

## **Perceived Family Life Quality in Junior Secondary School Students in Hong Kong**

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## **Abstract**

The present longitudinal study examined perceived family functioning and related socio-demographic correlates from the perspective of adolescents in Hong Kong. Results showed that adolescent perceptions of family functioning based on different indicators gradually deteriorated over time. Regarding the socio-demographic correlates, (a) boys had more favourable perceived family functioning than did girls; (b) adolescents from non-intact families had poorer perceived family functioning than those from intact families; and (c) economically disadvantaged adolescents had poorer perceived family functioning than non-economically disadvantaged adolescents. Results also revealed that adolescents' perceived family functioning was positively related to positive youth development. Analyses further indicated that perceived family functioning and positive youth development were concurrently and longitudinally related.

Keywords: Family life quality, Family functioning, Positive youth development, Adolescents, Economically disadvantaged

## 1 Introduction

Ecological systems theory has been adopted to understand human development. According to this approach, inter-related systems of environment (i.e., micro-, meso-, macro-, exo-) interact and function to impact on children and adolescents' development (Bronfenbrenner 1986; Maccoby and Martin 1983). Researchers, developmental psychologists, and educational practitioners, have come to the consensus that family, as a microsystem, is an influential factor impacting on adolescent development. Family functioning is a complex phenomenon. It refers "to the quality of family life at the systemic and dyadic levels and concerns wellness, competence, strengths, and weaknesses of a family" (Shek 2002a, p. 497). Quality of family life can be conceptualized and operationalized in numerous ways, but across different operationalizations, findings suggest that it impacts the wellbeing of members within a family system (Walsh 1993). According to Siu and Shek (2005), quality of family life can be conceived in terms of systemic family functioning (e.g., family climate and global communication among the family members) and dyadic relationships within the family (e.g., quality of relationships between husband and wife, and parent-child relationships). Family functioning has been commonly used as an indicator of family life quality (Shek 2008a; Shek and Lee 2007). Contrastingly, clinical literature on family therapy focuses on investigating "family malfunctioning" which is characterized by enmeshment, dysfunctional communication, and lack of family rules. Although studies on malfunctioning families have provided much theoretical addition to the family pathology literature, they have been critiqued for their heavy focus on the dark side of families. In 1993, therefore, Walsh

highlighted the importance of investigating family functioning in healthy families, rather than focusing merely on disruptive families.

Different systemic models propose their distinctive family functioning attributes. For instance, Beavers Systems Model (Beavers and Hampson 1990) outlines that clear boundaries, contextual clarity, relatively equal power and the process of intimacy, autonomy, joy and comfort in relating, skilled negotiation, and significant transcendental values are attributes pertinent to healthy family functioning. The Circumplex Model (Olson et al. 1989) recognizes family cohesion, adaptability, and communication as crucial family functioning elements. Lastly, the McMaster Family Functioning Model (Epstein et al. 1993) delineates problem solving, communication, roles, affective responsiveness, affective involvement, and behavioral control as factors associated with healthy family functions. Although there are different emphases in each of the models, an integration of the literature reveals common attributes among them, such as communication, mutual respect, mutual care and family rules. While the above-mentioned family functioning models serve as useful conceptual and methodological tools for understanding and assessing family functioning, they are mainly developed in the West. As argued by Walsh (1993), there is a need to understand family functioning in different populations and ethnic groups. With particular reference to the Chinese culture, the influence of Confucian, Buddhist, and Taoist philosophies may shape the “optimal” functions of the family. For example, the emphasis on filial piety and the authority of parents in Confucian teachings may constitute an important dimension of family functioning (Shek 2002c).

To understand the views of family functioning in Chinese people, Chinese parents (N = 416) and their adolescent children (N = 412) participated in a qualitative study where they were invited to give their views on the attributes of a happy family (Shek 2001). Utilizing family systems theory framework for analyses, the findings showed that Chinese views on family functioning were related to (a) the family as a whole, (b) the parent–child subsystem, and (c) the husband–wife subsystem. Results also revealed that Chinese parents and their children regarded harmony, mutuality, and the absence of conflict as important attributes of a happy family; some attributes intrinsic to Western theories of family functioning (e.g., emotional expressiveness) were mentioned less as being attributes of a happy family.

Based on an integration of the work of Shek (2001) and a thorough review of the literature, Shek (2002c) developed the Chinese Family Assessment Instrument (C-FAI). C-FAI consists of 33 items that measure family functioning in five dimensions, namely, mutuality, communication, conflict, parental concern, and parental control. The first dimension is “mutuality” which refers to mutual care, concern, and respect among the family members. The second dimension is “communication” which refers to the amount of exchange and closeness among family members. The third dimension is “conflict” which refers to the intensity of quarrels, arguments, tension and peace among the family members. The fourth dimension is “parental concern” which refers to support provided by the parents to the children. The final dimension is “parental control” which refers to control exerted by parents on the children. Strong support for reliability, concurrent validity, and factorial validity of the five-factor C-FAI was found. Shek and Ma (2010a) further showed that these

five primary factors were subsumed under two higher-order factors (i.e., family interaction and parenting).

