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Unbroken Homes: Parenting Style and Adolescent Positive Development in Chinese Single-Mother Families Experiencing Economic Disadvantage

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Abstract

Based on the data collected from 372 single-mother families experiencing economic disadvantage in Hong Kong, the familial pathways through which parenting style (maternal responsiveness and demandingness) influenced adolescent positive development via filial piety were examined. Results showed that maternal responsiveness and demandingness influenced adolescent positive development via filial piety in poor Chinese single-mother families. Rather than emphasizing “broken” homes and “deficiency” of single-mother families in cultivating adolescent development, this pioneering study underscores the importance of fostering care and pursuing demandingness in parenting, which further promotes filial piety and positive development of adolescents. Theoretical and practical implications of the study are discussed.

Keywords: single-mothers; parenting style; filial piety; Chinese adolescents; poverty

Introduction

The rise of single-parent families has been a social concern in the global and local contexts. In Hong Kong, the number of single-parent families has increased by 137%, from 34,538 in 1991 to 81,705 in 2011 (Census and Statistics Department 2001, 2011). The single-mother families far outnumbered the single-father families. The numbers of single-mother families and single-father families were 64,040 and 17,665 respectively, reaching a ratio of 3.63 to 1 in 2011 (Census and Statistics Department 2013). There is ample evidence showing that the single-mother families are vulnerable to risks and hardship (Amato and Keith 1991; Jones et al. 2007). Jones et al. (2007) identified several risk factors exhibited in single-mother families, including inadequate income, maternal depression and disruptive parenting. In the absence of the fathers, single mothers and their children have to manage the negative emotions of depression, anger and resentment, mourn for the loss and recover from the tragedy (Anderson 2003). The irritability, helplessness and depression experienced by single mothers lead to hostile, inattentive and abusive parenting behaviors. Children may feel terrified and insecure in response to the hostile and aggressive parenting, and legitimize violence or aggressive behaviors through modeling (Eamon and Zuehl 2001). Research generally shows that adolescents in single-mother families display more psychosocial problems such as psychiatric disorders, academic difficulties, and problem behaviors than do adolescents growing up in intact families (Amato and Keith 1991; Lipman et al. 2002). Unfortunately, single-parent families are labeled as “deficit” family units that are “inadequate, flawed or ‘broken’” (Rice 2001, p. xi).

In contrast to the stereotyped view that regards single-mother families as inherently problematic and defective, there is evidence showing that single mothers do care, nurture and guide their children despite the challenges and hardship they encounter (e.g. Hsieh and Shek 2008; Rodgers and Rose 2002). A survey of resilience literature showed that positive family

attributes (such as family support, warmth, shared values, consistency of rules) have been identified as protective factors for adolescents' positive development in the face of adversity (e.g. Garmezy 1993; Kelly and Emery 2003). Single mothers work hard to “balance their many responsibilities, stretch finances, learn to value themselves accurately, and reject the unconscious repetitions of inequitable gender roles and intergenerational family interaction patterns” (Rice 2001, p. xii).

Parenting Style and Adolescent Positive Development

In the family literature, parenting style is frequently used as one of the predictors of adolescent development (Baumrind 1991; Shek 2002b). Parenting style is defined as “a constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parents' behaviors are expressed” (Darling and Steinberg 1993, p.488). Parenting style has two dimensions: parental demandingness and parental responsiveness. While parental demandingness expects parents to be restrictive and firm on monitoring and supervising their children, parental responsiveness entails the warmth, encouragement and sensitivity through responding to their children's needs (Maccoby and Martin 1983). Baumrind (1991) categorized parenting styles into three qualitatively different types of parental attitudes and practices: authoritarian, authoritative and permissive. Authoritarian parents control and monitor their children's behaviors and attitudes in an absolute manner while giving limited warmth and support to their children. Authoritative parents are rational and firm, but at the same time responsive to their children's needs. They have firm expectations but at the same time encourage sharing and communication based on reasons. Permissive parents have low control over their children and permit their children to act on their own will (Baumrind 1991). Among these three parenting styles, authoritative parenting was found to be the most beneficial to children's competence and achievement

(Shek 2002b). There is evidence authoritarian parenting style (i.e., high demandingness and less responsiveness) is prevalent in Chinese communities (Chiu 1987; Leung, Lau and Lam 1998; Pong, Johnston, and Chen 2009).

