



Paternal parenting styles and locus of control: could family income moderate the link?

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ABSTRACT

The present study aims to determine the relationships between perceived paternal parenting styles and locus of control. In addition, the moderating role of family income was also tested. Sample consisted of 382 school-going adolescents with an average age of 14.27 years. A multi-stage cluster sampling was used for collecting the data. A self-administered questionnaire was prepared for the participants at their selected schools. Fathers' parenting style was measured using the inventory of Parental Authority Questionnaire, as well as a scale that assessed the respondents' locus of control. Results demonstrated that paternal authoritative and authoritarian parenting styles were significantly related to internal locus of control. However, no significant moderating effect was found for family income. The present study emphasizes the need for continued focus on the link between child rearing strategies and child developmental outcomes.

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Introduction

As children enter adolescence, they experience tremendous amount of changes. They undergo not only significant physical and cognitive growth, but also encounter new situations and responsibilities. Failure to adjust with these new situations may lead adolescents to be engaged in negative outcomes (Zimmer-Gembeck et al., 2007). Locus of control is one of the important factor for adolescents. It refers to people's expectations regarding where control over succeeding events resides. The construct of locus of control includes two components, internal and external locus of control. People with internal locus of control believe that events are the results of their own behaviors and therefore are controllable. In contrast, those who tend to indicate external locus of control orientation think that events are not related to their own actions and beyond their personal control (Rotter, 1966). The internal or external attributions of causes affect the permanent acquisition of new skills. For instance, it has been revealed that external locus of control are related to poor school adaptation and achievement (Kee, 2005; Nesselroade et al., 2002) as well as increased susceptibility towards anxiety and depression in children and adolescents (Chorpita, 1998; Ostrander & Herman, 2006). In contrast, individuals with an internal locus of control are less apt to consider negative events as factors out of their control. As a consequence, they are more likely to take action to decrease the stressors of their life. Therefore, internal locus of control associates positively with higher levels of self-efficacy and capability to cope with stress and unexpected challenges and negatively with different aspects of psychopathology including anxiety, depression and interpersonal problems (Wu et al., 2004).

Initial sources of locus of control are undoubtedly rooted in the family. In other words, parents are important in developing

locus of control in their children. Parents express their attitude to their children and convey their beliefs, values and behaviors to them in various degrees throughout parenting styles. Diana Baumrind (1991) identified three major parenting styles (i.e., authoritative, authoritarian and permissive) which are linked to a variety of developmental outcomes. A fourth style which refers to neglectful parenting was later added to complete the classification of parenting style. Each of these parenting styles described by their different levels of nurturance and limit setting which plays a major effect on children's outcome. Generally, authoritative parenting which is characterized by high warmth and responsiveness is often related to positive child's outcomes (Supple & Small, 2006; Pong et al., 2010). Authoritative parents establish clear rules for their children and give reasons for their expectations which lead to high levels of moral reasoning and internal locus of control in children (Carlo et al., 2007). In contrast, authoritarian parents exhibit high levels of controlling behavior and low levels of responsiveness. Children of authoritarian parents have few opportunities for exploration and their identity development has been impaired once they reach early adulthood (Luyckx et al., 2007). Permissive parents are high in responsiveness and low in demandingness. Children of permissive parents are excessively demanding and dependent upon adults, and they indicate less persistence on tasks (Steinberg et al., 2006). Neglectful parents are low in both demandingness and responsiveness and they rarely pay attention to their children's activities.

Rotter (1966) believed that the consistency of parent's discipline is significant antecedent of a child's locus of control orientation. Meanwhile, three conditions which may foster the development of an internal locus of control consisted of consistency of parental reinforcement, appropriate degree of parental control and encouragement of autonomy as well as lack

of stress during the early years of life (Rotter, 1966). In fact, support and warmth provide children with a sense of security which let them explore their environment, and as a consequence by offering them more opportunities to learn associations between their behaviors and outcomes, internal locus of control can be developed and generalized (Carton & Nowicki, 1994).