Family functioning could be influenced by intra-familial factors, such as gender of the child, economic situation, and family intactness (Cohen 1994; Poole et al. 1986; Shek 2008a). In the Chinese culture, family, being the primary source of identity is expected to play a particularly important role in adolescent development (Shek 2006); however, very few studies have actually investigated family functioning in the Chinese context (Shek 2010; Shek et al. 2005). A literature search on “family functioning” and “adolescence” in five major databases resulted in very few numbers of papers (Table 1), which lends further support to this observation.

**Table 1** Literature search results based on five major databases (25 February 2013)

Database and search terms	Search anywhere		Search as keywords/in abstract	
	All publications	Peer-reviewed Journals	All publications	Peer-reviewed Journals
PsycINFO (1806+)				
“Family functioning” and “adolescence”	1,923	1,356	898	656
“Family functioning” and “adolescence” and “Hong Kong”	41	33	18	15
“Family functioning” and “adolescence” and “China”	28	21	10	7
“Family functioning” and “adolescence” and “Taiwan”	7	4	2	1
Sociological abstracts (1963+)				
“Family functioning” and “adolescence”	89	78	3	2
“Family functioning” and “adolescence” and “Hong Kong”	6	6	0	0
“Family functioning” and “adolescence” and “China”	2	2	0	0
“Family functioning” and “adolescence” and “Taiwan”	0	0	0	0
Social work abstracts (1965+)				
“Family functioning” and “adolescence”	17	14	5	3
“Family functioning” and “adolescence” and “Hong Kong”	0	0	0	0
“Family functioning” and “adolescence” and “China”	0	0	0	0
“Family functioning” and “adolescence” and “Taiwan”	0	0	0	0
Medline (1965+) via EbscoHost				
“Family functioning” and “adolescence”	132	132	81	81
“Family functioning” and “adolescence” and “Hong Kong”	2	2	0	0
“Family functioning” and “adolescence” and “China”	0	0	0	0
“Family functioning” and “adolescence” and “Taiwan”	0	0	0	0
CINAHL database (1982+)				
“Family functioning” and “adolescence”	821	755	11	9
“Family functioning” and “adolescence” and “Hong Kong”	15	15	0	0
“Family functioning” and “adolescence” and “China”	13	13	0	0
“Family functioning” and “adolescence” and “Taiwan”	8	7	0	0

Figures in the table are number of papers

Adolescence is an important stage for socialization and identity formation. As girls are socialized to be more family-oriented (Thompson and Walker 1989), whereas boys are expected to be more independent and autonomous (Papini and Micka 1991; Russell and Russell 1987), it was assumed that adolescent boys and girls would have different perceptions of family functioning. Unfortunately, empirical support for this hypothesis is far from clear. Although some studies showed that boys perceived their family functioning to be less cohesive (Noller and Callan 1986) and their family life to be less satisfying (Benson et al. 1995), others found that boys perceived their families to be more cohesive (Poole et al. 1986) and were less susceptible to depressive symptoms (Davies and Windle 2001). In some studies, the support for gender difference was not conclusive or with small effect size even if it existed (Shek 1997, 1998, 2002a). Hence, more thorough research is needed before we could obtain a comprehensive picture of gender difference in adolescents' perceived family functioning.

Economic situation of the family also plays an important role in family life because it is essential to the health and well-being of the family members. According to the family investment model (Conger et al. 2010), families with economic prosperity are able to make investment that serves the purpose of family development. As noted by Masten et al. (1999), "high family-based adversity could reflect or hinder the quality of family functioning as a source of protection for children" (p. 147). In addition, raising children in an economically disadvantaged family is often associated with problematic extrafamilial environment, such as poor health care, inadequate educational systems, rare prosocial role models, inaccessible welfare and support agencies, and frequent exposure to organized antisocial peer groups and



their adverse impact (Jessor 1993). Different pathways of how economic disadvantage influences families functioning of adolescent children have been identified. According to the family stress model (Conger et al. 2000), economic disadvantage may exert its influence on the psychological well-being of the parents or exacerbate the dyadic relationships within the family, such as parent–child relationship, spouse relationship and parenting (Cox and Paley 1997; Shek 2008a). The coercive family process model suggests that economic stress might trigger a negative reinforcement mechanism in the family. For example, one may use hostile behaviors to control another family member (Patterson 1982; Robinson and Jacobson 1987).

Finally, family intactness and family functioning are closely linked to each other. On one hand, divorce or disharmonious spouse relationship often results in poor family functioning (Johnson et al. 1999). On the other hand, divorce is usually considered to be a positive solution to destructive family functioning (Hetherington and Stanley-Hagan 2003). While some studies showed that intact families and non-intact families did not differ in terms of family functioning (Bernstein and Borchardt 1996), family dysfunction (Bernstein et al. 1990) or functional family problems (Harris et al. 1999), the family systems theorists argued that parental divorce or separation might cause severe disruption of the family ecological system, which might in turn adversely affect parenting processes (Wagner and Reiss 1995; Walsh 1993). This notion is supported by findings showing that single-parent families were perceived to be less cohesive (Cohen 1994) and that adolescents from single-parent family tended to have more frequent angry disagreements and conflicts with their parents than those from two-parent families (MacKinnon 1989; Walker and Hennig 1997).

