

**A Comparative Study of the Relations Between Parenting and Deviance and
Parenting and Academic Achievement Among Chinese and European American
Youth from Taiwan and the United States**

by

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Abstract

The current investigation studied the relations between parenting and deviance and parenting and academic achievement among Chinese and European American youth from Taiwan (n = 906) and the United States (n = 627). More specifically, it examined the relationships between established parenting dimensions, namely closeness, communication, and peer approval/autonomy granting, and adolescent deviance and academic achievement in two countries with very different cultures. Based on scale scores, findings indicate that European American youth perceived parents as having higher levels of closeness, communication, and peer approval than their Chinese counterparts. European American youth also had higher mean levels of deviance as well as academic achievement. Based on regression analyses, maternal closeness in the Taiwanese sample had only modestly significant positive effects on academic achievement. Contrary to expectations, paternal closeness did not show any significant relationship with academic achievement in the Taiwanese sample, and neither maternal nor paternal closeness showed a significant relationship with academic achievement in the US sample. Findings also indicated that parental closeness in both samples and peer approval in the US sample were strong predictors of deviance, while maternal communication in the Taiwanese sample was also significantly associated with deviance. Additionally, results indicated that parental peer approval in the US sample was the strongest predictor of academic achievement. Maternal and paternal peer approval in the Taiwanese sample were unrelated to deviance; however, in the US sample, maternal and

paternal peer approval both had significant negative relationships with deviance. Finally, regression coefficients were compared using z-tests; these assessed whether relationships between parenting and deviance and academic achievement were similar or different in the Taiwanese versus US samples. The evidence indicated great similarities in effects between groups. Significant differences were found for both maternal and paternal peer approval on academic achievement, for maternal communication on deviance, and for maternal and paternal peer approval on deviance. Based on z-tests, maternal and paternal peer approval on academic achievement was also significantly different between groups, and lastly, the relationship between maternal communication and deviance was also significantly different between groups.

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Introduction

It is no secret that the expression and method of parenting vary greatly across cultures; it follows then that as a result, adolescent development and adjustment might also be differentially influenced because of these differences. Baumrind (1971) identified that authoritative parenting, an even combination of both firm instruction and warmth, is most conducive to a child's development while authoritarian and permissive parenting are maladaptive. There is much research describing how the Chinese parenting style is more authoritarian in comparison to European American parenting style (e.g. Chao, 1994). Although authoritarian parenting is typically considered maladaptive in terms of deviance or academic achievement, certainly in studies based on youth from the United States, past studies have not found that Chinese adolescents perform more poorly in school nor that they are more deviant than their peers, for instance (e.g. Shek, 2001; Bodman, 2005, Pong, Johnston & Chen, 2009).

At the same time, the argument has been made that different styles of parenting, ones characterized by more rules or strictness, per se, do not necessarily imply that the relationships between parenting and measures of adjustment, such as deviance or academic achievement, would be differentially affected. Jessor (2008) distinguishes between "descriptive" research and "explanatory" research in scholarship; consistent with the anthropological and ethnographic tradition, while the former focuses on mean level comparisons of behaviors or constructs of interest, the latter examines (structural or

correlational) relationships between variables of interest (Van de Vijver & Leung, 1998). There is little question that mean differences or differences in prevalence levels across cultural groups are informative; however, they do not offer any insights into why differences exist. The “explanatory” approach, on the other hand, focuses on the underlying quasi causal process of the relations among theoretically specified variables (Jessor, 2008), in this case, parenting processes and measures of deviance and academic achievement. In effect, the explanatory approach gives reason for potential mean level differences; thus, the current study examines this question of “description” versus “explanation” related to the links between parenting, deviance, and academic achievement among Chinese youth from Taiwan and compares them to European American youth.

Studies have shown that parents’ behaviors, parenting style, and parental control are important predictors in preventing, or facilitating, deviance or delinquency, and academic achievement (e.g. Wang, Pomerantz, & Chang, 2007; Shek, 1995). Social Control Theory suggests that bonding with conventional institutions and adopting their values creates social control that effectively promotes achievement and inhibits delinquency. Ngai and Cheung (2005) indicate that Chinese values and associated traditional systems of beliefs based on Confucianism are essentially functionally equivalent to strong moral beliefs and an ideological commitment. Thus, Chinese cultural values focus on the self and the restraint on desires and on benevolence, which in turn also influences parenting among Chinese families.