Research revealed that adolescents from authoritative mothers tend to exhibit behaviors associated with internal locus of control orientation. They ascertained positive relationships between maternal authoritative parenting style and internal locus of control. Conversely, maternal permissive and authoritarian parenting styles have been related to external locus of control (Marsiglia et al., 2007). However, the most previous studies (Abar et al., 2009; Butler et al., 2007; Fletcher et al., 2008) on parenting have investigated the effects of mother's parenting behavior on their children's outcomes, leaving a dearth of research examining the effects of fathers on children's outcome (Lamb, 1997; Parke, 2000). Therefore, this study focused on the relationships between perceived paternal parenting styles and locus of control among Malaysian adolescents.

From the ecological perspective (Bronfenbrenner, 1979; Belsky, 1984), parenting behaviors and subsequent child outcomes might be influenced by several factors such as family income. A family's financial position is a key determinant of members' sense of well-being that could impact on parents' roles. This is because one of the most important roles of parents is to facilitate the basic means of subsistence for their children. Research has consistently revealed that low-income and poverty associated with harsh and punitive parenting which leads to adolescents' misbehavior (Bradley et al., 2001). Under economic strain, families lean to accentuate obedience, conformity, and maintaining order and frequently utilize physical punishment (Hill & Bush, 2001). On the contrary, parents tend to become more authoritative in their parenting and stress more on children's self-reliance and personal initiative as socioeconomic status increases (McLoyd, 1990). Galy (2007) examined the moderating effects of family socio-economic status such as parents' education, family income and gender on the association between family environment, parenting styles and adolescents' well-being. The study found that family income rather than age and gender moderated the relationship between authoritative parenting and adolescents' self-esteem. As a result, high income is related to supporting parenting styles whereas low income parents become more rejecting of their children and as a consequence, their children were likely to become delinquents, aggressive and develop attention problems (Barnow et al., 2004).

Therefore, this study aims to examine whether family income moderates the relationships between paternal parenting styles and adolescents' locus of control. Besides that if these moderating effects exist, it is necessary to further examine the specific conditions under these factors interact. Examining these interactions is another important contribution of this study.

Hypotheses of the Current Study

The purpose of the study is to investigate the moderating effect of family income on the relationships between perceived paternal parenting style and adolescent's locus of control. It hypothesized that: 1) adolescents who reported their parents as authoritative tend to indicate internal locus of control while adolescents who reported their parents as authoritarian and permissive tend to indicate external locus of control, and 2)

family income moderates the relationships between perceived paternal parenting style and adolescent's locus of control.

Methodology

Participants

The sample of this study consisted of 382, 7-11th grade students aged between 13 and 17 years ($M = 14.27$, $SD = 1.26$ years) from public schools in the district of petaling. There were almost equal proportions of female (192) and male (190) participants. Most of adolescents showed their race as Malay (63.4%), with the rest indicating Chinese (22%), and Indian (14.7%). The age of the fathers ranged from 35 to 65 years old (Mean= 46.69, $SD = 5.19$), which suggests that the adolescents have fathers who are still in their productive years. Regarding fathers' level of education, the average years of education were 11.79 with the standard deviation of 4.11. It indicates that fathers of the respondents were moderately educated. The average of monthly income was RM 5019.68 with the standard deviation of 3640.28. Therefore, adolescents came from families with fairly moderate income.

Procedures

The respondents were identified using a Multi-stage cluster sampling technique. In this study, the first stage divide the district into some areas, and a random sample of these locations was collected. In the second stage, a random sample of schools was taken from within each of the locations chosen in the first stage. Then in the third stage, a random sample of classes was taken from within each of the schools chosen in the second stage. Finally, the sample of students was taken from the classes chosen in the third stage.

Additionally, the distributed questionnaires among participants consisted of demographic informations, parental authority questionnaire as well as a scale which assessed the respondent's locus of control. All the instruments were translated from English into Malay by using the back translation procedure. This procedure was carried out by two native-speakers of the target language. The translations were compared by a third consultant, and discrepancies were solved by consensus.

Measures

Demographics

Fathers were asked to indicate their level of education and level of income in the family. In addition, adolescents completed the questions about their age, gender, and ethnicity.

