

## Parental responsiveness and adolescent susceptibility to peer influence: A cross-cultural investigation

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### Abstract:

From a developmental perspective, this research focuses on how parental responsiveness affects adolescent susceptibility to peer influence both directly, and indirectly, through the key elements of adolescent self-concept (i.e., interdependent self-construal, self-esteem, and self-monitoring). The proposed parent-self-peer model incorporates culture as a moderator. The overarching finding is that in individualist cultures such as Canada, responsiveness reduces susceptibility mainly through an indirect effect by undermining interdependent self-construal, fostering self-esteem, and impairing self-monitoring. However, in collectivist cultures such as China, responsive parenting reduces susceptibility primarily through a direct effect. These findings are largely due to the cultural differences in socialization goals oriented toward individualism vs. collectivism.

**Keywords:** parental responsiveness | susceptibility to peer influence | self-construal | self-esteem | self-monitoring | cross-cultural

### Article:

#### 1. Introduction

Parental responsiveness is the extent to which parents use nurturance, affection, involvement, and support in the child rearing process (Baumrind, 1978). Parental responsiveness is an important socialization means in a family (for a review, see Bogenschneider et al., 1998), which is especially important for adolescents, because adolescents are at a stage of seeking for independence from their parents while, paradoxically, striving to remain connected to them (Youniss and Smollar, 1985). At this life stage, emotional connectedness with parents, as parental responsiveness fosters, plays a more important role in guiding the behaviors of adolescents than physical rules and supervision do (Bogenschneider et al., 1998).

Acknowledging the important role of parental responsiveness, researchers associate this parenting strategy with a variety of socialization outcome variables. In consumer research, scholars associate parental responsiveness with adolescents' use of influence strategies in family purchases (Bao et al., 2007). In public policy and marketing research, researchers relate parental

responsiveness to adolescents' sexual knowledge, attitudes, and behavior (Moore et al., 2002), credit card abuse (Palmer et al., 2001), and smoking development and progression (Yang and Schaninger, 2010). In the psychology and public health literatures, parental responsiveness is an important predictor of undesirable adolescent behaviors such as early drinking, smoking and drug taking (Bogenschneider et al., 1998, Windle, 1999).

The study here extends the existing literature to examine the effect of parental responsiveness on an under-examined consumer socialization variable, adolescents' susceptibility to peer influence (SPI), that is, adolescents' tendency to look to standards from peers in developing their own motivations, attitudes, and behavior. Previous studies establish the important role of peer influence in consumer decision making. Susceptibility to interpersonal influence, for example, is a key factor in shaping consumers' attitudes, norms, values and aspirations (Batra et al., 2001), affecting product and brand choice (Wooten and Reed, 2004), selecting service providers (Keaveney, 1995), and diffusing information regarding new products (Dawar et al., 1996). However, little is known about how parent-child interaction styles, such as parental responsiveness, may affect adolescents' development of SPI.

Peer influence is critical to advance knowledge about adolescent consumers, as adolescence is a stage when individuals are highly susceptible to ideas and trends popular among their peers (Rose et al., 1998). A better understanding of the potential impact of parental responsiveness on SPI is important to both marketers and social workers. As Rose (1999) points out, parental style is an important segmentation variable. Knowing about the extent to which parents in a family are responsive to their offspring can help marketers distinguish the kids who are highly susceptible to peer influence from those who have low levels of susceptibility. Marketers can then develop different communication strategies (e.g., peer-oriented vs. parent-oriented advertisements) to target these groups. Social workers can also use this information to develop educational programs to teach parents to change their parental styles as an approach to help their kids fight against unwanted peer influence.

Some marketing practitioners start to acknowledge the important role that parental responsiveness plays in adolescent consumption-related behaviors. Social workers, for example, use advertisements to encourage parents to communicate with their teenagers about sex as a way to prevent teens from engaging in risky sexual behavior (Tanner et al., 2008). Organizations such as Tobacco Free Kids have also used advertising campaigns and web sites to teach parents about how to be more responsive to their teenage children as part of the effort to curtail teen smoking (Yang and Schaninger, 2010).

Although little research examines the effect of parental responsiveness on SPI, previous studies in developmental psychology show that responsiveness exerts a great deal of impact on adolescents' affiliation to deviant peers (Oxford et al., 2000), reliance on parents vs. peers to solve their personal problems (Bogenschneider et al., 1998), and following their best friend to engage in deviant behaviors such as shoplifting (Fuligni and Eccles, 1993). These studies provide a solid foundation for the current research to explore how parental responsiveness may affect peer influence at a broader level, focusing on the general tendency of adolescents being influenced by peers in purchasing commodities.

The study here incorporates two additional factors – namely adolescent self-concept and culture – in the conceptual framework: adolescent self-concept likely mediates, whereas culture likely moderates the effects of parental responsiveness. The focus on self-concept as a key mechanism underlying the influence of parental responsiveness on SPI is due to the fact that the adolescent years are a period of self-discovery, a time of transition when children are trying to discover their identity as adults. At this internally precarious time in their lives, self-concept plays an important role in determining adolescents' psychological development and tendency to be influenced by peers.

Culture is a matrix that shapes the nature of interpersonal exchanges in society and provides the context within which parental influences on adolescents play out (Laroche et al., 2007, Leung et al., 1998). Despite the important role of culture in consumer socialization, prior researchers have not studied the effect of parental responsiveness on adolescents' self-concept or SPI across different cultural contexts yet. The present study addresses this gap by focusing on cultural differences in socialization goals between China and Canada, and its implications for the effect of parental responsiveness.