In addition to investigating the socio-demographic correlates of family functioning, another question that should be addressed is whether family functioning has any impact on positive youth development. Positive youth development approach focuses on the strengths, potentials, and talents of children and adolescents instead of being preoccupied with finding their deficits and pathologies (Damon 2004). Positive youth development researchers have argued that developmental assets (Benson et al. 1997) and psychosocial competencies (Weissberg et al. 1989) are important for holistic youth development. In a detailed review of the effective positive youth development programs in the United States, Catalano et al. (2004) argued that the following positive youth development attributes contribute to youth development. These attributes include psychosocial competencies (cognitive competence, emotional competence, social competence, behavioral competence, and moral competence), bonding, resilience, self-determination, self-efficacy, positive identity, spirituality, beliefs in the future, prosocial norms, opportunities for prosocial involvement, and recognition for positive behavior.

A survey of the literature shows that there are very few objective tools on positive youth development in different Chinese contexts. Based on the review of Catalano et al. (2004), Shek et al. (2007) formed an assessment framework and developed the Chinese Positive Youth Development Scale (CPYDS). Adopting a contrasted group design, Shek and Ma (2010b) conducted a validation study to examine the reliability, criterion-related validity and construct validity of the CPYDS and its subscales. Utilizing confirmatory factor analyses, the authors showed that there was empirical support for the 15 dimensions of the CPYDS which were subsumed under four higher-order factors, including cognitive-behavioral

competencies, prosocial attributes, positive identity and general positive youth development qualities.

Not only are adolescents, themselves, responsible and influential during the course of nurturing these positive youth development constructs, family members also play an important role. For instance, it is likely that both the parent–child dyad and spousal dyad within the family interact with each other and collectively impact on adolescents' development (Cigoli and Scabini 2006). Family theorists (e.g., Beavers and Hampson 1990), commonly postulate that family functioning influences the adjustment of individual family members, including children and adolescent members (e.g., Combrinck-Graham 1990; Papero 1990). Empirically, family functioning has been found to be negatively related to adolescent social and emotional problems (Gilman 2001; Shek 2002a; Valois et al. 2001). Unfortunately, very few studies have examined the influence of family functioning on positive youth development, particularly, on constructs such as resilience, psychosocial competencies, spirituality and prosocial behavior. Furthermore, it is expected that adolescents with better positive development (such as having higher psychosocial competencies) may interact more effectively with their parents and siblings, thus contributing to a higher level of family functioning. For example, Shek (1998) found that adolescent life satisfaction and purpose in life were positively associated with family functioning over time. Although research in positive youth development is gaining its prominence, there remain few studies investigating the relationship between family functioning and positive youth development, particularly in the Chinese context.

The present study addressed the following questions concerning Hong Kong adolescent perceptions of family functioning: (1) Are there any changes in adolescent perceived family functioning in junior secondary school years? (2) What are the socio-demographic correlates (gender, economic disadvantage, intactness of family) of perceived family functioning? (3) What is the relationship between positive youth development and family functioning over time? Both cross-sectional and longitudinal analyses were used to answer the above questions.

The developmental trend of perceived family functioning is closely related to developmental changes. Apart from changes in sexual and aggressive behaviors, changes in friends and school environment might present extra challenges and stress to the adolescents. In addition, adolescents' increasing demands for freedom may cause them to distant themselves from their family and lead to less family cohesion (Alessandri and Wozniak 1989; Feldman and Gehring 1988). In several studies, it was found that there was a negative association between grade and family functioning (Shek 2002b, 2008b). Therefore it was expected that students' perceptions of family functioning would deteriorate over time (Hypothesis 1).

For the socio-demographic correlates of perceived family functioning, three hypotheses would be tested in the current study. Although support for gender difference was not conclusive in the Western literature, gender differences in family experiences do exist in the Chinese culture. Since the concept of family is embedded in the positive identities of Chinese people (Ho 1996; Lee et al. 2006), pursuing one's own autonomy during the development of

one's identity does not mean alienating from one's family, even for boys, as some of the studies assumed (Benson et al. 1995; Noller and Callan 1986). Moreover, given that gender roles in the traditional Chinese culture were more rigidly defined in terms of marital and family roles for females than for males, family functioning should be more closely linked to adolescent adjustment for girls than for boys (Shek 1997). Therefore, the negative effect of maladjustment on family functioning would be more pronounced in adolescent girls than boys. In addition, boys are less sensitive or reactive to family emotional climate and stressful events (Eisenberg et al. 1992; Jaycox and Repetti 1993) and tend to engage in less frequent interpersonal conflicts than do girls (Chung et al. 2009; Collins and Russell 1991; Shearer et al. 2005). Therefore, it was expected that because boys are less affected by the negative events in the family, they would have better perceived family functioning than girls (Hypothesis 2a).

Regarding the impact of economic disadvantage, according to the family investment model (Conger et al. 2010), it was expected that economically disadvantaged adolescents would perceive their family functioning to be less favorable than would non-economically disadvantaged adolescents (Hypothesis 2b). With reference to the impact of family intactness on adolescent development, based on literature reviewed above (Cohen 1994; MacKinnon 1989; Walker and Hennig 1997), it was expected that adolescents growing up in non-intact families would have less favorable perceived family functioning than would those in intact families (Hypothesis 2c).

Finally, as family functioning is closely related to youth development (Gilman 2001; Shek 2002a; Valois et al. 2001), it was expected that perceived family functioning would be positively associated with positive youth development attributes at different time points (Hypothesis 3).