Although these parenting typologies can be derived from the responsiveness and demandingness dimensions, there are three points that should be noted. First, while types of parenting can yield useful information, parenting attributes along these two dimensions could be regarded as continuous variables which help researchers understand how the global parenting attributes affect child development. Second, use of these dimensions as continuous variables have been attempted in previous studies (Shek, 2005, 2008). Finally, there are views suggesting that these typologies of parenting styles may not fit parenting in the Chinese culture (Shek, 2006). Chao (1994) argued that “the concepts of authoritative and authoritarian are somewhat ethnocentric and do not capture the important features of Chinese child rearing” (p. 1111). Lau and Cheung (1987) suggested that Chinese parents could exercise a high level of parental control with great parental sacrifice, involvement and support. Embedded in the Chinese culture, the concept of parenting is associated with the concept of “training”, which is expressed by the terms “*jiao xun*” (to train) and “*guan*” (to govern; Chao 1994). The Chinese meaning of “*guan*” (i.e., monitoring) contains strong sentiments of parental warmth, involvement and commitment for their children’s development (Stewart et al., 1998). Cheung and McBride-Chang (2008) further argued that the two dimensions of parenting style, concern and restrictiveness, are theoretically independent but are highly associated in Chinese mothers, i.e. a mother could perceive herself as both warm and controlling. Hence, it is interesting and illuminating to examine both maternal responsiveness and demandingness in their influences of adolescent development in poor Chinese single-mother families.

A survey of literature showed strong evidence that parental warmth and support positively predicted adolescent psychosocial development and wellbeing across different cultures (Barber, Stolz and Olsen 2005; Bean, Barber and Crane 2006; Chen, Liu and Li 2000). Maternal warmth and support was regarded as a protective factor that enhance adolescents' positive adjustment in single-parent families (Brody et al. 2002; Mistry et al. 2002). Regarding parental demandingness, as parental demandingness set out the rules and standards for the adolescents to follow, there is empirical support parental demandingness and control enhanced adolescents' academic achievement (Cheung & McBride-Chang, 2008; Pettit et al. 2001; Wang, Pomerantz and Chen, 2007) and inhibited adolescents' delinquent behaviors (Bean, Barber and Crane 2006). However, there were some studies indicating that parental restrictiveness and high control showed negative impacts on adolescent psychosocial development (e.g. Metsäpelto and Pulkkinen 2003; Peterson and Bush, 1999).

Furthermore, the role differentiation between fathers and mothers in children's socialization in the Chinese culture is worth noting. In the traditional Chinese culture, there is a strong discourse of "strict fathers, kind mothers" thesis (Wilson 1974), where fathers are harsher and more demanding, and mothers are more affectionate and responsive (Shek 2002b). Fathers are mainly responsible for training and monitoring their children (Chao 1994), whereas mothers are mainly responsible for the caring and rearing roles in their children's socialization (Shek 2002a). However, the conventional thesis that fathers take up more monitoring roles in the family has been challenged in recent years (Dwairy and Achoui 2010; Leung and Shek 2012; Shek 2008). A "strict mothers, kind fathers" thesis, or even "stricter mothers and kinder mothers with fathers remaining detached" thesis (Leung and Shek 2012; Shek 2008), is proposed. Nonetheless, single mothers have to shoulder both monitoring and caring roles in the family.

Filial Piety as a Mediator

Filial piety is the guiding principle for intergenerational conduct in the Chinese culture (Ho 1996). It is a Chinese virtue that children are expected to show respect for their parents, fulfill family responsibilities, bring honors to the family, and avoid disgrace on the family name (Yeh and Bedford 2003). Central to the Chinese culture where collectivism and parent-child interdependence is emphasized, parents are obliged to care and guide their children out of benevolence. In return, children should obey and respect their parents out of filial piety (Yeh and Yang 1997). Generally speaking, the influence of parenting on filial piety can be explained by two main mechanisms embedded in the Chinese familism. First, parents deliver care, nurturance and support to their adolescents. Adolescents who are indebted to their parents' sacrifice and nurturance would develop a sense of filial piety to show their gratitude towards their parents (Leung and Shek 2013; Yeh and Bedford 2003). In this case, there is mutual relatedness and intimacy between the dyad (Yeh et al. 2013). This is particularly important in single-mother families as adolescents are more empathic to maternal sacrifice for their psychosocial development. Second, parents socialize their children to observe the moral virtues such as obedience, filial piety, compliance through the exercise of authority and training, and adolescents learn to suppress their desire and follow parents' instruction so as to comply with the authority (Yeh & Bedford, 2003). Ho (1996) used the term "authoritarian moralism" to describe the obedience of the children in observing the moral standards demanded by their parents. Under these mechanisms, it is deemed that parental responsiveness predicts filial piety as adolescents who experience the care and affection of their parents will develop a sense of gratitude to repay their parents (Yeh and Bedford 2003). At the same time, parental demandingness also predicts filial piety of adolescents when the adolescents learn to obey and follow the standards and rules set by mothers, who are the authority figures in the families.

Regarding the relationship between filial piety and adolescent positive development, research findings indicated that filial piety was positively related to adolescents' psychosocial attributes, including personality traits, life satisfaction and psychosocial development (Yeh and Bedford 2003; Yeh et al., 2013). Adolescents who were more filially obliged to their parents behaved well and strived for excellence so that they would not disappoint their parents and disgraced the family name (Fuligni and Yoshikawa 2003). The mediational role of filial piety is supported by research findings showing that authoritative parenting influenced life satisfaction of young Chinese adults via filial piety (Chen, 2014).