Canada is a typical individualist culture that views the self as a unique entity, while China is a typical collectivist culture that views the self as embedded in group memberships (Triandis, 1995). The overall societal orientation toward individualism or collectivism can moderate the influence of parental responsiveness on adolescent self-concept and SPI. The theoretical framework in this study represents a first attempt to examine the antecedents and psychological processes underlying adolescent SPI.

## **2. Conceptual framework**

### **2.1. Self-Concept**

Self-concept is “conceptions of physical characteristics, typical activities and abilities, relationships and personality traits, and cognitive and emotional qualities” (Hart and Fegley, 1997, p. 130). From this definition, self-concept appears to be a multifaceted construct that is a result of the developmental interaction between the understanding that adolescents have of themselves and the views about them from social contexts (Oppenheimer, 1990). The study here focuses on three specific components that relate to the cognitive, affective, and social dimensions of the self-concept, respectively.

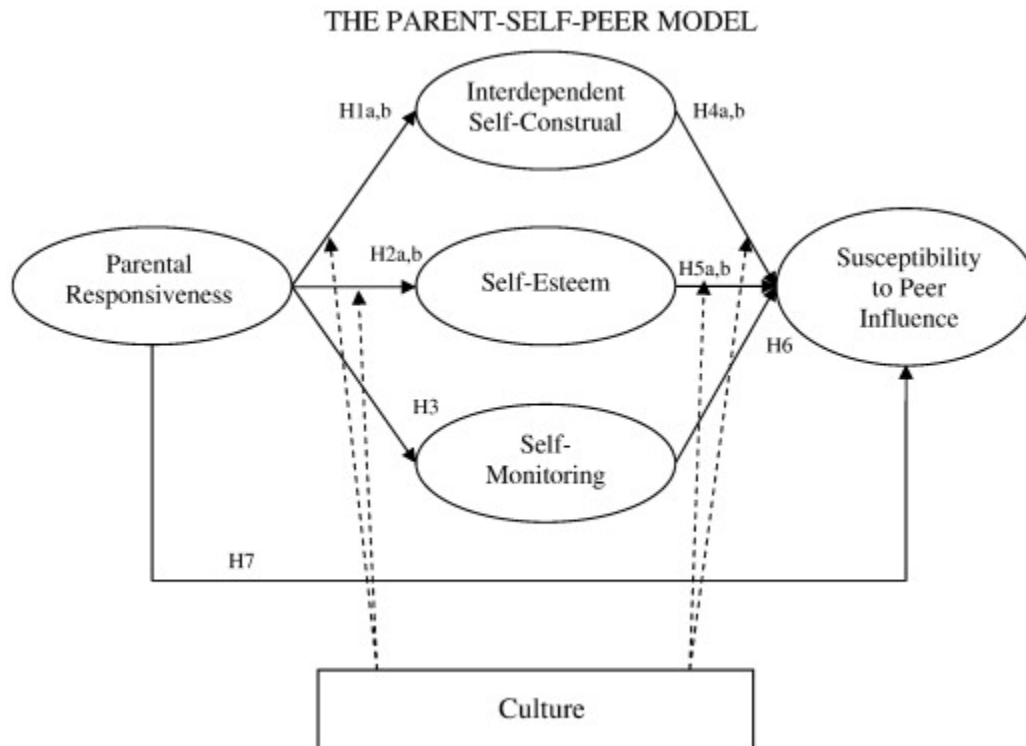
Self-construal is the cognitive aspect of self that shows what individuals think about themselves, especially in terms of how self relates to others (Markus and Kitayama, 1991). There are two types of self-construal: independent and interdependent. People with a dominant independent self-construal value autonomy and separateness of the self from others. In contrast, those with a dominant interdependent self-construal value connectedness or relatedness of self to others, which involves self-presentations that are blended with representations of others, shared social norms, and flexible interpersonal boundaries (Markus and Kitayama, 1991).

More recent research (e.g., Gardner et al., 1999) suggests that in any given culture, people simultaneously possess both types of self-construals that differ in availability and accessibility.

To avoid potential confounding effects caused by the dimensionality of self-construal, the present research only assesses participants' extent to which they construe themselves interdependently. Self-esteem is the affective component of the self that reflects one's feelings of his/her own worthiness and competence (Cooley, 1902). Self-monitoring is the social aspect of self that refers to the propensity to monitor and control one's own self-presentation behaviors in order to seek social appropriateness (Snyder, 1974).

A central theme among theories of self-concept is that one's social experiences influence self. From an early age, parents provide their children with information about cultural priorities and parental expectations (LeVine et al., 1994). Through many interactions with their parents, children internalize these inputs, slowly building different aspects of their self-concept. In this process, supportive social experiences, such as responsive parenting, may be especially effective in facilitating transmission of parental values to adolescents.

Responsive parenting fosters an emotionally supportive parent–child relationship (Peterson and Hann, 1999) that likely encourages the child to identify with parents and thus absorb their attitudes, values and role expectations. Building on this insight, the study develops a parent-self-peer model (see Fig. 1) about the effects of parental responsiveness on three dimensions self-concept – namely interdependent self-construal, self-esteem, and self-monitoring – and the subsequent effects of these dimensions of self-concept on SPI. Culture sets a boundary for these effects.



**Fig. 1.** The parent-self-peer model.

## 2.2. Parental responsiveness and adolescent interdependent self-construal

Little is known about the impact of parental socialization efforts on the development of cognitive self-concept or self-construal, although researchers argue that the culture one resides in shapes and guides the construction of the type of self-construal that is consistent with the values of the larger society (Yamada and Singelis, 1999). The general conception of cross-cultural researchers is that there is a tendency for individuals in individualist cultures (e.g., Canada and the United States) to be more independent, while individuals in collectivist cultures (e.g., China, Korea, and Japan) tend to be more interdependent (Singelis, 1994, Yamada and Singelis, 1999). However, this phenomenon only exists at the group level. Significant individual differences in self-construal are present within one culture. While some American adolescents seek more independence (i.e., self-determination) and differentiation (i.e., distinctiveness), others assign more priority to relationships over self-achievements (Escalas and Bettman, 2005).