Parental Authority Questionnaire (PAQ)

Perceived paternal parenting styles were assessed by using Parental Authority Questionnaire (Buri, 1991). This scale is a reliable 30-item with 5-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). As it has been indicated in Table 1, reliabilities of the three dimensions of this scale namely authoritative, authoritarian and permissive exhibited acceptable internal consistency in the present study (alphas of 0.73, 0.75, and 0.74 for adolescents' ratings of their fathers respectively).

Nowicki-Strickland Internal-External Control Scale for Children

Locus of control in the current study was evaluated by the Nowicki-Strickland Internal-External Control Scale for children (Nowicki & Strickland, 1973). This scale includes 40 questions which are answered by "yes" or "no" response. Statements that indicate an external orientation to locus of control receive a score of "1" and those which refer to an internal orientation receive a score of "0". Therefore, lower scores are indicative of

internal locus of control orientation. In this study, a spearman-Brown split-half reliability was 0.70 (Table 1).

Results

Before data analyses, normality of the distribution of scores for all variables of the study were assessed by obtaining EDA, skewness and kurtosis values. The distribution of scores on the measures used in this study were within the expected values (Table 2).

Pearson Product-Moment correlation was used to assess the relations between all the variables of study. Following the scientific research tradition, all calculations were conducted at alpha 0.05 (2-tailed). As presented in Table 3, the results from the correlation analyses identified significant associations among variables. Specifically, the variables of father's education and locus of control had significant negative relationship ($r = -0.45$, $p < 0.001$), which suggested that as father's education increased, locus of control also tended to decrease (internal orientation). Furthermore, family income significantly related to locus of control. Additionally, the results indicated a positive relationship between the variables of adolescent's gender and locus of control ($r = 0.19$, $p < 0.001$). this study also found that paternal authoritative and authoritarian parenting style were related to internal locus of control.

Moreover, to assess the moderating effect of family income, A hierarchical regression analyses were conducted. As recommended by Aiken and West (1991), in order to reduce multicollinearity, all the independent variables were centered before examining the regression analyses. As it has been shown in Table 3, father's education and gender of adolescents are related to various parenting dimensions and locus of control. Therefore, these potentially confounding background variables were controlled at Step 1. In addition, hierarchical multiple regression analysis examine the moderating effects by including their interaction terms at a last Step in the regression equation (Baron & Kenny, 1986; Cohen & Cohen, 1983).

The analysis of regressing adolescent's locus of control indicated that control variables (paternal education and adolescent's gender) were entered at Step 1 explaining 21.9% of the variance to adolescent's locus of control. The paternal parenting styles entered at Step 2 accounted an additional 4% variance to locus of control. The main effect of family income as a moderator variable entered at Step 3 resulted in a minimal R^2 change of 0.008, increasing the total R^2 to 27.8% $F(6,375) = 22.891$, $p < 0.001$. Examination of the variables within the third block revealed that the interactions of paternal parenting styles and family income were not significant in predicting adolescents' locus of control (Table 4).

Discussion

The present study demonstrated that authoritative fathers play an important role in fostering stronger internal locus of control in their children. This finding is consistent with the previous studies (Baumrind, 1993; Carlson et al., 2000; Chao, 2001) that showed authoritative parenting is related to positive outcomes during adolescence, a period accompanied by heightened conflict with parents. Additionally, paternal authoritarian parenting style was related to internal locus of control. The finding is aligned with the previous studies that sustain culturally specific associations for the authoritarian parenting style (Chao & Tseng, 2002; Supple et al., 2004). These culturally specific associations may be elucidated, in part, by parenting norms and child expectations. For instance, Li, Costanzo and Putallaz (2010) found that Chinese children may

expect to receive more authoritarian parenting from their parents in comparison to European American. Therefore, the negative influence of authoritarian parenting may be reduced.

Nonetheless, our findings showed no significant moderating effect for family income. This finding is consistent with Davic-Kean's (2005) study who examined how parents' education and family income influence parents' belief and behavior and academic achievement amongst school-aged children. His study revealed that the overall total effect of parent educational attainment on child achievement is much stronger than the total effect of income. Thus, the present study indicates that the relationship between paternal parenting styles and locus of control is not influenced by family income.