Adolescent Positive Development

While the majority of family research emphasizes internalizing and externalizing problems of adolescents (e.g. Eamon and Zuehl 2001), there are comparatively fewer studies that focus on adolescents' positive developmental outcomes. The concept of positive youth development emphasizes assets, abilities, and potential of adolescents (Shek, Siu and Lee 2007). Benson (1997) adopted the asset-building paradigm and identified 40 developmental assets. Lerner et al. (2009) identified six "C"s of positive youth development, namely competence, confidence, connection, character, caring and contribution. Catalano et al. (2002) proposed a systematic framework on adolescents' positive youth development and highlighted fifteen positive youth development constructs. Based on Catalano et al.'s (2002) framework, Shek, Siu and Lee (2007) operationalized the positive youth development constructs that are applicable to Chinese adolescents. As far as adolescent development is concerned, this study examined seven positive youth development constructs of adolescents, namely, spirituality, cognitive competence, clear and positive identity, self-efficacy, self-determination, beliefs in the future and resilience. These developmental attributes are especially important to single-mother families as they are determinants for adolescents to

solve the problems ahead, shape their life goals and strive to excel in adverse conditions (Shek, Siu and Lee 2007).

The Present Study

The present study attempted to examine the mediational effects of filial piety in the influence of maternal parenting style (maternal responsiveness and maternal demandingness) on adolescent positive development in single-mother families experiencing economic disadvantage in Hong Kong. There were four research questions in the study:

Research Question 1: Does maternal responsiveness predict adolescent positive development in poor Chinese single-mother families? Based on the family socialization theories (Baumrind 1991; Maccoby and Martin 1983) that parental responsiveness entails the care and support to adolescents' developmental needs, it was hypothesized that a high level of parental responsiveness would be associated with better development of adolescents in the poor Chinese single-mother families (Hypothesis 1).

Research Question 2: Does maternal demandingness predict adolescent positive development in poor Chinese single-mother families? Based on the previous studies that strict rules and monitoring provided standards and guidance for adolescents, which predicted adolescents' achievement and psychosocial development (Cheung & McBride-Chang, 2008; Pettit et al. 2001; Wang, Pomerantz and Chen, 2007), it was hypothesized that a higher level of parental demandingness would be associated with better adolescent positive development in poor Chinese single-mother families (Hypothesis 2).

Research Question 3: Does adolescent filial piety mediate the influence of maternal responsiveness on adolescent positive development in poor Chinese single-mother families? Based on the Chinese socialization model (Yeh 2003; Yeh and Yang 1997) and previous studies (e.g. Chen 2014; Fuligni and Yoshikawa 2003), it was hypothesized that filial piety

would mediate the influence of maternal responsiveness on positive development of adolescents in Chinese single-mother families (Hypothesis 3).

Research Question 4: Does adolescent filial piety mediate the influence of maternal demandingness on adolescent positive development in poor Chinese single-mother families? Based on the Chinese socialization model that authoritarian parenting predicted adolescent filial piety (Ho, 1996) and filial piety influenced adolescent psychosocial development (Yeh and Bedford 2003), it was hypothesized that filial piety would mediate the influence of maternal demandingness on positive development of adolescents in Chinese single-mother families (Hypothesis 4).

As a summary, a full hypothetical model of mediational pathways of adolescent filial piety in the relationships between maternal parenting style (parental responsiveness and demandingness) and adolescent positive development is illustrated in Figure 1.

Method

Participants and Procedures

A cross-sectional survey of single-mother families was conducted in Hong Kong. As a complete list of single-mother families is non-existent in Hong Kong, and poor single-mother families are “hidden” communities to avoid social stigmatization, purposive sampling method was adopted in the study. A total of 15 social service agencies providing children and youth service centres, community centres, family service centres across Hong Kong for the families in poverty were invited to participate in the study. Finally, 5 social service agencies having 17 social service units joining the study. Social workers were given training on identification of respondents as well as data collection. To identify the respondent families, three criteria were used: 1) Chinese families facing single-motherhood; 2) having at least one child aged between 11 and 16; and 3) the monthly household income being less than 50% of the monthly

median domestic household income based on the Hong Kong Census 2011. Social workers identified the respondent families from their lists of members/service users that met the criteria, and invited them to participate in the research. The final sample consisted of 372 single-mother families experiencing economic disadvantage.

During data collection, the purpose of research, procedures of collecting the data, respondents' rights in voluntary participation as well as the use of data were introduced to the mothers and the adolescents. Written informed consent of both mothers and adolescents was obtained. The mothers were invited to complete the Mother Questionnaire which contained the measure of parenting style, and adolescents were invited to complete the Adolescent Questionnaire which contained the measures of filial piety and positive development. To ensure confidentiality, the mothers and the adolescents were asked to complete the questionnaires separately. The questionnaire was administered in a self-administered format. There were a few respondents who were illiterate and had difficulties in comprehending the questionnaires. In these exceptional cases, trained social workers read out the items in an interview format. The mothers and the adolescents took around 35 minutes to complete the questionnaires. Conforming to the ethics of human subject research, the study was approved and monitored by Human Subjects Ethics Sub-committee of an internationally recognized university.