The parent-self-peer model in Fig. 1 depicts that parental responsiveness may negatively affect interdependent self-construal for the Canadian adolescents, but positively affect interdependent self-construal for the Chinese adolescents. The rationale is that the interdependent self-construal is consistent with the socialization goals of Chinese society, but not with those of Canadian society. The socialization goals of Chinese society are to train youngsters to get along with others, to conform to the group, and to well-behave, while those of Canadian society put emphasis on independence, autonomy, assertiveness, and individuality (Triandis, 1995).

However, it is hard for individuals to voluntarily place the interests of others over their own (an important trait of interdependent self-construal). Responsive parenting, which fosters positive parent-child relationships, makes the intergenerational transmission of such collectivistic norms from parents to their adolescents easier, especially those emphasizing hierarchy in a society, such as obedience to seniors and conformity to authority figures. In line with this reasoning, prior studies show that positive parent-adolescent relationships facilitate the identification of adolescents with parental attitudes, values and role expectations and help them incorporate these attitudes into their own value system (Henry et al., 1989). According to Bretherton et al. (1997, p. 104), “making parental values one's own is not the result of identification derived from fear of punishment, but is based on an increasing capacity for self-regulation achieved through the supportive quality of parent-child interactions.” In contrast, parental responsiveness tends to hinder the development of interdependent self-construal for the Canadians, as such behavior is incongruent with individualistic cultural priorities.

**H<sub>1a</sub>.** Parental responsiveness negatively affects Canadian adolescents' interdependent self-construal.

**H<sub>1b</sub>.** Parental responsiveness positively affects Chinese adolescents' interdependent self-construal.

### 2.3. Parental responsiveness and adolescent self-esteem

For both Canadians and Chinese, the parent-self-peer model predicts a positive relationship between parental responsiveness and adolescent self-esteem, but parental influence is stronger for the Canadians. Responsive parenting behaviors convey information to young people about their worth and instill in children a sense of their inherent value (Openshaw et al., 1984); as a

result, adolescent self-esteem increases. Previous studies examining the effects of responsiveness on self-esteem have consistently found that parental affection or support increases self-esteem in adolescents, whereas failing to receive a sense of parental approval during interactions with their parents decreases it (Hoelter and Harper, 1987).

Yet, the strength of this link tends to be stronger for the Canadian than for the Chinese adolescents. In Western cultures, the development of self is more separate, distinct, and independent of others. Therefore, acceptance and support from parents are sufficient for adolescents to establish a strong positive attitude toward themselves. On the contrary, the Chinese derive their sense of self and self-esteem from their kinship network (Yang, 1981). Their construction of the self emphasizes continuity of family, societal roles, supremacy of hierarchical relationships, compliance with authority and maintenance of stability (Pratt, 1991). Although parental interactions are an important contributor to their self-worth, parent–adolescent ties do not account for all social relationships that adolescents use to assess themselves. In other words, while positive feedback from parents can enhance their self-image, other social contacts may also affect their self-esteem. Due to the complex collective attributes in this self-evaluation process, it is more difficult for Chinese adolescents to precisely evaluate themselves than for their Western counterparts. In this situation, adolescents tend to devalue rather than overvalue their levels of self-esteem, because Chinese society highlights self-effacement and modesty (Brand, 2004). Such a general propensity to devalue self-esteem should deflate the magnitude of the relationship between responsiveness and self-esteem among Chinese adolescents. Therefore,

**H<sub>2a</sub>.** In both cultures, parental responsiveness positively affects adolescents' self-esteem.

**H<sub>2b</sub>.** The positive impact of parental responsiveness on adolescent self-esteem is stronger for the Canadians than for the Chinese.

#### 2.4. Parental responsiveness and adolescent self-monitoring

Self-monitoring includes both the perspective-taking ability (i.e., to catch the expressive cues of others) and the self-adjustment ability (i.e., to apply those cues to guide one's own expressive behavior). Of these two aspects, the emphasis is on the latter, that is, the tendency to use the behavior of others or the cues sent by others, rather than one's own personality, as guides to one's behaviors (Snyder, 1974). Few studies have examined the relationships between parenting strategies and self-monitoring. Among the rare exceptions, Eisenberg et al. (1991) find that parental practices that demand children to control their own feelings and negative emotional displays relate positively to their self-monitoring. More recently, a study by Schoenrock et al. (1999) shows that high self-monitors are often from families with high levels of conflict and insecurity. A combination of the findings from these two studies seems to support Graziano and Waschull's (1995) speculation that self-monitoring is a result of parental intolerance or unacceptance of their children's emotional expressions, which can produce distrust of internal cues in these youth and generate poor intergenerational relationships.

Translating these findings into a more general level of parenting, the parent-self-peer model of this study specifies a negative association between responsiveness and self-monitoring. A major reason is that parental responsiveness provides a fertile soil to nourish autonomy seeking

behaviors of adolescents (Skinner, 1998), including freedom of self-expression and personal dignity. The element of responsive parenting tends to de-emphasize role requirements and situational demands relative to personal preferences in determining how adolescents will behave. Adolescents from these families are likely to pay more attention to their inner needs and feelings than to controlling contingencies, an attribute often found among low self-monitors. In addition, responsiveness normally creates close parent–adolescent relationships, which also seems less likely to foster highly self-monitoring adolescents, as per the findings of Schoenrock et al. (1999).