## **2 Method**

### **2.1 Participants and Procedure**

In this study, three waves of data from a large-scale longitudinal study on youth development and family situations in Hong Kong were used. All secondary 1 students in 28 secondary schools, which were randomly selected from all secondary schools in Hong Kong, were invited to participate in the study in the school year of 2009/2010. All participants responded to a comprehensive youth development questionnaire, which included both existing instruments and scales developed by the first author. All instrument scales were in a self-administered format. A trained research assistant was present during the administration period. The first wave was conducted in 2009/2010, and 3,325 adolescents participated. The second assessment was conducted 1 year after the first assessment, in which the students were asked to respond to the same questionnaire at Wave 1, and 3,638 adolescents participated. The third assessment was conducted 1 year after the second assessment, and 4,106 adolescents participated. As there were students absent from the administration and there were new students joining the study throughout the years, the numbers of respondents in different waves were not the same. A total of 2,667 students completed the questionnaire at

all three waves of data collection. School, parental and student consent had been obtained before data collection.

## **2.2 Instruments**

At each wave of data collection, participants responded to a standardized questionnaire in a self-administered format. The questionnaire used in this study comprises questions about participants' demographic information, participants' family environment (family functioning and parental control), different measures of youth development constructs and adolescent problem behaviors. Instruments that were related to the present paper are introduced below.

### *2.2.1 Chinese Family Assessment Instrument (CFAI)*

The simplified version of the Chinese Family Functioning Assessment Instrument developed by the first author was used to measure various aspects of family functioning, with three items each, including family mutuality (CFAIM), family conflict (CFAIC) and family communication (CFAICOM). As the dimensions of parental control and parental concern were included in other measures of the study, the related items were not used in this study.

On a 5-point scale, the participants indicated the extent to which they found the statements to resemble their own family situation from 1 (Very Dissimilar) to 5 (Very Similar). Higher scores indicated higher qualities of perceived family functioning. Reliability analyses showed that the scale was considerably reliable with Cronbach's  $\alpha$  of .90 across the three waves. For family mutuality and family communication, mean scores were computed and included in the

following analyses. For family conflict, mean score was computed after the score for each item was reverse coded, with higher score indicating lower level of family conflict.

### *2.2.2 Chinese Positive Youth Development Scale (CPYDS)*

Adolescent development based on various positive youth development constructs was measured by a scale developed by the first author, the CPYDS. It consists of 15 subscales that embrace 15 aspects of positive youth development. All constructs were measured by three items on a 6-point scale, except for the construct of Spirituality (7-point scale).

Multigroup confirmatory factor analyses (Shek and Ma 2010b) showed that the 15 factors could be loaded on four higher-order factors, including cognitive-behavioral competencies (CBC), prosocial attributes (PA), positive identity (PIT) and general positive youth development qualities (GPYDQ). In this study, the mean score of each higher-order factor was used with higher scores indicating higher levels of development within that domain.

Reliability analyses showed that the scale was considerably reliable with Cronbach's  $\alpha$  of .96 across the three waves.

To assess economic disadvantage, students were asked to indicate whether their families were receiving Comprehensive Social Security Allowance (CSSA). In Hong Kong, families receiving CSSA obtain welfare money from the Government and this condition is commonly used to define economic disadvantage. Besides, for families experiencing economic hardship such as low-income families, their children can apply for textbook allowance. If the family of the student received CSSA or textbook allowance, the student was regarded as experiencing



economic disadvantage. This conception of economic disadvantage has been used in many studies by the first author (Shek 2008a; Shek and Lee 2007).

### **3 Results**

The students' responses to the nine items of the CFAI are presented in Table 2. Specifically, we focus on the negative responses because we believe they are more indicative of the quality of perceived family functioning by the participants. Several observations could be drawn from data reported in Table 2. First, concerning family mutuality, across the three waves, 5.8–8.7 % of the students perceived their families as not having attributes of mutuality in terms of loving each other, cohesiveness and getting along well. Second, the situation was worrying in the family conflict aspect. The students reported that there was little care (6.7–9.5 %) or harmony (8.5–11.3 %) among family members. More strikingly, up to one-fourth of the students perceived frequent conflicts within the family. Third, the negative perceptions of family functioning could also be shown in the lack of communication in the family. Specifically, the students reported that their parents did not understand (18.7–24.1 %) or talk to them (16.7–19.2 %). Fourth, among all the items, percentage of negative responses

increased across the 3 years.

**Table 2** Frequency and percentage of responses to the items of family functioning

	Frequency and percentage of “negative responses” (i.e., “Slightly Dissimilar” and “Very Dissimilar”)					
	W1		W2		W3	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Family mutuality</b>						
Family members love each other	273	5.8	344	7.3	375	7.9
Family members are cohesive	336	7.1	414	8.7	413	8.7
Family members get along well	298	6.3	378	8.0	361	7.6
<b>Family conflict<sup>a</sup></b>						
Family members don’t care about each other	316	6.7	367	7.7	449	9.5
There is much friction among family members	867	18.3	939	19.8	1,118	23.6
The family lack of harmony among family members	404	8.5	459	9.7	535	11.3
<b>Family communication</b>						
Family members are united	345	7.3	391	8.3	451	9.5
Parents understand children’s mind	884	18.7	1,052	22.2	1,140	24.1
Parents often talk to children	792	16.7	832	17.6	910	19.2