Confucian ethics has been the principle doctrinal system used over the past 2,500 years to exercise and maintain social control in China. Although China and Taiwan

currently have different social and political systems, these deep traditional cultural roots from China also permeate life (and parenting practices) among Taiwanese families. Taiwanese culture was shaped by Japanese colonialism, but it was a province in China for much longer than the time it was a Japanese colony. Therefore, Taiwan maintains many aspects of China's culture (i.e. filial piety, respect for the elderly, strong value for education) (Pong et al., 2009). The importance of these moral and ideological beliefs is that they are quite distinct and different from ones found in Western cultures. Thus, an important question is to what extent does this affect parenting among Taiwanese parents and to what extent does this parenting affect deviance and academic achievement among youth. This is not an entirely new question and has been examined previously, with a focus on parenting styles (e.g. Chao, 1994; Shek, 1995). However, the current effort follows the call by Darling and Steinberg (1999) to further unpack this overly simplistic parenting typology and to study a more nuanced conceptualization of parenting processes that includes a number of known parenting dimensions (Steinberg & Silk, 2002).

Research on the links between parenting and adolescent adjustment largely falls out into two main areas, namely one which finds support for the idea that parenting dimensions among Chinese families have different developmental effects on adolescent adjustment in comparison to European American youth, for instance. Secondly, the competing argument finds support for the idea that despite large cultural (mean level) differences in parenting, the effects by parenting process on measures of adjustment are largely consistent across different ethnic, cultural or racial groups (Pong, et al., 2009). The present study attempts to bring some additional empirical evidence to bear on this issue as very few studies have taken Jessor's explanation approach to study the links

between parenting processes, deviance, and academic achievement among Chinese (native youth as opposed to Chinese immigrants to the United States) and European American youth.

The current study examines the question of whether mean levels of parenting processes differ between Chinese and European American families, but perhaps more importantly, whether these differences also have differential effects on measures of adolescent deviance and academic achievement. It is hypothesized that levels of parenting, deviance, and academic achievement will be different among Taiwanese youth as compared to European American youth from the United States. It is expected that in comparison to their European American counterparts, Chinese youth will report higher levels of closeness and communication but lower levels of peer approval/autonomy granting. Secondly, it is expected that as a result of these different parenting effects, Chinese adolescents will report lower levels of deviance and higher levels of academic achievement than their European American counterparts. Third, in comparison to European American adolescents, it is expected that a stronger or larger positive relationship will be found between measures of closeness, communication and measures of academic achievement, but also a stronger or larger negative relationship between measures of peer approval/autonomy granting and measures of academic achievement for Chinese youth. Lastly, it is also expected that in comparison to their European American counterparts, there will be a larger relationship between measures of closeness and communication with measures of deviance, and a larger positive relationship between measures of peer approval/autonomy granting and measures of deviance among Chinese youth.

The following literature review further examines these questions and provides background for the current study regarding differential parenting by Chinese parents as compared to European American parents. Adolescent outcomes, specifically, deviance and academic achievement, for both groups will also be examined and compared. Literature regarding potentially different effects by parenting constructs on deviance and academic achievement will also be discussed. Finally, four specific hypotheses regarding the expected mean level differences in parenting constructs, deviance, and academic achievement as well as expected differences in the relationships between parenting measures and measures of deviance and academic achievement will be presented.

Literature Review

Unlike European American culture, Chinese culture places great emphasis on the family as a whole and not on the individual. Because of this emphasis on the collective family unit, the quality of parent-adolescent communication and of parental support by Chinese parents may be qualitatively different in comparison to that found for European American youth, such that parenting efforts may have a stronger effect or impact on both deviance and academic achievement. The emphasis on the family unit may also contribute to closer relationships between Chinese parents and their adolescent children. Children are socialized to be submissive to parents and since this results in less parent-child conflict, adolescents are more likely to have better school adjustment and less likely to exhibit problem behaviors or deviance (Shek, 1995). Based on these previous findings and the apparent cultural differences between Chinese youth and European American youth, the current study focuses on comparing both mean level differences in parenting and the associations between parenting and both deviance and academic achievement.