**H3.** In both cultures, parental responsiveness negatively impacts adolescents' self-monitoring.

## 2.5. Interdependent self-construal and SPI

There is little research in the literature that examines the relationship between self-construal and SPI. The parent-self-peer model in Fig. 1 depicts a positive effect of interdependent self-construal on SPI for both Canadian and Chinese adolescents, but the effect is stronger for the former. Individuals with predominantly interdependent self-construal tend to incorporate the needs of others into their own motivations and behaviors. They are more likely to view themselves from the perspectives of others, are highly conscious of group memberships, more vulnerable to criticism and more concerned with the establishment and maintenance of harmonious ties with others (Markus and Kitayama, 1991). For those with a strong interdependent self, making decisions based upon their own inner feelings or beliefs may be regarded as immature or selfish; as a result, they often sacrifice personal goals for the good relationship with others (Triandis, 1995). Taken together, the above discussion indicates that adolescents with higher levels of interdependent self-construal tend to comply with the expectations of their friends in consumer choices in order to promote interpersonal harmony.

The positive relationship between interdependent self-construal and SPI would be stronger for the Canadian than for the Chinese adolescents. The rationale rests on the significant difference in developmental timetables across cultures. Chinese youths exhibit behavioral autonomy substantially later than their Western counterparts (Feldman and Rosenthal, 1990). While the formulation of autonomous identity is a primary task of adolescence for Western adolescents, Chinese society expects the adolescents to have a prolonged period of dependency on their parents. To be more specific, Canadian society encourages adolescents to make decisions for themselves on a variety of issues, ranging from consumer choices affecting physical appearance to life decisions such as the choice of a boyfriend/girlfriend, marriage, and career. The adolescents are also responsible for any adverse consequences arising from these decisions. In other words, Canadian society expects adolescents to be independent decision-makers for all these issues and the adolescents are literally “free” to be influenced by other people including their peers.

Collectivistic cultures, however, do not encourage their adolescents to make decisions regarding these life events. According to Confucian teaching, it is even immoral for Chinese adolescents to choose a mate or decide a career path without getting prior consent from their parents. Chinese society requires parents to protect, govern, teach and discipline their children and to have the last

say in their children's life decisions. As a consequence, when adolescents fail in their life or career, they are normally not the first person blamed; rather, it is their parents who are required by society to take full responsibility for these failures (Ho, 1986). Probably because of this, Chinese parents expect their children to have earlier independence in areas such as task-oriented caretaking activities and academic work, but later in areas such as social and self-initiated tasks (Young, 1972). Forced compliance is socially accepted and self-sacrifice in life decisions is expected from a filial person (Dien, 1999). In such a collectivistic environment, although Chinese adolescents high in interdependent self-construal are willing to sacrifice their personal goals for the good relationship with others, they are less likely to follow the advice of their peers to do things that they perceive their parents may disapprove of. In other words, their loyalty to their parents is so important to them that even if their parents are not physically present, parental influence is still there. When facing peer pressures, the strong consideration of both parental preferences and peer relationships will drive Chinese adolescents to take a “middle-road” choice decision in order to maintain harmony with both parents and peers.

**H<sub>4a</sub>.** In both cultures, adolescents' interdependent self-construal positively affects SPI.

**H<sub>4b</sub>.** The positive impact of interdependent self-construal on SPI is stronger for the Canadian than for the Chinese adolescents.

## 2.6. Self-esteem and SPI

The parent-self-peer model further posits a negative association between self-esteem and SPI for both Canadian and Chinese adolescents, but the strength of the association is stronger for the Canadian ones. According to Leary's sociometer theory of self-esteem, self-esteem reflects perceptions of interpersonal inclusion vs. exclusion (Leary et al., 1995). Whereas low self-esteem reflects insecurity about interpersonal acceptance, high self-esteem indicates a high level of perceived interpersonal regard. Individuals with low self-esteem report more loneliness than their high self-esteem counterparts, have higher level of social anxiety, and describe themselves as having fewer friends (Leary and Baumeister, 2000). They strive to gain the approval of others, a motive that drives them to engage in self-presentation strategies (Brockner, 1988), such as voicing agreement with the views of significant others (Premeaux and Bedeian, 2003).

Conversely, high self-esteem individuals are more likely to engage in self-esteem reparation at a personal level to reaffirm the self's favorable, individualistic qualities (Leary and Baumeister, 2000, Leary et al., 1995), a strategy known as self-protection (Vroom, 1964). One such self-protection strategy is to increase self-ratings of intelligence and derogate others by rating generalized others and even their friends less favorably (Beauregard and Dunning, 1998). Similarly, previous studies show that self-esteem relates negatively to normative interpersonal influence on purchasing decisions (Bearden et al., 1989) and social comparison in consumption-related issues (Bearden and Rose, 1990).

Although such an effect likely appears for both Canadian and Chinese adolescents, the strength of this effect is weaker for the latter. When facing peer pressure, high self-esteem Chinese adolescents are less likely to use self-protection strategy; instead, their self-esteem reparation may involve affirming the self through relationships, a similar pattern as their low self-esteem



counterparts. According to the Confucian's moralistic conception of the self, one cannot attain the true meaning of self without sacrificing the “little me” to complete the “big me” (Dien, 1983). The use of the self-protection strategy to highlight the “little me” is normally considered as selfish and socially unacceptable. Chinese society emphasizes maintaining harmony and following group norms and expectations and therefore values more the expression of collective attributes of self (i.e., conformity, obedience, and interdependence). In this context, the reflected actions and appraisals of others facilitate private sense of social-worth.