<sup>a</sup> Reverse coded scores for items of family conflict were used

Concerning whether there was change in perceived family functioning over time, repeated measure MANOVAs with different waves being the within-subject factor were conducted for family mutuality, family conflict, and family communication scores, respectively. For family mutuality, the change over time was significant [Wilks’ Lambda = .995,  $F(2, 2507) = 6.61$ ,  $p < .01$ ,  $\eta^2 p = .005$ ]. Further pairwise comparisons showed that the difference lied at Wave 1 and Wave 2. Specifically, the students scored higher at Wave 1 ( $M=3.91$ ,  $SD=.88$ ) than at Wave 2 ( $M=3.85$ ,  $SD=.88$ ). Other differences were not significant. For family conflict, the change over time was significant [Wilks’ Lambda = .989,  $F(2, 2515) = 13.51$ ,  $p < .01$ ,  $\eta^2 p = .011$ ]. Further pairwise comparisons showed that the difference lied at Wave 1 and Wave 2 as well as in Wave 1 and Wave 3. Specifically, students scored higher at

Wave 1 ( $M = 3.86$ ,  $SD = .88$ ) than Wave 2 ( $M = 3.78$ ,  $SD = .91$ ); they scored higher at Wave 1 ( $M = 3.86$ ,  $SD = .88$ ) than at Wave 3 ( $M = 3.77$ ,  $SD = .90$ ). However, scores at Wave 2 and Wave 3 were not significantly different. For family communication, the change over time was significant [Wilks' Lambda = .995,  $F(2, 2570) = 7.02$ ,  $p < .01$ ,  $\eta^2 p = .005$ ]. Further pairwise comparisons showed that the difference lied in Wave 1 and 2, Wave 1 and 3. Specifically, the students scored higher at Wave 1 ( $M = 3.52$ ,  $SD = .99$ ) than at Wave 2 ( $M = 3.46$ ,  $SD = .94$ ); they scored higher at Wave 1 ( $M = 3.52$ ,  $SD = .99$ ) than at Wave 3 ( $M = 3.47$ ,  $SD = .91$ ). Scores at Wave 2 and Wave 3 were not significantly different. Generally speaking, perceived family functioning deteriorated over time which gave support to Hypothesis 1.

For the socio-demographic correlates of perceived family functioning, three repeated measure MANOVAs with each social demographic variable, namely gender, economic disadvantage and intactness of families (between-subject factors), and waves (within-subject factor) were performed on the three dimensions of family functioning, respectively. For gender, the result from repeated measure MANOVA showed that boys scored higher in all family functioning aspects but family conflict, which partially supported the Hypothesis 2b instead of 2a. In particular, the boys scored higher than the girls in family mutuality [ $F(1, 2482) = 7.86$ ,  $p < .01$ ,  $\eta^2 p = .003$ ]. This gender effect disappeared as they entered higher grades, as indicated by the significant interaction between wave and gender [Wilks' Lambda = .996,  $F(2, 2481) = 5.13$ ,  $p < .01$ ,  $\eta^2 p = .004$ ]. Post hoc comparisons using Bonferroni Test showed that gender difference was only significant at Wave 1 and Wave 2, but not at Wave 3. Similar results were found for family communication with the boys scoring significantly

higher than the girls [ $F(1, 2542) = 28.29, p < .01, \eta^2 p = 011$ ]. This gender effect disappeared as the students entered higher grades, as indicated by the significant interaction between wave and gender [Wilks' Lambda = .995,  $F(2, 2541) = 6.80, p < .01, \eta^2 p = 005$ ]. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. No gender related effect was found for family conflict across the three waves.

The related findings are presented in Table 3.

**Table 3** Perceived family functioning measures, by socio-demographic variables

Variable	Wave 1 family functioning			Wave 2 family functioning			Wave 3 family functioning		
	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM
<b>Gender</b>									
Boys	3.97 (.83)	3.84 (.89)	3.62 (.95)	3.91 (.84)	3.78 (.93)	3.57 (.91)	3.88 (.83)	3.76 (.90)	3.52 (.88)
Girls	3.85 (.93)	3.88 (.87)	3.43 (1.02)	3.80 (.91)	3.78 (.89)	3.35 (.96)	3.86 (.86)	3.77 (.90)	3.42 (.94)
Significant level	$p < .01$	<i>ns</i>	$p < .01$	$p < .01$	<i>ns</i>	$p < .01$	<i>ns</i>	<i>ns</i>	$p < .01$
<b>Economic disadvantage</b>									
Non-disadvantage	4.01 (.85)	3.95 (.86)	3.63 (.97)	3.93 (.84)	3.84 (.90)	3.54 (.92)	3.97 (.81)	3.85 (.87)	3.57 (.88)
Disadvantage	3.82 (.90)	3.77 (.89)	3.42 (1.01)	3.78 (.91)	3.73 (.91)	3.37 (.95)	3.79 (.87)	3.69 (.93)	3.38 (.93)
Significant level	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$
<b>Family intactness</b>									
Non-intact	3.54 (.94)	3.51 (.90)	3.18 (1.04)	3.51 (.92)	3.53 (.92)	3.20 (.93)	3.56 (.89)	3.48 (.95)	3.21 (.90)
Intact	3.97 (.86)	3.91 (.86)	3.58 (.98)	3.91 (.86)	3.82 (.90)	3.50 (.93)	3.93 (.82)	3.82 (.88)	3.52 (.91)
Significant level	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$