A study conducted by Vazsonyi, Hibbert, and Snider (2003) examined six dimensions of family and parenting processes (closeness, monitoring, support, communication, conflict, and peer approval) across four countries. Although the study provided evidence that these six parenting dimensions can be measured reliably cross-nationally, none of the countries were Asian countries. To provide further evidence of the validity of this measure, samples should also include Asian ones. A Chinese sample

would be very appropriate to use as a comparison country because China differs drastically from the United States (and most Western countries) in terms of social, political, and economic systems. This comparison would also be beneficial because it would examine the relationship between parenting measures and measures of deviance and academic achievement in both Chinese youth from Taiwan and European American youth.

It is known that Chinese parents parent their children differently; according to Chao (1994), much of the literature on Chinese parenting has depicted it as controlling, restrictive, or authoritarian. Although these parenting styles have been shown to be associated with poor school achievement in European-American families, Asian-American families in which the harsher parenting style is in place actually report better school performance than even the European-American students. Since it is difficult to apply Western concepts of authoritarian and authoritative parenting to Chinese families, Cheung (2008) focused on concern (warmth, closeness) and restrictiveness (sternness, severity). He suggests that Chinese parents govern their children out of love, even though the term “to govern,” or *guan*, may have a negative connotation in English. The study includes measures of parenting styles, practices, academic achievement, ego, and mastery motivation in order to test the extent in which the children's school related motivation, along with features of Chinese parenting, might be associated with academic achievement. Cheung discovered that concern and restrictiveness may not necessarily be exclusive of each other; a mother may be perceived as warm and controlling at the same time, and Chinese parents display both control and connectedness with their children with

the goal to foster emotional closeness and interdependence. This way, the parent may be considered very restrictive yet warm and caring at the same time.

Chao (1994) suggests that parental obedience and strictness may be translated as genuine concern instead of dominance. With this understanding between parent and child, harmony, instead of conflict, may be achieved. Harmony describes dimensions that assess the affective relationship between parents and adolescents (Vazsonyi et al., 2003) such as acceptance, closeness, warmth, and communication. Previous studies have shown that these dimensions have been found to be positively associated with social confidence while negatively associated with both internalizing and externalizing behaviors (Vazsonyi et al., 2003). Therefore, conceptually, the higher the level of “harmony” (in this case, communication and closeness), the higher the level of social competence which, in turn, would predict lower levels of delinquency and higher levels of academic achievement.

It is not only parenting dimensions that play a role in the prevalence of problem behaviors and level of academic achievement, but also the culture in which these dimensions are measured. Different cultures exhibit and perceive these parenting dimensions differently and this may be one of the reasons for the lower prevalence rate of delinquency and better academic achievement in Chinese adolescents from Taiwan. Deep traditional cultural roots (filial piety, respect for elderly, strong value for education, etc.) may result in a stronger positive relationship between measures of closeness, communication and academic achievement and a stronger negative relationship between measures of peer approval/autonomy granting and measures of academic achievement.

Pong, Johnston, and Chen (2009) examined the relationship between parenting and school performance among Asian students. Pong et al. used samples taken from the Add Health Survey and the Taiwan Educational Panel Survey (TEPS) – 10,668 from the nationally representative Add Health Survey was used (Chinese-American students were oversampled) and 13,042 Taiwanese seventh graders from TEPS were used. An interesting finding by Pong et al. is that authoritarian parenting is negatively associated with children's school achievement in both the United States and Taiwan. This finding appears to contradict Chao (1994) and does not support the idea that authoritarian parenting is beneficial for Chinese adolescents but not for anyone else. It is important to note, however, that Pong and colleagues also found that the impact of parenting style on school performance was relatively small compared to other family background variables (i.e. parental education) and should not be granted too much importance in its role in Asian academic achievement. Although Pong and colleagues found that authoritarian parenting is a negative factor in academic achievement, they also note that it is only a minor negative factor, and it is easily compensated by other positive ones. These findings are directly related to the current study because they support the rationale that there are factors that have a greater impact on academic achievement than parenting style. This current study aims to address this idea and examine a more nuanced conceptualization of parenting processes.