The above discussion suggests that in Eastern cultures although high self-esteem adolescents do see their own decisions better than their peers', the tendency to maintain harmony drive them to integrate the opinions of their peers into their purchasing decisions. Peer pressure in this case may heighten their awareness of the dynamic nature of relationships and alert them to pay attention to relationship concord.

**H<sub>5a</sub>.** In both cultures, adolescents' self-esteem negatively affects SPI.

**H<sub>5b</sub>.** The negative impact of self-esteem on SPI is stronger for the Canadian than for the Chinese adolescents.

## 2.7. Self-monitoring and SPI

The parent-self-peer model specifies a positive relationship between self-monitoring and SPI in both cultures. A prototypic high self-monitor is “someone who treats interactions with others as dramatic performances designed to gain attention, make impressions, and at times entertain” (Snyder, 1987, p. 178). High self-monitors tend to be sensitive to contextual cues and are capable of deliberately modifying their behaviors for the sake of desired public appearances (Premeaux and Bedeian, 2003). They are skillful in reading the nonverbal behavior of others to discern underlying emotions (Geizer et al., 1977). They are also more prone to seek information from others in order to discover the appropriate behavior in a given situation, and to look to situational cues for guidance in how to deliver a desired image (Mill, 1984). In contrast, the expressive behaviors of prototypic low self-monitors tend to reflect their own inner attitudes, emotions and dispositions (Premeaux and Bedeian, 2003); consequently, low self-monitors are likely to show behavioral consistency across situations and consistency between attitudes and observable actions (Snyder, 1987).

Since high self-monitors are effective at social integration and behavior adjustment, compared with low self-monitors, they are more susceptible to interpersonal influence on consumer choices (Bearden et al., 1990), more vulnerable to pressure from others (Mehra et al., 2001), and more likely to make decisions similar to those with whom they interact socially (Kilduff, 1992).

**H<sub>6</sub>.** In both cultures, adolescents' self-monitoring relates positively to SPI.

## 2.8. Parental responsiveness and adolescent SPI

The parent-self-peer model proposes a negative relationship between parental responsiveness and adolescents' SPI in both cultures. Parental responsiveness fosters close relationships between

parents and adolescents. Such a positive parent–child relationship increases the child's motivation and opportunity to share information with parents, which allows parents to become knowledgeable about the child's emotional and physical circumstances and offer timely help when she needs. Consequently, it is not surprising to see that a child with responsive parents is more likely to deal with peer pressure. As evident, Bogenschneider et al. (1998) find that the level of maternal warmth relates inversely to children's reliance on peers vs. parents to deal with personal problems. Nurturant or emotionally supportive relationship encourages the child to identify with parents and incorporate their attitudes, values and role expectations (Henry et al., 1989).

**H7.** Parental responsiveness relates negatively with SPI for both Canadian and Chinese adolescents.

### 3. Method

#### 3.1. Sample and procedure

The sampling frame consists of students from four high schools in Ontario, Canada, and six high schools in China. With the help of local district school boards, teachers were recruited to hand out survey packages to students in Grades 8–12. The interested students completed the surveys during the regular class time. The Chinese survey is a translation of the English version. The back translation method, in which the survey is first translated from English to Chinese and then back again to English, was applied to ensure the idiomatic equivalence of the Chinese and English versions. An additional effort was made to ensure the translation of the established measurement items free of linguistic confounds. Specifically, two judges unaware of the purpose of this research were recruited to compare the original English and back-translated English versions. The judges agreed that 93% of items in the two versions conveyed the same meaning. Based on suggestions from the two judges, minor modifications were made on the Chinese version. Nine Canadian and eight Chinese adolescents pre-tested the final versions to ensure clarity, comprehension, and ease of completion.

A total of 1500 sets of Chinese and 820 sets of English questionnaires were distributed in China and Canada, respectively. In China, 1289 sets of Chinese surveys were returned, and 40 were excluded because of missing data, yielding a useable response rate of 83.3%. In Canada, 305 sets of surveys were returned, and 5 were excluded, for a usable response rate of 36.6%. The inequality of the sample sizes was primarily due to a much lower response rate from the Canadian students. Cultural differences in socialization goals can be used to explain this phenomenon, i.e., Chinese students are more submissive to authorities (school teachers in this case). Given that the inequality of sample size increases the likelihood of making Type II errors in invariance tests, 300 responses are randomly selected from the Chinese data set and compared with the Canadian sample. The results from the Chinese sub-sample largely replicate those of the full sample; therefore, the results of the full sample are kept in the paper. The age profile of the Chinese adolescents ( $M_{\text{age}} = 15.5$  years, ranging from 14 to 18 years) is similar to that of the English-Canadian adolescents ( $M_{\text{age}} = 15.8$  years, with a range of 14 to 18 years). About 14.3% of the Chinese sample and 22.0% of the Canadian sample are from single-parent households.

## 3.2. Measures

### 3.2.1. Independent and mediating variables

Parental responsiveness, the independent variable in the model, was gauged by Paulson's (1994) Responsiveness Scale. Three dimensions of self-concept, namely interdependent self-construal, self-esteem, and self-monitoring, were potential mediators in the model. Interdependent self-construal was measured with Singelis' (1994) scale; self-esteem was measured by Rosenberg's (1986) Self-Esteem Scale; self-monitoring was assessed by Snyder's (1974) Self-Monitoring Scale.