In the mothers' sample, the mean age of the mothers was 43.35 ($SD = 5.58$). A high proportion of mothers were of low educational standard, with 268 mothers (72.0%) at the junior secondary school level or below. There were 26.3% ($n = 98$) and 28.5% ($n = 106$) of the women born in Hong Kong and having resided in Hong Kong for a period of six to ten years respectively. A majority of the families ($n = 277$, 74.5%) received Comprehensive Social Security Assistance (CSSA) from the Government. Those who worked in the labour force engaged mostly in unskilled jobs ($n = 34$, 9.1%). Among the single mothers in the

sample, 11 (3.0%) were unmarried mothers, 262 (70.4%) were divorced, 21 (5.6%) were separated, 67 (18.0%) were widowed, and 5 (1.3%) mothers had their spouse disappeared. The mean and mode of the number of children in the sample were 1.89 ($SD = 0.84$) and 2 respectively. The demographic characteristics of the sample resembled to the characteristics of single-mother families in Hong Kong (Census and Statistics Department 2013).

Regarding the adolescent sample, there were 187 boys (50.3%) and 185 girls (49.7%). The mean age of the adolescents was 13.45 ($SD = 1.64$), with the mean age of boys and girls at 13.43 ($SD = 1.62$) and 13.45 ($SD = 1.67$) respectively. There were 106 adolescents (28.5%) studying primary six or below (Grade 6 and below), 201 (54.1%) in junior secondary school level (Grade 7 to 9), and 65 (17.5%) in senior secondary school level (Grade 10 and above).

Instruments

Mothers' reports

Assessment of Parenting Style

Maternal Parenting Style Scale (MPS). Based on the framework of Maccoby and Martin (1983) and parenting assessment work of Lamborn et al. (1991), Shek (1999) developed a modified version of the Maternal Parenting Style Scale (MPS). It consists of two subscales: Maternal Demandingness Subscale (MDEM) and Maternal Responsiveness Subscale (MRES). MDEM comprises 7 items and is used to assess demandingness of the mother towards their children's behaviors. A sample item of MDEM is "I know exactly where my child is most afternoons after school". MRES is composed of 13 items and is used to assess responsiveness of the mother to their children's behaviors. A sample item of MRES is "My child can count on me to help him/her out, if he/she has some kinds of problems". The scales and subscales showed good psychometric properties in the Chinese sample (Shek, 1999). The total scores of each subscale were used as an indicator of the level of maternal

demandingness and responsiveness respectively, with a higher score indicating a more positive maternal attribute. The two subscales showed acceptable internal consistencies (MDEM: $\alpha = 0.664$; MRES: $\alpha = 0.655$; Table 1).

Adolescents' reports

Assessment of Chinese Filial Piety

The Filial Behaviour Scale (FBS). A 25-item Filial Behaviour Scale was developed in the Hong Kong context (Chen, Bond and Tang 2007). Sample items from the FBS are “When I start to work, I will contribute financially to my parents” and “I care for my family”. Responses to the item statements are reported on a 5-point Likert scale from 1 = *totally disagree* to 5 = *totally agree*. The scale showed one-factor structure in factor analysis and had good internal consistency in both samples of Hong Kong and Beijing (Chen, Bond and Tang 2007). A higher total score of items indicates the higher levels of filial behaviors. The FBS showed good internal consistency ($\alpha = 0.911$; Table 1).

Assessment of Adolescent Positive Development

Chinese Positive Youth Development Scale (CPYDS). Shek, Siu and Lee (2007) developed a 90-item CPYDS that contains fifteen aspects of positive youth development. Seven positive youth development constructs (spirituality, cognitive competence, clear and positive identity, self-efficacy, self-determination, beliefs in the future and resilience) were employed in this study. Sample items are “I will try new ways to solve my problems” and “I have confidence to be admitted to university”. The Spirituality Subscale is rated on a 7-point semantic differential scale, whereas the items of the other subscales are rated on a 6-point Likert scale from 1 = *strongly disagree* to 6 = *strongly agree*. The total score of each subscale was used as an indicator adolescent positive development, with a higher score indicating more positive

development. The scale showed good internal consistency ($\alpha = 0.940$; Table 1).