Students whose family had received the Comprehensive Social Security Assistance (CSSA) or the text book allowance (Shek 2005) in at least one of the three waves were defined as the economically disadvantaged group ( $n = 1,628$ ). The remaining students were defined as the non-economically disadvantaged group ( $n = 1,660$ ). Confirming Hypothesis 3, the results from repeated measure MANOVA with economic disadvantage being the between-subject factor showed that all three dimensions of family functioning were significantly affected by economic disadvantage. For family mutuality (CFAIM), the economically disadvantaged group scored significantly lower than the non-economically disadvantaged group [ $F(1, 2507) = 35.36, p < .01, \eta^2 p = 014$ ]. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. For

family conflict (CFAIC), the economically disadvantaged group scored significantly lower than the non-economically disadvantaged group [ $F(1, 2515) = 27.80, p < .01, \eta^2 p = .005$ ]. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. For family communication (CFAICOM), the economically disadvantaged group scored significantly lower than the noneconomically disadvantaged group [ $F(1, 2570) = 34.79, p < .01, \eta^2 p = .013$ ]. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. The related findings are presented in Table 3.

**Table 3** Perceived family functioning measures, by socio-demographic variables

Variable	Wave 1 family functioning			Wave 2 family functioning			Wave 3 family functioning		
	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM
<b>Gender</b>									
Boys	3.97 (.83)	3.84 (.89)	3.62 (.95)	3.91 (.84)	3.78 (.93)	3.57 (.91)	3.88 (.83)	3.76 (.90)	3.52 (.88)
Girls	3.85 (.93)	3.88 (.87)	3.43 (1.02)	3.80 (.91)	3.78 (.89)	3.35 (.96)	3.86 (.86)	3.77 (.90)	3.42 (.94)
Significant level	$p < .01$	<i>ns</i>	$p < .01$	$p < .01$	<i>ns</i>	$p < .01$	<i>ns</i>	<i>ns</i>	$p < .01$
<b>Economic disadvantage</b>									
Non-disadvantage	4.01 (.85)	3.95 (.86)	3.63 (.97)	3.93 (.84)	3.84 (.90)	3.54 (.92)	3.97 (.81)	3.85 (.87)	3.57 (.88)
Disadvantage	3.82 (.90)	3.77 (.89)	3.42 (1.01)	3.78 (.91)	3.73 (.91)	3.37 (.95)	3.79 (.87)	3.69 (.93)	3.38 (.93)
Significant level	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$
<b>Family intactness</b>									
Non-intact	3.54 (.94)	3.51 (.90)	3.18 (1.04)	3.51 (.92)	3.53 (.92)	3.20 (.93)	3.56 (.89)	3.48 (.95)	3.21 (.90)
Intact	3.97 (.86)	3.91 (.86)	3.58 (.98)	3.91 (.86)	3.82 (.90)	3.50 (.93)	3.93 (.82)	3.82 (.88)	3.52 (.91)
Significant level	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$	$p < .01$

For family intactness, students whose parents were in the states other than married (i.e., “divorced but not remarried”, “separated but not remarried” or “others”) in at least one of the three waves were defined as the non-intact family group ( $n = 703$ ). The remaining students were defined as the intact family group ( $n = 2,585$ ). The results from repeated measure MANOVA with family intactness being the between-subject factor indicated that all three aspects of family functioning were significantly affected by family intactness, which lent support to Hypothesis 4. For family mutuality (CFAIM), the non-intact family group scored lower than the intact family group [ $F(1, 2507)=93.30, p<.01, \eta^2 p = .036$ ]. This

difference was consistently observed during three waves. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. For family conflict (CFAIC), the non-intact family group scored lower than the intact family group [ $F(1, 2515) = 71.88, p < .01, \eta^2 p = .028$ ]. This difference was consistently observed during three waves. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. For family communication (CFAICOM), the non-intact family group scored lower than the intact family group [ $F(1, 2570) = 54.71, p < .01, \eta^2 p = .021$ ]. This difference was consistently observed during three waves. Post hoc comparisons using Bonferroni Test showed that this difference was significant throughout all three waves. The related findings are presented in Table 3.

Further multiple regression analyses showed that the linear combination of gender, economic disadvantage and family intactness significantly predicted perceived family functioning at Wave 1 [ $F(3, 3094) = 46.88, p < .01$ ; Cohen's  $f^2 = .045$ ], Wave 2 [ $F(3, 2724) = 31.46, p < .01$ ; Cohen's  $f^2 = .034$ ] and Wave 3 [ $F(3, 2712) = 29.48, p < .01$ ; Cohen's  $f^2 = .033$ ] with economic disadvantage and family intactness being the stronger predictors ( $b_{\text{economic disadvantage}}$  ranging from  $-.069$  to  $-.096$ ,  $b_{\text{family intactness}}$  ranging from  $.139$  to  $.172$  across the three waves) and gender being the weaker predictor ( $b_{\text{gender}} = -.054$  at Wave 2; insignificant at other two waves). In summary, students from non-intact or economically disadvantaged families or female students tend to perceive their family functioning to be poorer.