### 3.2.2. Dependent variable

The dependent variable of SPI was measured by Bearden et al.'s (1989) 8-item scale of consumer susceptibility to normative influence, which is a broad measure of interpersonal influence on consumption-related issues. The wording of some items was tailored to peer influence among adolescent respondents. This adapted version was used by Zhang (2001) to assess Chinese adolescents' SPI and found to be reliable. With the exception of demographic measures, all items in the questionnaire were assessed with 5-point scales.

## 3.3. Analysis and results

Given that one of the focuses in this study is to test the moderating effects of culture on the proposed relationships among parental responsiveness, self-concept, and SPI, it is important to ensure the equivalence of the measurement model across the Canadian and Chinese groups (cf. Steenkamp and Baumgartner, 1998). The items were purified and a similar factor pattern across the Chinese and the Canadian samples was confirmed, following the procedures suggested by Kim and Lee (1997).

Factor analysis on the combined sample using the final set of purified items (see Appendix) yields five distinct factors (i.e., paternal responsiveness, interdependent self-construal, self-esteem, self-monitoring, and SPI), which jointly explain 70.3% of the variance in the data. The extracted factors have adequate reliabilities, with all Cronbach's alphas above the 0.70 threshold (Nunnally, 1978). Subsequent analyses on separate samples (i.e., Chinese, Canadian) also confirm the factor structure and the reliability of the measures.

### 3.3.1. Measurement model

Before testing the full latent model, the EQS software of Bentler (1992) was used to perform a CFA on the measurement model for each sample. Estimation displays desirable goodness of fit statistics for the data, as indicated by  $\chi^2(265) = 387.2$ ,  $\chi^2/df = 1.46$ ,  $p = 0.000$ , CFI = 0.93, RMSEA = 0.047 for the Chinese sample, and  $\chi^2(265) = 298.1$ ,  $\chi^2/df = 1.12$ ,  $p = 0.010$ , CFI = 0.98, RMSEA = 0.032 for the Canadian sample. Convergent and discriminant validity of these factors were then assessed for each sample. Evidence of the former relates to the extent to which items correlate strongly with other items used to measure the same construct, while the latter refers to the degree to which measures of different constructs are unique from each other

(Churchill, 1979). According to Fornell and Larcker (1981), convergent validity is established if the average variance extracted for each factor accounts for 0.50 or more of the total variance.

The results confirm convergent validity of these factors extracted from the data in both groups, with the average variance extracted for the factors are all above the 0.50 cut-off value, ranging from 0.503 to 0.572 in the Chinese sample, and from 0.509 to 0.637 in the Canadian sample. Moreover, Anderson and Gerbing (1992) note that convergent validity is demonstrated by statistically significant path coefficients. In this study, all coefficients are significant at the  $p < 0.05$  level.

Discriminant validity is established if the average variance extracted is larger than the squared correlation coefficients between factors (Fornell and Larcker, 1981). The results show that this criterion is met across all pairs of factors. Furthermore, results from LaGrange Multiplier (LM) tests indicate no significant cross-loadings for measurement items with non-hypothesized constructs thus providing additional evidence to support the discriminant validity of these constructs.

### 3.3.2. Testing hypotheses $H_1$ through $H_7$

A two-step analysis was conducted to test hypotheses  $H_1$  through  $H_7$ . In the first step, the full latent model (see Fig. 1) was specified separately for the Canadian and the Chinese samples and treated as the baseline for subsequent cross-cultural comparison analyses. Estimation of these two baseline structural models generates acceptable fit (Chinese:  $\chi^2 = 390.1$ ,  $df = 268$ ,  $\chi^2/df = 1.46$ ,  $p = 0.000$ , CFI = 0.93, RMSEA = 0.047; Canadian:  $\chi^2 = 300.1$ ,  $df = 268$ ,  $\chi^2/df = 1.12$ ,  $p = 0.010$ , CFI = 0.98, RMSEA = 0.032). In the second step, measurement-level constraints – namely configural invariance, metric invariance, factor covariance invariance, and error variance invariance – were introduced to simultaneously test the equivalence of these two models. A series of model comparisons shows that the five factors have the same factor patterns, factor structure, and factor covariances across the two samples. As shown in Table 1, the measurement invariance model fits the data well, with  $\chi^2 = 722.6$ ,  $df = 536$ ,  $p = 0.001$ ,  $\chi^2/df = 1.35$ , and CFI = 0.95.

**Table 1.** Differences between Canadian and Chinese models.

Causal paths in the parent-self-peer model <sup>a</sup>	Standardized $\beta$ values		Chi-square	$p$ -value
	Canadians ( $N = 300$ )	Chinese ( $N = 1249$ )		
RES → INTER (H1a, H1b)	- 0.307**	0.277***	26.11	0.000
RES → ESTEEM (H2a, H2b)	0.405***	0.266***	4.02	0.045
RES → SMONI (H3)	- 0.177*	- 0.043	3.25	0.071
INTER → SPI (H4a, H4b)	0.389***	- 0.059	16.87	0.000
ESTEEM → SPI (H5a, H5b)	- 0.167*	0.110	8.28	0.004
SMONI → SPI (H6)	0.253**	0.261***	1.09	0.296
RES → SPI (H7)	- 0.032	- 0.199*	4.71	0.030
Variance explained in SPI	42.9%	18.8%		
Fit indices of the invariance test	$\chi^2 = 722.6$ , $df = 536$ , $\chi^2/df = 1.35$ , $p = 0.000$ , CFI = 0.95			

<sup>a</sup> RES = Responsiveness, ESTEEM = Self-esteem, INTER = Interdependent self, SMONI = Self-monitoring, SPI = Susceptibility to peer influence.

\*\*  $p < 0.01$ . \*\*\*  $p < 0.001$ . \*  $p < 0.05$ .