Data Analytical Plan

Structural equation modeling (SEM) using AMOS 22.0 was conducted to test the hypothetical model. Structural equation modeling (SEM) is a statistical technique to investigate theory-derived structural hypotheses. It tests complex models for structure of effects of independent variables on dependent variables (Marcoulides and Schumacker 1996). SEM is advanced in estimation and control of measurement errors, model confirmation by assessment of goodness-of-fit criteria, and simultaneous estimation of direct and indirect effects of the relationships among the variables (Raykov and Marcoulides 2006). Initially, the direct influence of maternal responsiveness and demandingness on adolescent positive development was assessed (Model 1). Then, adolescent filial piety was added as a mediator to the model to examine the indirect influence of maternal responsiveness and demandingness on adolescent positive development via filial piety (Model 2; Figure 1). Several goodness-of-fit indices were used to test the models, including (i) chi-square (χ^2), with a non-significant probability value showing a closer fit of the hypothetical model, and χ^2/df ratio less than 2 (Hu and Bentler 1999); (ii) the Comparative Fit Index (CFI) and the Normal Fit Index (NFI), with the values being above 0.95 indicating a good model fit; and (iii) Root Mean Square Error of Approximation (RMSEA), with the value at below 0.06 indicating a good fit (Hu and Bentler 1999). Indirect effects of different paths were estimated. To assess the mediational effect, the bootstrapping mediation test having 5,000 bootstrapped re-samples was performed. Bootstrapping mediation test involves repeatedly sampling of the data set and estimation of indirect effect of each data set, with the attempt of evaluating whether the results are due to chance effect. The test is powerful in obtaining confidence limits of an indirect effect in most conditions, and is robust in small and moderate samples (Preacher and

Hayes 2008). In case a “zero” is not found between the upper and lower bounds of bias corrected 95% confidence intervals, it can be concluded that the indirect effect is significant from zero at $p < 0.05$ (Preacher and Hayes 2008). Finally, in case filial piety fully mediated the influence of maternal responsiveness and demandingness on adolescent positive development, a simplified model by omitting the direct influence was further tested (Model 3). The $\Delta\chi^2$ between Model 2 and Model 3, and the Akaike’s Information Criterion (AIC) values of Model 2 and Model 3 were used to determine the final model, with non-significant $\Delta\chi^2$ and smaller value of AIC represented a better model fit (Burnham and Anderson 2002).

Results

Preliminary Analyses

The descriptive statistics of the measures are listed in Table 1. Full information maximum likelihood (FIML) estimation was employed to deal with missing data (Arbuckle 2007). The skewness and kurtosis values of all observed variables were lower than 2 and 7 respectively (Table 1), suggesting that multivariate normality assumptions were supported (Curran et al. 1996). Hence, the maximum likelihood method was used to analyze the data.

Correlations of the demographic data with maternal responsiveness, maternal demandingness, filial piety and adolescent positive development was assessed. It was found that all demographic variables (mothers’ age, education level, duration of stay in Hong Kong and duration of single motherhood, adolescents’ gender, age and duration of stay in Hong Kong), except adolescents’ age, were not significantly related to the measuring variables. Age of adolescents was negatively correlated with parental demandingness and adolescent filial piety. Thus, age of adolescents was included as covariate in the study.

Correlational analyses showed that maternal responsiveness and demandingness was correlated with each other ($r = 0.381, p < 0.001$). Maternal responsiveness and

demandingness was correlated with adolescent filial piety and positive development of adolescents (Table 2).

Regarding the direct influence of maternal responsiveness and demandingness on adolescent positive development (i.e., Model 1), the goodness-of-fit indices showed a good fit of the data, with $\chi^2(2) = 2.379, p > 0.05$; $\chi^2/df = 1.189$ (non-significant χ^2 ; Hu and Bentler 1999); NFI and CFI were 0.975 and 0.996 respectively (above 0.95; Hu and Bentler 1999), and RMSEA was 0.023 (below 0.06; Hu and Bentler 1999). Maternal responsiveness significantly influenced adolescent positive development ($\beta = 0.109, p < 0.05$), but maternal demandingness did not predict adolescent development ($\beta = 0.099, p > 0.05$). Hypothesis 1 was supported, but Hypothesis 2 was not supported.

Then the hypothetical model of mediation (Model 2; Figure 1) was tested. The goodness-of-fit indices showed a good fit of the data, with $\chi^2(2) = 2.089, p > 0.05$; $\chi^2/df = 1.044$; NFI and CFI were 0.991 and 1.000 respectively (above 0.95; Hu and Bentler 1999), and RMSEA was 0.011 (below 0.06; Hu and Bentler 1999). Model 2 explained 25% of the variance of adolescent positive development in poor Chinese single-mother families. The direct influence of both maternal responsiveness and demandingness on adolescent positive development was non-significant, with $\beta = 0.02 (p > 0.05)$ and $\beta = 0.02 (p > 0.05)$ respectively. However, both maternal responsiveness and demandingness indirectly influenced adolescent positive development via adolescent filial piety, with indirect effect = 0.085 ($p < 0.01$) and 0.067 ($p < 0.05$), respectively. The total effect of maternal responsiveness and demandingness on adolescent positive development was 0.181 ($p < 0.01$; Table 3). As “zero” was not found between the upper and lower bounds of the bias corrected 95% confidence intervals of the indirect effects of the paths between maternal responsiveness and demandingness on adolescent positive development via filial piety, (Preacher and Hayes 2008; Table 4), Hypotheses 3 and 4 were supported. A simplified model indicating the

indirect effects (i.e., omitting the direct effect) of maternal responsiveness and demandingness on adolescent positive development via filial piety (i.e., Model 3) was tested. It was found that Model 3 fitted the data well, with $\chi^2(4) = 2.587, p > 0.05$; NFI and CFI were 0.989 and 1.000 respectively, and RMSEA was 0.000 (Table 4). The $\Delta\chi^2$ was between Model 2 and Model 3 was non-significant ($\Delta\chi^2 = 0.498, p > 0.05$), and the Akaike's Information Criterion (AIC) value of Model 3 (AIC = 34.487) was smaller than Model 2 (AIC = 38.089). Based on Burnham and Anderson's (2002) suggestion that a smaller value of AIC represented a better model fit, as well as the consideration of model parsimony, the Model 3 (i.e., simplified model) was considered as the final model.