The following sections focus on previous empirical work on the relationships between parenting effects on deviance and academic achievement. They will also review separately the salience of different parenting processes or dimensions, namely closeness, communication, and peer approval/autonomy granting. Because this study examines

whether the effects by parenting processes on developmental outcomes differ between Chinese and European American families, these three specific dimensions were selected for study as they offer a strong comparison between two different cultures. Taiwanese culture, much like Chinese culture, is strongly influenced by Confucian morals; closeness, communication, and peer approval/autonomy granting are three parenting dimensions that offer a strong cultural comparison because these morals less common in Western cultures.

Parenting Effects on Deviance

Closeness. Closeness is a parenting dimension that is examined by many researchers, including based on Chinese samples (Shek, Tsoi, Lau, Tsang, Lam & Lam, 2001; Suldo, Mihalas, Powell & French, 2008) and with good reason. Chinese culture is heavily rooted in Confucian beliefs (Chao, 1994), and having a close parent-child relationship is a key contributor to positive adolescent adjustment including being conforming and not deviant (Shek et al., 2001).

Shek, Tsoi, Lau, Tsang, Lam and Lam (2001) examined parenting qualities and the influence that different parent-adolescent processes had on adolescent psychological well-being, school adjustment, and problem behaviors of 1,519 secondary school students from four schools in Hong Kong. One such dyadic process is parental support; Shek finds that previous research findings generally show higher parental support was related to better adolescent developmental outcomes such as higher general competence, better adolescent adaptation, and even better health. Just as high levels of parental support may have a positive influence on adolescent psychological well-being, high levels of parent-adolescent conflict may have a negative influence. Shek et al. also suggests that high

levels of conflict in this dyad can be regarded as stress and in turn, this stress has a negative effect on adolescent well-being and adjustment such as injuries, identity development, and unacceptable behavior.

Shek et al. (2001) used similar measures as in his 1995 study on the relation of family environment to adolescent psychological well-being school adjustment, and problem behavior; however, there were several unique measures that measured different parental qualities. Parental support was measured using the Paternal/Maternal Support Scales, and similarly, the level of perceived parental help was measured using separate items designed to assess help provided by the father and mother. Parent-adolescent conflict was measured using the Father/Mother-Adolescent Conflict Scale (Shek, 1998). To measure the parent-adolescent relationship, separate items were developed to assess whether the respondent was satisfied with his or her relationship with the mother and father. Regarding adolescent psychological well-being, the Mastery Scale was used to measure the respondents' sense of control over his or her life. Specially designed items to measure substance abuse and delinquency were used to assess problem behaviors. These measures describe mean level differences in parental support, level of perceived help, parent-adolescent conflict, etc. Shek et al. predicted that if there is indeed a relationship between parental qualities and adjustment in Chinese adolescents, the parental variables would be significantly associated with the variables related to psychological well-being, school adjustment, and problem behavior. More specifically, respondents with positive perceptions of parental parenting qualities would report better mental health, better school adjustment, and lower levels of problem behavior.

Regarding parental qualities, the results show that paternal parenthood qualities and maternal parenthood qualities are correlated to the measures of perceived parenting and parent-child relational qualities. The findings regarding perceived parenting styles were generally consistent with previous work; positive parenthood qualities (parental support, perceived help from parents, etc.) were found to be related to better adolescent adjustment. The hypotheses were supported by the findings that parental support and perceived help from parents, and parent-adolescent conflict were positively linked to adolescent mental health, school adjustment and problem behavior. These findings are consistent with the hypothesis in the current study regarding Chinese parenting effects on adolescents. The results show that measures of positive parenthood qualities such as parental support were found to be related to better adolescent adjustment. This finding strongly supports predictions made in the current study; it is expected that in comparison to their European American counterparts, there will be a stronger negative relationship between measures of closeness, communication and measures of deviance for Chinese youth.

The Shek studies showed that although parenting behaviors are important to the development of adolescent outcomes, the adolescent's perception of these behaviors is also important. For instance, punishment may be perceived as an act of hostility in a European-American family, but in a Chinese family, punishment is understood as a means of ensuring right and wrong actions. Closeness may be a determining factor because in the close-knit Chinese family, everything – including disciplinary actions – is done with the well-being of the family in mind. This understanding may act as a mediator between parenting behavior and adolescent deviance and academic

achievement. Suldo, Mihalas, Powell, and French (2008) agree that closeness between children and parents is important because in their study, they found that adolescents' relationships with key adults (such as teachers and parents) influence their choices to use substances indirectly through links with their decisions regarding peer groups.