To investigate the relationship between positive youth development (PYD) and perceived family functioning (CFAI), zero-order and partial correlations were conducted on the two sets of variables at the three waves. Potential reciprocal relationship between PYD and CFAI was also explored. The related findings are presented in Table 4. Concurrent correlation coefficients for the link between perceived family functioning and positive youth development at Waves 1, 2 and 3 are reported in Table 4. The findings revealed that across all the three waves, all three dimensions of family functioning (CFAIM, CFAIC and CFAICOM) were positively correlated with all four dimensions of positive youth development (CBC, PA, GPYDQ and PIT).

**Table 4** Correlations among measures of adolescent perceived family functioning and indicators of adolescent positive youth development

Positive youth development	Wave 1 family functioning			Wave 2 family functioning			Wave 3 family functioning		
	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM	CFAIM	CFAIC	CFAICOM
Wave 1									
CBC	.39**	.20**	.38**	.27**	.19**	.27**	.23**	.13**	.23***
PA	.42**	.26**	.42**	.28**	.21**	.25**	.24**	.18**	.23**
GPYDQ	.54**	.36**	.53**	.40**	.29**	.39**	.35**	.25**	.35**
PIT	.43**	.26**	.41**	.32**	.23**	.31**	.27**	.17**	.28**
Wave 2									
CBC	.27**	.18**	.28**	.38**	.18**	.36**	.27**	.17**	.28**
PA	.29**	.22**	.31**	.41**	.26**	.40**	.29**	.21**	.29**
GPYDQ	.40**	.29**	.41**	.52**	.33**	.51**	.39**	.27**	.40**
PIT	.32**	.21**	.33**	.40**	.22**	.40**	.30**	.19**	.31**
Wave 3									
CBC	.24**	.16**	.24**	.29**	.18**	.28**	.34**	.18**	.35**
PA	.25**	.18**	.27**	.31**	.22**	.30**	.37**	.23**	.37**
GPYDQ	.34**	.25**	.35**	.40**	.29**	.39**	.49**	.31**	.49**
PIT	.29**	.20**	.28**	.33**	.23**	.33**	.35**	.21**	.38**

\*\* Correlation is significant at 0.01 level

Longitudinal correlations between Wave 1 perceived family functioning and Wave 3 positive youth development indicated that higher levels of family mutuality, communication and lower level of conflict at Wave 1 were associated with higher levels of cognitive and behavioral competence, prosocial attributes, general positive youth development qualities and positive identity at Wave 3. To test the possibility that adolescents' positive youth development influences their family functioning, we computed correlations between Wave 1

positive youth development and Wave 3 perceived family functioning. The correlations indicated that perceived family functioning was indicative of positive youth development.

In order to examine the link between Wave 1 positive youth development and Wave 3 perceived family life quality in a more stringent manner, we computed partial correlations between Wave 1 positive youth development dimensions and Wave 3 family functioning dimensions in which the related Wave 1 perceived family functioning was controlled in each prospective correlation (see Table 5). The significant partial correlations were the links between Wave 1 cognitive and behavioral competencies and Wave 3 family conflict ( $r = -.04$ ,  $p < .05$ ), between Wave 1 general positive youth development qualities and Wave 3 family mutuality ( $r = .04$ ,  $p < .05$ ) and family communication ( $r = .06$ ,  $p < .01$ ), and between Wave 1 positive identity and Wave 3 family communication ( $r = .04$ ,  $p < .05$ ).

**Table 5** Partial correlations of family functioning and positive youth development with the effect of wave 1 level of the criterion variables removed

	Positive youth development	Family functioning		
		CFAIM	CFAIC	CFAICOM
CFAI at wave 1 and PYD at wave 3				
CBC	.02	.01	0.01	
PA	.01	.03	.01	
GPYDQ	.06**	.05*	.07**	
PIT	.04	.04	.03	
PYD at wave 1 and CFAI at wave 3				
CBC	.02	-.04*	.03	
PA	.03	.02	-.01	
GPYDQ	.04*	-.02	.06**	
PIT	.02	-.03	.04*	

\* Correlation is significant at 0.05 level

\*\* Correlation is significant at 0.01 level

We also tested possible linkage from earlier perceived family life quality to later positive youth development. We computed partial correlations between Wave 1 family functioning and Wave 3 positive youth development measures in which the related Wave 1 positive youth



development scores were controlled in each prospective correlation (see Table 5). The significant partial correlations were the link between Wave 1 family mutuality, family conflict, family communication and Wave 3 general positive youth development qualities ( $r = .06, p < .01$ ;  $r = .05, p < .05$ ;  $r = .07, p < .01$ ). In summary, the above analyses suggest that positive youth development and perceived family functioning are two closely related constructs and they may influence each other over time. However, the effect size of the correlation coefficients was not high.

#### **4 Discussion**

The purpose of this paper was to examine perceived family functioning and related socio-demographic correlates in junior secondary schools students in Hong Kong. The relationships between positive youth development and family functioning were also explored.

There are several unique features of the study. First, an indigenous measure of family functioning based on an integrative conceptual model with empirical support was used. Second, a validated measure of the Chinese measure of positive youth development was adopted. Third, a large and representative sample was used. Finally, longitudinal data were collected over 3 years. As studies of family functioning in Chinese adolescents are few, the current study is a pioneer study in this field.