The standardized solution of the final model (i.e., Model 3) is presented in Figure 2. In summary, the findings indicated that both maternal responsiveness and demandingness predicted adolescent positive development via adolescent filial piety in poor Chinese single-mother families.

Discussion

The study attempted to examine the mediational pathways of filial piety in the influence of maternal responsiveness and demandingness on adolescent positive development in poor Chinese single-mother in Hong Kong. There are several unique features of the present study. First, poor Chinese single-mother families were selected as the targets of the study. This community is expanding in Hong Kong and the global contexts. Unfortunately, related studies of underprivileged families (e.g. poor families and single-parent families) were severely lacking in the Chinese contexts (Shek, 2010). Second, the perspective of positive development was employed in the study. Rather than focusing on the deficiencies of the single mothers, the study looked into the contributions of single-mothers in developing the adolescent developmental assets. Third, the study emphasizes the cultural uniqueness of the

Chinese socialization processes where familism and the interdependent dyadic relationship was stressed (Yeh and Yang 1997). Fourth, the study captured the perspectives of both parents and adolescents with both of them participating in a single study. Last but not the least, the measurement tools used in the study were indigenously developed for the Chinese and were validated in the Chinese communities.

Echoed with many studies related to parenting and adolescent development (e.g., Bean, Barber and Crane 2006; Chen, Liu and Li 2000; Cheung and McBride-Chang 2008), parental responsiveness was more influential in predicting adolescent positive development than was parental demandingness. As parental responsiveness entails the care, support and affection of parents to their adolescents (Maccoby and Martin 1983), adolescents show better development and psychosocial wellbeing under parental nurturance and support. This is especially salient in the mother-child dyads as Chinese mothers emphasize the relational goals of fostering an enduring mother-child relationship and sharing love and affection (Chao and Tseng 2002). However, although parental demandingness and control may bring benefits to adolescents by guiding and monitoring the children's behaviors (Maccoby and Martin 1983), parental strictness may result in adolescents' misbehaviors and pathologies when adolescents' innate needs of building self-identity and autonomy during the stage of adolescence are restricted (Metsäpelto and Pulkkinen 2003; Wenzlaff and Eisenberg 1998). Hence, it is reasonable that maternal responsiveness was more influential adolescent development in Chinese poor single-mother families.

It is illuminating to identify the indirect effects of filial piety in the influence of maternal responsiveness and demandingness on adolescent development in the poor Chinese single-mother families. Despite the tragedies and hardship that the Chinese single-mothers have experienced, they pay much emphasis on nurturing their children through responding to their needs, as well as setting clear rules and standards for their children to follow. By

demonstrating responsiveness and demandingness in parenting, a series of “psychosocial reactions” occur which enhance adolescent positive development. Allied with the Chinese socialization model (Yeh and Yang 1997; Yeh 2003; Yeh and Bedford 2003) where collective familism and interdependence was emphasized, maternal responsiveness and demandingness cultivated the sense of filial piety of adolescents. Filial piety served as a mediator that further enhanced adolescent positive development. This is especially insightful that filial piety indirectly linked maternal demandingness and adolescent positive development together in single-mother families. Even though mothers demonstrated demandingness and strictness to their children, adolescents built up filial piety and followed the rules and standards of mothers, which further enhanced adolescent psychosocial development.

There are several theoretical and practical implications of the present study. Theoretically, rather than employing a “pathological” paradigm that emphasizes the deficiency and inadequacies of single mothers, the study used a “positive development” paradigm to examine the positive role of single-mothers in nurturing their children. The study appreciates the “mother present” perspective instead of adopting the “father absent” perspective (Wordlaw-Stinson 2003). Moreover, the study examines the familial mediational pathway through which maternal responsiveness and demandingness influence adolescent positive development via filial piety in single-mother families. This helps in the construction of the family model that is applicable to the Chinese families in the face of adversity. Indeed, there are several distinctive features in the Chinese parenting, including the integration of maternal concern and restrictiveness in parenting and the development of filial piety. The present study shows how the Chinese family constructs are related with each other in enhancing adolescent psychosocial development. As suggested by Bornstein and Cheah (2006) that culture “plays a major overarching role in shaping the ecology of parenting and childhood” (p.3), it may shed new light on the development of indigenous Chinese family

models.