As previously discussed, Chinese families are family-oriented and less individualistic than European American families, and filial piety is a Confucian concept that is highly regarded within Chinese family systems (Chao, 1994). According to Leung, Wong, Wong, and McBride-Chang (2009) who examined 231 Hong Kong Chinese fifth and sixth graders, parental warmth and two aspects of children's filial piety, reciprocal and authoritarian, were strongly associated with life satisfaction, self-esteem, and social competence.

Filial piety is defined by Leung et al. (2009) to traditionally involve devotion, love, respect, and obedience for one's parents. These include, but are not limited to, preserving family honor, avoiding family disgrace, continuing the family line, and showing care for them. Since these beliefs are engrained into Chinese family tradition, children are raised believing them. This may play an integral role in explaining why that even though Chinese families are viewed as being authoritarian, Chinese adolescents do not display significantly higher levels of deviance and have poor academic achievement that is expected of such an environment. Although filial piety is not measured or tested in the current study, it is relevant and informs the study. Pong, et al. (2009) suggest that filial piety is an aspect of Chinese culture that Taiwan has maintained, and it is also an ideological belief that is different from ones in Western cultures. The idea of preserving family honor and avoiding disgrace may have a profound impact on adolescent deviance

and academic achievement because academic success would bring the family honor while acts of deviance would bring disgrace. With these ideas engrained in the Taiwanese culture, it is likely that children will be raised to be close and to have good communication with their parents as well as less autonomy granting behaviors by parents in favor of being very conforming, including a strong focus on academic achievements.

Leung et al. (2009) define reciprocal filial piety as focusing on children providing emotional, physical, and financial support to parents in gratitude for parents' devotion in having raised them. Authoritarian filial piety is based on the Confucian principle of "respecting the superior" (Yeh, 2003) and demands children's repression of their own desires, submission to parental will, sprit of furthering parents' reputations, and fulfillment of family responsibilities. The researchers also cite that apart from filial piety, children's perceived parental warmth has consistently been shown to have salient beneficial effects for children's psychological development, and high levels of perceived parental warmth are correlated with children's abilities to overcome challenges and are related to children's emotional adjustment, social and academic achievement, and family harmony.

Leung et al. (2009) administered questionnaires (all in Chinese) to each of the participants: the Filial Piety Scale, Perceived Parental Warmth Scale, and the Social Competence subscale of the Perceived Competence Scale for Children. Results showed that reciprocal piety had positive associations with children's social competence, while authoritarian filial piety had negative associations with children's self-esteem and social competence. Children who displayed high reciprocal beliefs were likely to be more

motivated to support and care for their parents, and they also significantly and positively explained perceived peer acceptance. Children who are high in authoritarian filial piety are socialized to respect, but never question authority. Although Leung et al.'s study showed that this characteristic may result in feelings of relative incompetence, helplessness, or frustration, this respect for authority may negate their desire to perform delinquent acts. Also, the fear of bringing disgrace to the family by engaging in deviant behaviors in addition to their inherent respect for authority may also aid in negating these behaviors. Leung, McBride-Chang, and Lai (2004) also discuss life satisfaction and found that perceived maternal concern and academic competence is important in predicting early Chinese adolescent life satisfaction. With higher levels of life satisfaction, it is possible that these adolescents do not need to seek external sources of stimulation and are therefore less likely to participate in deviant activities.

The measures utilized by Shek et al. (1995, 2001) and Leung et al. are so relevant because they describe the mean level differences between the different groups. They offer insight on dimensions that can be qualitatively measured. The results of these measures are of particular interest to the current study because they help form the rationale behind the hypotheses. However, the current study is interested in not only the “description”, but also the “explanation” of these differences, and using the results of those measures, the current study offers possible explanations for these results. Shek et al. found that positive parenting qualities predicted better school adjustment, while Leung et al. (2009) found that children who are high in filial piety respected authority. Based on these findings, it is hypothesized that because of higher mean levels of closeness, Chinese

youth from Taiwan will report stronger or larger, negative relationships between closeness and deviance than their European American counterparts.

Communication. Communication is a parenting dimension that is related to closeness. As discussed, having a close parent-child relationship plays an important role in positive adolescent adjustment. Good, clear, and open communication between the parent and an adolescent child is also important because without a clear understanding of what the parents are attempting to achieve with their parenting behaviors, the child may perceive discipline or controlling behaviors as hostile behaviors (Shek 1995, 2001).