Regarding changes in perceived family functioning in early adolescents in Hong Kong, the present study showed that there was a general decline in perceived family functioning in the early adolescent years. Responses to the items showed that family functioning perceived

by the adolescents in their early adolescent years was far from satisfactory. Specifically, with regard to family mutuality, a considerable proportion of the students perceived their family to be non-cohesive, loving, or that family members did not get along well. We observed a worrying situation in perceived family conflict. Apart from the lack of care or harmony, up to one fourth of the students perceived frequent conflicts within the family. Worse still was the perceived communication within the family, where respondents reported that their parents did not understand or talk to them. Corroborating with the observation of a decline in general family functioning in this study, as well as Shek's finding (2002a), these findings based on percentages call attention to intervention of the subjective and objective family situations of early adolescents.

Regarding the socio-demographic correlates of perceived family functioning, the results showed that boys generally had more favorable perceptions of perceived family functioning than did girls in all aspects of family functioning (except the family conflict aspect), which partly supported Hypothesis 2a. There are several explanations for this observation. First, the transition into adolescence as a time of psychological vulnerability is more challenging for girls (Eme 1979; Werner and Smith 1982), and they tend to be involved in family life to a higher extent. Therefore, they have a higher chance in interacting and being in conflict with their parents. Second, compared with boys, girls are more attached to their families, which make them unable to view the family functioning from an objective view (Papini and Micka 1991; Russell and Russell 1987). Third, the concept of autonomy, which is especially emphasized in the boys, is less incongruent with the importance of attaching to one's own family in the Eastern culture (Poole et al. 1986). As a result, it is less surprising that boys

perceived their family functioning to be better, instead of worse, than did girls. However, the size of this effect was not high given that it was only present in the multiple regression at Wave 2 when the effects of economic disadvantage and family intactness were also considered in the regression equation.

Echoing a series of research by Shek (2002c, 2003, 2005; Shek and Tsui 2013), we found robust economic disadvantage effect and family intactness effect on adolescents' perceived family functioning among all the three waves of data, in which both Hypotheses 2b and 2c were confirmed. In addition, results from multiple regression analyses showed that economic disadvantage and family non-intactness would chronically deteriorate perceived family functioning. This is consistent with the literature in resiliency that family-based adversities, in the current case, economic disadvantages or broken families, would hinder the role of family functioning as a protective factor in a prolonged manner (Masten et al. 1999).

Regarding the linkage between positive youth development and perceived family functioning, four major domains of positive youth development were positively correlated with three aspects of perceived family functioning at each wave, which confirmed Hypothesis 3. As both factors may have mutual influence on each other, we further tested potential causal relationships in a more stringent manner. The results of prospective analyses showed that both causal relations were partially supported. On one hand, better positive youth development led to higher quality of family life (family functioning). Specifically, higher cognitive and behavioral competencies predicted more frequent conflicts within the family. We speculate that, with better cognitive and behavioral competencies, adolescents are able to

be more independent from their family, which might cause more conflicts within the family. We also found that higher general positive youth development qualities led the students to perceive their families to be more cohesive and with better communication. On the other hand, higher perceived family functioning resulted in better positive youth development. This observation is consistent with the literature suggesting the interactional influence between adolescents and their family (Allen et al. 1994; Delsing et al. 2005). Given that previous findings have primarily focused on the role of family functioning on adolescent development, the current findings shed light by reexamining their relationship from an opposite direction. That is, testing the role of adolescent development on family functioning.

The present study suffers from a few limitations. First, the conceptualization of family functioning by CFAI adopted an outcome-oriented approach. More thorough understanding of the functioning processes of family could be obtained if we also consider the process-oriented approach (Skinner et al. 2000). Several researchers defined family functioning by tasks that are required by families, say problem solving, communication, family role, affective response, affective involvement and behavior control (e.g., Epstein et al. 1993; Skinner et al. 2000). It is highlighted that, instead of characteristics of the family system structure, it is the processes of family fulfilling various functions that exert real influence on individuals in the family. In this sense, investigating where the crux lies in the problematic family functioning is expected to give direct and effective guidance to the educators and positive youth development program implementers. Second, as only partial correlation analyses were performed, it is noteworthy that the significant correlations do not necessarily

imply significant causal relationships. It is suggested that structural equation modeling be performed to look at the causal relationships amongst the variables in future.

In addition, the present study only used the quantitative method. More in-depth understanding of the phenomenon is expected if we also adopt the qualitative method, such as focus group interviews (Morgan and Spanish 1984). Moreover, the present study only investigated family functioning from the adolescent perspective. Given the common discrepancies in perceptions from the children and their parents (O'hannessian et al. 2000; Shek 1997), perspectives of other family members, and also of the gap between different perception holders (Shek 1998) may provide extra assistance for us to comprehend the phenomenon. Last but not least, more stringent methods, such as the social relations model (Cook and Dreyer 1984), could be used to test the bidirectional relationship between family functioning and positive youth development and how different roles of family members should play (Kenny et al. 2006). Despite these limitations, the present study is the first Chinese study that examined perceived family functioning in early adolescents utilizing a longitudinal design. With reference to the criticism that there is a general shortage of Chinese family studies (Shek 2010; Shek et al. 2005), this is a constructive response.

**Acknowledgments** The preparation for this paper and the Project P.A.T.H.S. were financially supported by The Hong Kong Jockey Club Charities Trust. The authors wish to express their gratitude to the reviewers of the original manuscript for their constructive comments.

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