Practically, the study provides insights to helping professionals on how positive developmental attributes of adolescents from poor single-mother families can be enhanced. There is a need for the helping professionals to take a strengths-based as well as a family-based intervention approach in helping adolescents in single-mother families. Rather than emphasizing the deficits of single-mother families due to economic hardship and father's absence, they can focus on the contributions of mothers in nurturing and monitoring their children, as well as cultivation of filial piety of adolescents in response to their mothers' nurturance and guidance.

Although the study shows the positive influence of maternal responsiveness and demandingness on adolescent positive development via filial piety, helping professionals should be sensitive to the anticipated stresses of the mothers and the adolescents in poor single-mother families. First, the single mothers who shoulder dual parental roles on caring and monitoring of their children may show great stresses in parenting (Shek 2008). This may further affect their psychological well-being. Mutual aid groups and informal supportive networks among single mothers should be strengthened. Second, adolescents who are driven by filial piety may exhibit feelings of guilt and shame if they fail to perform well (Bempechat, Graham and Jimenez 1999). Thus, it is essential for helping professionals to take care of the psychological well-being of the adolescents when they have stresses and negative emotions. Last but not the least, to facilitate single mothers to perform the parental roles and enhance adolescents' motivation to excel themselves, tangible (e.g. free or low-cost tutoring) and intangible (enhancing family support) resources should be considered for the families. Rice (2001) strongly suggested that family social policies should support rather than penalize the choices of single-mother families. In recent years, the development of community social capital has helped poor families in building their human and social assets, which is especially

essential for single-parent families. Mentorship schemes and asset-building programs (e.g., Child Development Fund) should be promoted.

There are several limitations of the study. First, the problem of cross-sectional research design in inferring cause-and-effect relationships due to the lack of time order should be recognized. Hence, a longitudinal research design is recommended for future studies. Second, the limitation of purposive sampling should be noted. As families were not randomly sampled, the generalizability of the findings may be in question. Third, as the findings presented in the study were based on single-mother families experiencing economic disadvantage in Hong Kong, there is a need to assess the generalizability of the findings in different Chinese communities (e.g. mainland China) and Chinese people living in non-Chinese communities (e.g. Chinese-Americans). Besides, whether the present findings in the Chinese contexts can be generalized to other ethnic groups deserves further consideration. Finally, instead of looking at the hypothesized model in different types of parents, the present study regarded parental responsiveness and demandingness as continuous variables. Although this approach has been used in previous studies and legitimate, future studies with a large sample should examine this issue.

Despite the limitations, this study is the first known scientific study that examined the familial pathways of filial piety in the influence of maternal parenting style (maternal responsiveness and demandingness) on adolescent positive development in poor Chinese single-mother families. Essentially, the study provides empirical support to Anderson's (2003) remark that "their [single-parents'] homes are not 'broken', their lives are not miserable, and their children may have problems, but most eventually thrive" (p.123). It illuminates our understanding of the roles of Chinese single mothers in shaping their children's development.

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Table 1. Descriptive statistics of measuring variables ($N = 372$)

	Measuring variables	Range	Mean	SD	Skewness	Kurtosis	Cronhach's Alpha
Mother	Maternal responsiveness	0-22	17.082	2.815	-0.481	-0.084	0.655
	Maternal demandingness	0-18	12.924	2.589	-1.005	0.564	0.664
Adolescent	Filial piety	25-125	91.523	12.589	0.032	0.269	0.911
	Positive development	20-123	91.382	16.164	-0.451	0.313	0.940
	Age	11-16	13.446	1.636	0.040	-1.176	N.A.

Table 2. Correlation matrix of the observed variables

	1	2	3	4	5
1. Age of adolescents	1.00				
2. Maternal responsiveness	-0.068	1.00			
3. Maternal demandingness	-0.256***	0.381***	1.00		
4. Adolescent filial piety	-0.189***	.0235***	0.240***	1.00	
5. Positive development	-0.074	0.140**	0.147**	0.501***	1.00

** $p < 0.01$, *** $p < 0.001$

Table 3: Direct and indirect effects of influences of parenting responsiveness and demandingness to adolescent positive development

		Effects	Estimate (standardized)	BC (95% CI)	
				Lower	Upper
1.	Parenting responsiveness → Adolescent positive development	Direct	0.016	-0.560	0.717
2.	Parenting demandingness → Adolescent positive development	Direct	0.023	-0.401	0.613
3.	Parenting responsiveness → Adolescent filial piety → Adolescent positive development	Indirect	0.085**	0.191	0.823
4.	Parenting demandingness → Adolescent filial piety → Adolescent positive development	Indirect	0.067*	0.094	0.767
Total Indirect effect		Total	0.181**	0.398	1.914

