral problems (Gervan, Granic, Solomon, Blokland, &

Ferguson, 2012), while punitive fathering lead to social adaptive problems, including explicit behavior problems (e.g. sabotage and drug abuse) and implicit emotional disorders (e.g. depression and anxiety) (Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008. Thus, social problem-solving seems to benefit from positive fathering style.

Though the relationship between fathering style and social problem-solving has been widely studied with various intervening variables such as coping efficacy (Zhou et al., 2008), attachment (Dreyer, 2012), and self-esteem (Brodski & Hutz, 2012), few studies have explained the mechanism of fathering style and social problem-solving from gender stereotypes and identity perspective. As is known, fathering style has influence on children's gender stereotypes and identity. For example, Gunderson, Ramirez, Levine, & Beilock (2012) argued that children often share the same gender-role stereotypes with their father. Tsola & Anastassiou-Hadjicharalambous (2011) found that indifferent fathering style lead to less masculine gender identity among children. Meanwhile, social achievements have been stereotypically masculine favored as people hold the gender stereotypes that masculinity make people easier to succeed in social competition (Dietrich et al., 2013; Fox, 2013). For example, most effective strategies of social problem-solving like problem definition and formulation, generation of alternative solutions, and decision making are more attributed to masculine stereotypical personalities like rational, open-minded, dominance, systematic, and achievement-oriented (D'Zurilla,

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Nezu, & Maydeu-Olivares, 2002). According to Bandura and Bussey (2004), gender stereotypes would impact on individual behavior when they were transformed into gender-role identity. Thus, we tentatively predict that masculine gender stereotypes and identity would be linked-mediators of the relationship between fathering style and social problem-solving.

In addition, previous studies have also observed the gender-differentiated fathering pattern for sons and daughters (Hallers-Haalboom et al., 2014), but few investigated whether the same fathering style would have different influence on social problem-solving for sons and daughters. Studies have shown that fathers spent more time with sons to do some masculine activities such as playing basketball (Yeung, Sandberg, Davis-Kean, & Hofferth, 2001), and boys identified with their fathers more than girls do (Dodge, Bates, & Pettit, 1990). Drawing on these previous literatures, we expect that the relationship between fathering style and children's social problem-solving will be much closer between father–son than father–daughter relationship. In other word, there might be gender difference between these variables.

In summary, the current study has two goals. First, we want to reveal a possible mechanism of the relationship between fathering style and social problem-solving through masculine gender stereotype and identity (see Fig. 1) by constructing a structural equation model. Second, we want to explore gender differences of this relationship between fathering style and social problem-solving using multiple-group analysis. Thus, we proposed four hypotheses in current study:

Hypothesis 1. Fathering style is a significant predictor of social problem-solving.

Hypothesis 2. Fathering style is a significant predictor of masculine gender stereotypes (H2a) and masculine gender identity (H2b), and masculine gender stereotype should predict masculine gender identity (H2c).

Hypothesis 3. There is a mediating linkage between fathering style and social problem-solving through masculine stereotypes and identity.

Hypothesis 4. Gender moderates the mediation relationship as boys will have more identity with their masculine stereotypes.

2. Method

2.1. Participants

We randomly selected 820 junior high school students who come from biological families with both two parents. After deleting unusable data which contained more than 10% missing items, there were 763 valid questionnaires. Among these, 368 participants were boys (mean age = 13.18, SD = 0.97) and 380 were girls (mean age = 13.06, SD = 1.00). Educational qualifications of fathers and mothers were recorded in five categories, with 2.2% and 0.7% having elementary or lower level of education; 6.25% and 6.05% having junior middle school level; 38.3% and 42.6% having senior middle school level; 41.3% and 40.7% having Bachelor degree;

11.9% and 9.7% holding Master's degree, for fathers and mothers, respectively. Chi-Square tests were conducted to exclude the probable interference of education level of parents. Results indicated that education level of fathers was not significantly different between boys and girls, $\chi^2(df = 4) = 4.17$, $p > .05$, and so was education level of mothers, $\chi^2(df = 4) = 1.72$, $p > .05$.

2.2. Measures

2.2.1. Fathering style

Fathering style perceived by children was assessed by a Chinese adapted version of Perris' Egna Minneu av Bardndosnauppforstran (EMBU) which has found to be of satisfactory reliability and validity (Dongmei, 1993). To improve measurement efficacy, we only selected 15 items in emotional warmth (9 items) and punitive subscales (6 items) according to factor loadings, which were representative for positive and negative fathering style, respectively. Each item was answered on a 4-point Likert type scale ranging from 1 = never to 4 = always. Cronbach alpha coefficient was .85 for positive items and .78 for negative items.

2.2.2. Masculine gender stereotypes

Children's views on masculine gender stereotypes were measured by a Chinese version of Bem Sex Role Inventory (CSRI-50: Qian, Zhang, Luo, & Zhang, 2000). Similarly, to improve measurement efficacy, we only chose ten most representative expressions of positive and negative masculine stereotype separately. Each item was answered on a 5-point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher score on positive items indicated more positive masculine stereotype and higher score on negative items indicated more negative masculine stereotype. Cronbach alpha coefficient was .80 for positive and .76 for negative masculine gender stereotypes.

2.2.3. Masculine gender identity

According to the structure validity studies of Chinese version of Bem Sex Role Inventory (CSRI-50), leadership, brave, analytical, and generous were four main positive masculine characteristics, and impulsive, rash, hasty, and impatient were four main negative masculine characteristics in current Chinese culture (Liu et al., 2011). Therefore, we used these eight adjective words to indicate adolescents' masculine gender identity with a self-identity expression pattern ("*I am . . .*"). Each item was answered on a 5-point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher score on positive items indicated more positive masculine gender identity and higher score on negative items indicated more negative masculine gender identity. Cronbach alpha coefficient was .64 for positive and .66 for negative masculine gender identity.

To further confirm the validity of these selected items, we conducted an items assessment with seven experts in developmental or social psychology. For items of fathering style, experts were provided with the definition of positive and negative fathering style and were asked to make judgments about whether the fifteen items
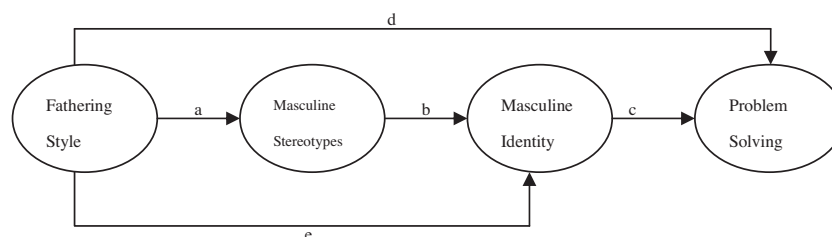

Fig. 1. The theoretical model.