Hypotheses H<sub>1a</sub> and H<sub>1b</sub>, respectively, predict that parental responsiveness associates negatively with adolescent interdependent self-construal for the Canadians, whereas the reverse is true for the Chinese. Consistent with these hypotheses, the estimate of the link between responsiveness and interdependent self-construal in the Canadian model is negative and significant ( $b = -0.307, t = -3.14, p < 0.01$ ), but that in the Chinese model is positive and significant ( $b = 0.277, t = 6.52, p < 0.001$ ). Therefore, H<sub>1a</sub> and H<sub>1b</sub> are supported.

H<sub>2</sub> specifies that parental responsiveness positively affects self-esteem in both cultures (H<sub>2a</sub>), but the effect is stronger for the Canadians (H<sub>2b</sub>). Consistent with H<sub>2a</sub>, responsiveness has a positive link with self-esteem in both the Canadian model ( $b = 0.405, t = 5.90, p < 0.001$ ) and the Chinese model ( $b = 0.266, t = 6.60, p < 0.001$ ). Further, results of the invariance test show that the estimate in the Chinese model is significantly lower than that in the Canadian model ( $b_{\text{Canadian}} = 0.405$  vs.  $b_{\text{Chinese}} = 0.266, \chi^2 = 4.02, p < 0.05$ ), lending support for H<sub>2b</sub>.

H<sub>3</sub> posits a negative relationship between responsiveness and self-monitoring in both cultures. As expected, a negative link between responsiveness and self-monitoring exists in the Canadian model ( $b = -0.177, t = -2.27, p < 0.05$ ); however, this link is not significant in the Chinese model ( $p > 0.10$ ). Therefore, H<sub>3</sub> is partially supported.

H<sub>4a</sub> suggests a positive association between interdependent self-construal and SPI in both cultures, and H<sub>4b</sub> proposes that the strength of this link is stronger for the Canadians. Consistent with H<sub>4a</sub>, the link between interdependent self-construal and SPI is positive and significant for the Canadians ( $b = 0.389, t = 3.82, p < 0.001$ ). Nonetheless, no such relationship exists for the Chinese ( $p > 0.10$ ). Therefore, H<sub>4a</sub> is partially supported. Follow-up invariance tests indicate that the positive association between interdependent self-construal and SPI is stronger for the Canadians than for the Chinese ( $b_{\text{Canadian}} = 0.389$  vs.  $b_{\text{Chinese}} = -0.059, \chi^2 = 16.87, p < 0.001$ ), lending support for H<sub>4b</sub>.

H<sub>5a</sub> builds from the expectation that self-esteem relates negatively to SPI for both Canadians and Chinese, whereas H<sub>5b</sub> posits that such a negative association is stronger for the Canadians. Results show a negative link between self-esteem and SPI in the Canadian model ( $b = -0.167, t = 2.01, p < 0.05$ ), but not in the Chinese one ( $p > 0.10$ ). The difference in the magnitude of these two estimates is statistically significant and in the hypothesized direction ( $b_{\text{Canadian}} = -0.167$  vs.  $b_{\text{Chinese}} = 0.110, \chi^2 = 6.28, p < 0.01$ ). These results provide partial support for H<sub>5a</sub> and full support for H<sub>5b</sub>.

H<sub>6</sub> posits a positive association between self-monitoring and SPI in both cultures. As expected, self-monitoring relates positively to SPI in both the Canadian model ( $b = 0.253, t = 3.00, p < 0.01$ ) and the Chinese one ( $b = 0.261, t = 6.69, p < 0.001$ ), supporting H<sub>6</sub>. Hypothesis H<sub>7</sub> depicts a negative association between parental responsiveness and SPI in both cultures. Results show that parental responsiveness is negatively linked to SPI for the Chinese ( $b = -0.199, t = -2.45, p < 0.05$ ). Although the estimate in the Canadian model is in the hypothesized direction, it does not reach statistical significance ( $p > 0.10$ ). Thus, H<sub>7</sub> is partially supported.

### 3.3.3. Relative contributions of self-concept

To examine the importance of including the three aspects of self-concept as the mediating variables in the model, the proposed model is compared to a direct-effect model (with only parental responsiveness as predictor; three self-concept variables omitted as mediators) in terms of  $R^2_{\text{adjusted}}$ , using Cohen's (1988) formula for calculating effect size ( $f^2$ ) (the degree to which the phenomenon is present in the population):

$$f^2 = (R^2_{\text{included}} - R^2_{\text{excluded}}) / (1 - R^2_{\text{included}})$$

The results show that dropping self-concept from the model significantly reduces the variance explained in SPI to  $R^2 = 0.182$  ( $f^2 = 0.43$ ) for the Canadian model and to  $R^2 = 0.117$  ( $f^2 = 0.09$ ) for the Chinese model. In addition, the direct-effect model without self-concept variables has significantly lower predictive validity compared to the proposed model, as shown by the substantial effect sizes (Cohen, 1988). This is especially true for the Canadian model. A further analysis on the total effects, indirect effects, and direct effects of parental responsiveness on SPI using the Sobel (1987) approach shows that more than 83.1% of parental responsiveness' total effect on SPI flows through self-concept in the Canadian model, whereas 20.5% of its total effect on SPI is mediated by self-concept in the Chinese model. These results suggest important cultural differences in the effect of parental responsiveness on SPI. Specifically, the impact of responsiveness on the Canadian adolescents' SPI works primarily through the mediating mechanism of self-concept, but its impact on the Chinese adolescents' SPI works mainly through the direct path.