Communication and closeness (or warmth), are two of the dimensions that will be examined in this study. It is expected that there will be mean level differences when comparing communication and closeness in European-American versus Chinese families. In a study by Barnes and Farrell (1992), parental support and monitoring are important predictors of adolescent outcomes regardless of family factors, race, age, gender, and family structure. Although cultural differences may have an influence on the adolescent's perception of parental support and monitoring, their findings show that regardless of cultural factors, poor parental monitoring and support are detrimental to adolescent behavior. According to Deng (2007), the family has always been the source of social control in China, whereas European-American families typically emphasize the importance of individualism. This emphasis on the family naturally moves the adolescent closer into the family unit, and within this structure, it is expected that Chinese parents will have greater involvement in their adolescent's life than a typical European American parent. This is consistent with what is hypothesized in the current study, namely, higher mean levels of warmth and communication as well as lower levels of

autonomy granting behaviors by parents. Because of the strong emphasis placed on the collective family unit, good communication is especially critical in Chinese families.

One way good communication has a positive effect on adolescent outcomes is by the parent providing conventional activities for the adolescent to participate in. By conveying these ideas, Deng found that both conventional opportunities and participating in conventional activities were associated with parent-adolescent attachment. Although Chinese families may appear to be more authoritarian, communication between the parent and child may help buffer the negative effects that are typically found in authoritarian settings. This buffer effect may be one of the reasons that explain why Chinese adolescent outcomes are more favorable than European-American adolescent outcomes despite the authoritarian parenting.

Although much of the research has focused on the parental influence on adolescent development, the adolescent also plays an important role in his or her own development. Lau and Leung (1992) examined how self-concept and delinquency were related to locus of control from a multidimensional perspective. Lau et al.'s perspective is an interesting one because instead of examining the adolescent's adjustment as a direct result of parental behavior, the present study examines how self-concept and delinquency and locus of control are interrelated. The researchers do not totally ignore the impact that parents and schooling has on the adolescents, however; the associations between adolescents' relations with parents and school and their locus of control were also studied.

Lau et al. state that in past studies, external control was generally found to have negative effects on self-esteem, but recent research has shown that self-concept is

multidimensional and that academic ability, physical appearance, social ability, and physical ability are major components. Lau and Leung (1992) also take gender into consideration; they cite that recent studies on adolescent delinquency and development suggest that boys may commit more delinquent behaviors, but girls may not be much less delinquent based on impulse. Where they differ, however, is in the kind of delinquency – in general, boys' delinquent behaviors involve more crime, they are more serious, and involve aggression against others. Girls' delinquent behaviors involve less crime, are less serious, and involve aggression against the self. The researchers expected, in agreement with previous work, that a parent-child relationship that is perceived as warm and supportive will be conducive to a child's development of internal control.

The study included 352 Chinese high school students, and each participant was given measures to assess locus of control, self-concept, frequency of delinquent behaviors, and perceived relations with parents and school. Locus of control was measured with the Locus of Control Scale. Self-concept was divided into four other dimensions: academic ability, physical appearance, social ability, and physical ability. Overall self-concept was measured by the Self-Esteem Scale, and academic self-concept was measured by the Self-Concept of Ability Scale. Physical appearance, social ability, and physical ability self-concept was measured with the Self-Description Questionnaire. Frequency of delinquent behaviors was measured with the Delinquency Scale. Lastly, perceived relation with parents was measured with the Self-Description Questionnaire and perceived relation with school was measured with the Classroom Environment Scale.

Lau et al.'s findings illustrate that external control was associated with lower general self-concept and higher delinquency. Also, external control was related to the

same extent to low academic self-concept in both sexes. As predicted, Lau et al. (1992) found that the relation of external control to low appearance, social, and general self-concept was found only in girls. The impact of involvement in delinquency on locus of control was found to be strong, and it tended to be more pronounced in girls. The study clearly showed that locus of control was related to feelings of success and competency of the self in different dimensions. For instance, girls' sense of control was especially related to their appearance, academic, and social aspects of the self. For boys, their sense of control was not related to the appearance or social domains. The study also showed that adolescents who had poor relations with their parents and school were higher in external control. This finding shows that good communication and a close relationship between parent and child are crucial in establishing an internal locus of control in adolescents. These results are helpful in establishing one of the study hypotheses, namely, that it is expected that in comparison to their European American counterparts, a stronger negative relationship between measures of communication and measures of deviance will be found among Chinese youth from Taiwan as compared to their European American counterparts from the United States. Since higher self-concept and lower levels of deviance are related to internal loci of control, this implies that higher mean levels of closeness and communication should be directly related to lower levels of deviance.