This study indicates an improvement on previous research about father-child relationships in several important ways. First, it was used the large, mixed gender and socio-economical diverse sample of school-going adolescents. Second, it provides data about the associations between different constructs that have typically only been explored individually or in pairs in the past (Fearn & White, 2006; Ingoldsby et al., 2004; Joshi et al., 2003).

There are several limitations in the present study, which should be considered in future research. One major limitation of this research study arises from the selected research design. The present study employed a correlational research design in order to investigate the relationship between perceived paternal parenting styles and locus of control. Due to the nature of the study, an experimental design is not feasible. Parenting style is not a randomly assigned condition, and the independent variable cannot be manipulated in order to compare its effects on the dependent variable. Therefore, due to the lack of direct manipulation of the independent variable, no causal relationship can be inferred from the correlational analyses. Furthermore, research results were based on retrospective reports from respondents who recall their parents' behaviors, which may have introduced potential biases into the data. Moreover, the focus here on paternal parenting style begs for replication in future research with both mothers and fathers, in order to observe any unique associations that may be present across gender of the parents.

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Table 1. Scale Means, Standard Deviations, Alpha Coefficients (N=382)

Scale	No.of items	Alpha	Mean (SD)	Min/Max
Paternal Permissive	10	0.74	24.48 (6.25)	10/40
Paternal Authoritarian	10	0.75	34.19 (6.22)	20/48
Paternal Authoritative	10	0.73	35.71 (4.96)	22/50
Locus of Control	40	0.70	14.89 (4.12)	6/26

Note: *M* = Mean; *SD*= Standard Deviation

Table 2. Assessment of Normality of Distribution: Mean, and 5 %, Trimmed Mean, Skewness and Kurtosis (N=382)

Scale	<i>M</i> (<i>SD</i>)	5% Trimmed <i>M</i>	Skewness	Kurtosis
Permissive	24.48 (6.25)	24.53	-0.27	-0.51
Authoritarian	34.19 (6.22)	34.23	-0.07	-0.52
Authoritative	35.71 (4.96)	35.72	0.04	0.10
Paternal Education	11.79 (4.11)	11.69	0.27	0.03
Family Income (RM)	5019.68 (3640.28)	4750.54	0.97	0.59
Locus of Control	14.89 (4.12)	14.85	0.15	-0.68

Note: *M* = Mean; *SD* = Standard Deviation; RM= Ringgit Malaysia

Table 3. Correlations between Variables of Study (N=382)

Variables	1	2	3	4	5	6	7
1. Paternal Permissive	-						
2. Paternal Authoritarian	-0.11*	-					
3. Paternal Authoritative	0.20***	0.09	-				
4. Family Income	0.06	0.01	-0.06	-			
5. Paternal Education	0.02	0.06	0.19***	0.10*	-		
6. Adolescent's Gender	-0.10*	0.03	-0.25***	-0.02	-0.12*	-	
7. Locus of Control	0.04	-0.13	-0.24***	-0.23	-0.44***	0.19***	-

Note: * $p \leq 0.05$; *** $p \leq 0.001$

Table 4. Hierarchical Multiple Regression Analyses for Predicting Adolescent's Locus of Control from Paternal Parenting styles, and Family Income (N=382)

Predictor	F Test (<i>p</i>)	R ²	Δ R ²	b
Step1	53.292 (0.00)	0.219***	0.219***	
Gender				0.143**
Paternal Education				-0.429***
Step 2	26.415 (0.00)	0.260***	0.040***	
Paternal Permissive				0.109*
Paternal Authoritarian				0.097*
Paternal Authoritative				-0.188***
Step 3	22.891 (0.00)	0.268*	0.008*	
Family Income				-0.096*
Step 4	15.910 (0.00)	0.278	0.010	
Permissive x Income				-0.008
Authoritarian x Income				0.080
Authoritative x Income				-0.035

Note: b denotes standardized regression coefficient; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$