## 4. General discussion and future research

Adolescents are often susceptible to the opinions of peers, such as their friends, activity partners and co-workers. Marketing practitioners have recognized the importance of peer influence when targeting adolescent consumers, by emphasizing interpersonal communications such as buzz marketing and opinion leaders (Kotler et al., 2005). And every year, marketers in North America spend over a billion dollars on advertising in youth-oriented channels including television advertising, in-school marketing, product placements, and children's clubs (Austin and Reed, 1999). This study develops and tests an integrative model of adolescent susceptibility to peer influence (SPI) that includes parental responsiveness as driver, adolescents' self-concept as mediator, and the cultural context as moderator of SPI. The model simultaneously tests both direct effects of parental responsiveness on SPI, as well as its indirect effects through aspects of self-concept. The model is validated using respondents from two cultures.

This research makes a number of important theoretical contributions, outlined below, to the literature on family influences in decision making. The primary and overarching finding is that in a Western cultural context, responsive parenting reduces SPI by influencing adolescents' self-concept. The intuition underlying this result may be traced back to a shift in child-rearing norms in Western cultures over the last fifty years. Beginning with Baumrind's (1968) seminal work on parenting, most Western cultures have moved towards a model of childrearing that emphasizes the social values of individualism and autonomy. As a result, responsive parenting in a Western

cultural context serves to create relatively self-oriented adolescents, who are thereby better equipped to distance themselves from peer pressure.

The current research shows that this shift has been socially beneficial in at least one major way—the shift serves to decrease adolescent SPI by modifying key elements of their self-concept. In particular, the findings indicate that responsiveness reduces SPI by undermining interdependent self-construal, fostering self-esteem, and impairing self-monitoring. These results provide a deeper understanding of the impact of parental responsiveness on SPI, and the internal psychological processes in adolescents that mediate these effects.

The second major finding is that the cultural context can moderate the impact of parenting on SPI. Parental responsiveness tends to foster adolescents' interdependent self-construal in China but to undermine the development of the interdependent self in Canada. A higher level of interdependent self-construal, yet, increases the Canadians' but not the Chinese's SPI. In addition, responsiveness has a stronger influence on adolescent self-esteem in Canadian society than in Chinese society. Armed with a higher level of self-esteem, Canadian adolescents are less susceptible to peer influence; however, this is not the case for Chinese adolescents. The unique characteristics and priorities of each society seem to be the core to explain these cross-cultural differences.

The results also have substantive implications for managers and parents. From a managerial perspective, the results suggest that marketers should allocate larger budgets for interpersonal communications, such as buzz marketing and opinion leaders, when targeting adolescent consumers in Western cultures such as Canada or United States, in comparison to more Eastern cultures such as China and Japan. In Eastern cultures, it may be more profitable to influence parents, who would in turn influence their adolescents. Within each culture, parental responsiveness can be a meaningful segmentation variable to identify adolescents who are high or low in susceptibility to peer influence from peers. Consumer research acknowledges that parental styles are important segmentation variables. Rose (1999), for example, concludes that a deeper understanding of parental styles helps managers “assess the overlap and specific types of parental styles across nations to determine the effectiveness and likely reaction of parents to various products and promotions” (p. 118).

The present research does not examine the potential differences in the effects of paternal and maternal childrearing practices. Previous research suggests that mothers are more responsive than fathers (Shek, 2000). But much remains unknown about how paternal responsiveness and maternal responsiveness may affect adolescents differently. Future researchers should measure fathers' and mothers' parental responsiveness separately to examine the disparities in the functions of paternal and maternal parenting behaviors on adolescent self-development and SPI. In addition, the inequality of the sample sizes is a limitation and future research should collect more data from Canada to increase the generalizability of the findings.

### Appendix. Scale items used in the model

Scale items	Cronbach's $\alpha$		
	Combined Canadian Chinese		
Parental responsiveness (RES)	0.83	0.83	0.81
1. My parents encourage me to talk with them about things.			

Scale items	Cronbach's $\alpha$		
	Combined Canadian Chinese		
2. My parents expect me to tell them when I think a rule is unfair.			
3. My parents encourage me to look at both sides of an issue.			
4. My parents take my ideas seriously, when making family decisions.			
5. My parents talk it over and reason with me when I misbehave.			
6. My parents respect my opinion and encourage me to express it.			
7. My parents praise me if I do things well.			
Self-esteem (ESTEEM)	0.79	0.80	0.71
1. I take a positive attitude toward myself.			
2. I feel I am a person of worth, at least on an equal plane with others.			
3. I am able to do things as well as most other people.			
4. On the whole, I am satisfied with myself.			
Interdependent self-construal (INTER)	0.77	0.70	0.81
1. My relationships with other people are more important to me than my own accomplishments.			
2. It is usually better to work with others than to work alone, even if they aren't as good at things as I am.			
3. Blending in is better than standing out.			
4. It is important to me to follow the decisions made by the group.			
Self-monitoring (SMONI)	0.72	0.72	0.70
1. In different situations with different people, I often act like very different people.			
2. I can look anyone in the eye and tell a lie with a straight face (if for a right end).			
3. I am not always the person I appear to be.			
4. I can change my behavior depending on who is around.			
Susceptibility to peer influence (SPI)	0.83	0.73	0.75
1. It is important that my friends like the products and brands I buy.			
2. If I want to be like someone, I often try to buy the same products or brands that they buy.			
3. I would like to purchase products and brands my friends will approve of.			
4. To maintain a good relationship with friends, I often purchase the same products or brands they purchase.			
5. I feel that the purchase or use of a particular brand will enhance my image.			
6. I feel that purchase or use of a particular brand helps me show my friends who I am, or would like to be (such as an athlete, successful businessman, etc.).			

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