Peer approval/autonomy granting. Parental peer approval/autonomy granting has a different effect on adolescents than closeness and communication do. While it is hypothesized that there will be a stronger negative relationship between measures of closeness/communication and measures of deviance in Chinese adolescents than

European-American adolescents, it is also hypothesized that there will be a stronger positive relationship between measures of peer approval/autonomy granting and deviance in Chinese adolescents as compared to European-American adolescents. As mentioned, Chinese culture places more emphasis on the family unit than the individuals within the family unit and because of this, Chinese parents are less likely than European American parents to grant their children autonomy.

Steinberg and Silk's (2003) review examined parental autonomy granting, particularly adolescent emotional autonomy. According to Steinberg and Silk, adolescents who are emotionally autonomous are more self-reliant, and less dependent on parents. They also lead more individual lives and they tend to feel that even though their parents may still be involved in their lives, there are things that they may not know about them. Although this may not necessarily indicate a rift between parent and child, it does show that the adolescent is becoming more autonomous. It is also discussed in the review that families work best when there is a good mix of autonomy and connectedness. This idea is quite understandable because too much autonomy may be interpreted as lack of care for the child whereas not enough autonomy and too much connectedness may give a sense that the parent has become enmeshed in the child's life and be too overbearing. Also, almost intuitively, overprotective parents were found to have difficulty individuating, that is, they did not grant their children autonomy as easily.

Another important point that Steinberg and Silk point out is that adolescents who become emotionally autonomous and feel distant and detached from their parents score poorly on psychological adjustment scales. This is important because the current study proposes the idea that there is a difference in parenting effects between Chinese families

and European-American families that helps to mediate the effect of poor psychological adjustment and deviant behavior. Because of the expected higher mean levels of closeness and communication and lower mean levels of peer approval/autonomy granting in Chinese families in relation to European American families, adolescents are expected to be less likely to feel distant and detached from the parents.

Chou's (2003) study examined the relationship between emotional autonomy and problem behaviors in 512 11th and 12th graders. Chou defines emotional autonomy as involving three dimensions: de-idealization of parents, nondependency on parents, and individuation. In previous studies, emotional autonomy was found to be positively associated with problem behaviors such as substance abuse and fighting. Also, emotional autonomy was found to be positively related to susceptibility to peer pressure for problem behavior. Previous studies have also shown that although Hong Kong is a modernized city, Chinese adolescents in Hong Kong develop emotional autonomy at a significantly later age than do young people in Western countries. The Emotional Autonomy Scale, a 13-item scale measuring three aspects of emotional autonomy (individuation, nondependency on parents, and de-idealization of parents), was given to 512 participants in the 11th and 12th grades. Problem behaviors were measured using a 19-item self-report scale that assessed the frequency of 19 different types of behavior over the last 6 months. Results showed that problem behavior is positively associated with individuation.

According to Chou's multivariate regression analysis for variables predicting adolescent problem behavior, individuation ($\beta = .21$) was shown to have a significantly positive relationship with problem behaviors. This seems to be because as part of the separation-individuation process in adolescence, there is likely to be a reorganization of

personal relationships, with decreasing dependencies on parents and increasing dependencies on peers. This finding also strongly supports predictions made in the current study; since Chinese families put more emphasis on the family unit instead of the individual, the stronger parent-child relationship should result in a stronger, more negative relationship between closeness, communication and adolescent deviance than their European American counterparts.

An important aspect of emotional autonomy that is not frequently discussed is how much the parent actually knows about his or her child. Padilla-Walker, Nelson, Madsen, and Barry (2008) attempted to gain a clearer understanding of the relation between parents' knowledge of their emerging adult children and emerging adults' risk behaviors. Research suggests that parent-child relationships continue to be important, especially in times of transition such as emerging adulthood. Therefore, the study proposed to examine the relations between parental knowledge and parental closeness and emerging adults' risky behaviors. Emerging adulthood is especially important because it is seen as the time when young people begin to want independence and to become self-reliant while establishing an equal relationship with the parents. Parental knowledge during adolescence is associated with a number of positive outcomes including lower levels of adolescent externalizing behaviors and internalizing behaviors. Given that emerging adulthood is a time where young adults are striving to be seen on the same level as their parents, this may be a time period when parental knowledge that may be interpreted as intrusive or controlling may be particularly related to negative behavior problems.