* $p < .05$, ** $p < 0.01$, *** $p < .001$

Table 4: Goodness-of-fit indices of different tested models

Model No.	Influences	Model	χ^2	df	NFI	CFI	RMSEA
1	Maternal responsiveness, maternal demandingness → adolescent positive development	Model 1 (Direct Influence Model)	2.379	2	0.975	0.996	0.023
2	Maternal responsiveness, maternal demandingness → filial piety → adolescent positive development	Model 2 (Full Model)	2.089	2	0.991	1.000	0.011
3	Maternal responsiveness, maternal demandingness → filial piety → adolescent positive development	Model 3 (Simplified Model, omitted the direct effect)	2.587	4	0.989	1.000	0.000

Figure 1: The hypothetical model of the study

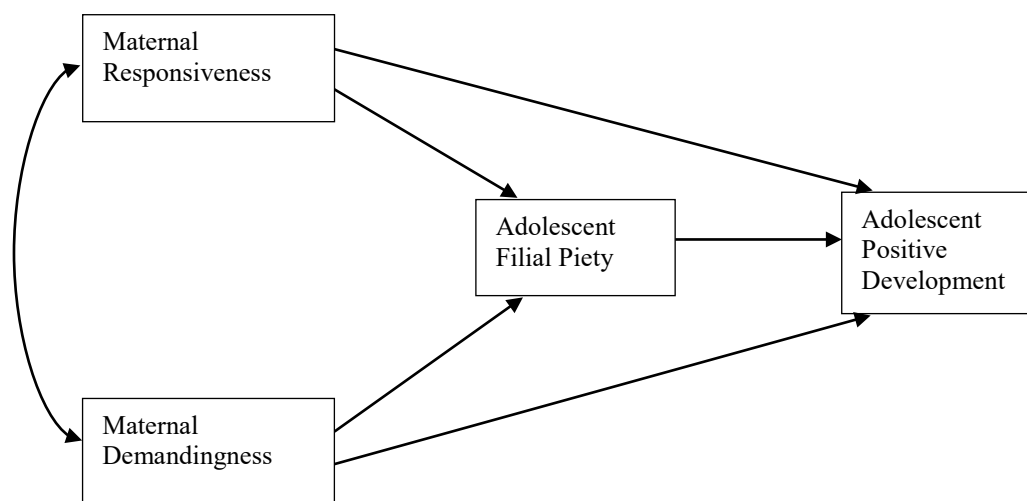
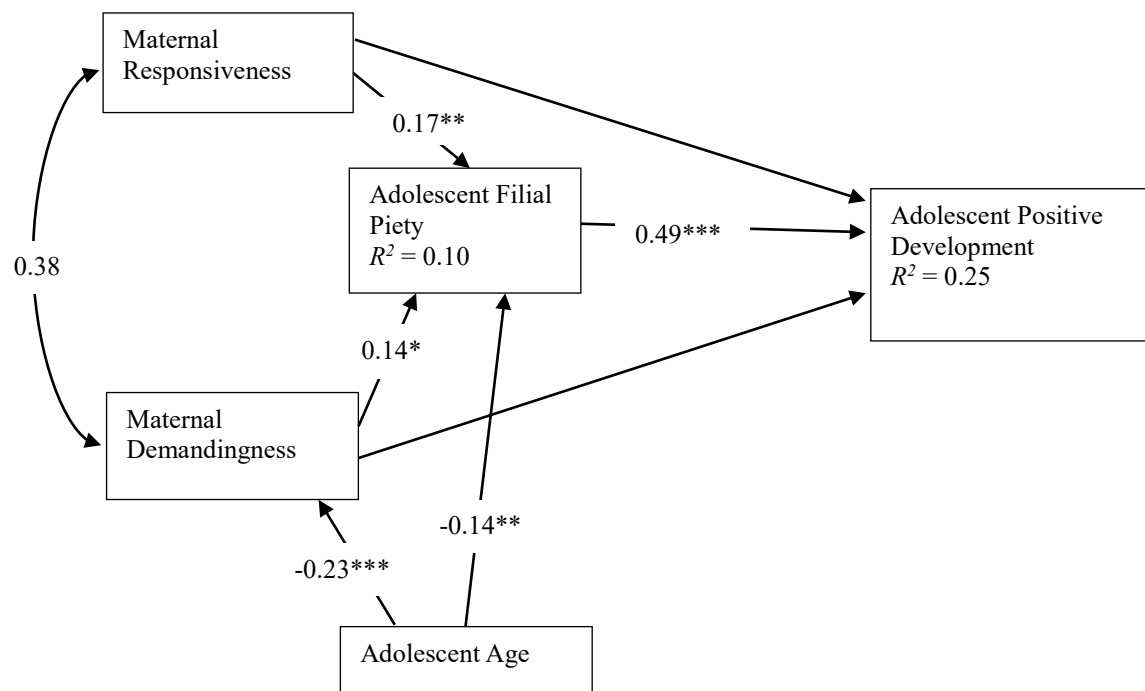


Figure 2: The final model of the study



* $p < .05$, ** $p < 0.01$, *** $p < .001$

$\chi^2(4) = 2.583, p > 0.05$
 $\chi^2/df = 0.647$
 NFI = 0.989
 CFI = 1.000
 RMSEA = 0.000