The researchers had three hypotheses: First, they examined the relation between parent and emerging-adult reports of parental knowledge and expected they would be weakly related to each other. Second, they examined whether parental knowledge was related to emerging-adult outcomes over and above the variance accounted for by the closeness of parent-child relationship, and they expected parental knowledge to be related uniquely to positive outcomes during emerging adulthood even after closeness was taken into account. Third, they explored the interaction between parental knowledge and parental closeness to assess whether parental closeness moderated the interaction between parental knowledge and child outcomes, and they expected parental knowledge to be related more strongly to lower levels of risk behavior in the context of close parent-child relationship.

Two hundred undergraduates and their parents were selected from four college sites throughout Midwestern and West Coast universities. Participants were given Barber's Regulation Scale to measure parental knowledge, the Parent-Child Closeness Scale to measure parental closeness, questions from the Add Health Questionnaire to measure emerging adults' drinking habits, drug use, and sexual risk.

Results showed that child-reported maternal knowledge marginally and negatively predicted drinking while paternal knowledge significantly and negatively predicted drug use and number of sexual partners. For parent-reported knowledge, maternal knowledge negatively predicted both drinking and number of sexual partners. Also, closeness was not related to any outcomes, but appeared to act as a moderator in that when maternal closeness was high, then high levels of maternal knowledge were related to lower alcohol and drug use. Alcohol and drug use and risky sexual behavior all appeared to decrease in

the presence of parental knowledge. Therefore, parental knowledge may serve as a protective factor during the uncertainties of emerging adulthood. The relationships between self-reported maternal knowledge and less alcohol and drug use were strongest when maternal closeness was high. These results indicate that when the child knows that the parent is aware of his or her actions, drug use, alcohol consumption, and number of sexual partners were all reduced. A child's closeness with the parents did not directly influence any outcomes, but intuitively, when a child reported high levels of maternal knowledge, high levels of maternal closeness and lowered levels of drug and alcohol use were also reported. Therefore, parental closeness, although it may not necessarily have a direct effect, has a moderating effect that seems significant enough to lower some forms of deviance. This finding applies to the current study's Chinese sample because since the families are typically closer and display better communication and higher levels of closeness, parental knowledge will naturally be higher. Because of the greater parental knowledge regarding their children's actions, it is expected that Chinese youth should score lower on measures of deviance than European American youth.

Steinberg and Silk (2003) point out that adolescents who are more emotionally autonomous score more poorly on psychological adjustment scales. This finding, along with the finding that individuation (more autonomy) has a significantly positive relationship to problem behaviors (Chou, 2003) and Padilla-Walker et al's (2008) finding that alcohol and drug use, number of sexual partners were all reduced when the parents were aware of adolescents' actions (less autonomy) illustrate Jessor's "description" regarding the relationship between autonomy granting and deviance. Based on these findings, Chinese youth from Taiwan are expected to report lower levels of deviance than

European American youth. In addition, because of the emphasis that Chinese families place on having a close relationship with their children, it is also expected that there will be a stronger negative relationship between measures of autonomy granting of deviance for Chinese youth in comparison to their European American counterparts.

Parenting Effects on Academic Achievement

Closeness. Shek (1995) explored the relations between family environment and adolescent psychological well-being, school adjustment, and problem behaviors. This study is particularly salient because he studied a Chinese sample. In this study, a survey of literature that has been done on the relationship between family environment and adolescent psychological well-being and adjustment has been done, and there were some notable discoveries. One discovery is that many of the existing studies included and focused on parenting styles and measures of adolescent well-being. Also, instead of focusing on parenting styles, the current study attempts to study the links between parenting processes, deviance, and academic achievement among Chinese and European American youth. Secondly, parenting style has commonly been assessed in terms of subjective perceptions of specific parental behavior. However, Shek cited a need for a distinction between global parenting styles and specific parenting behaviors when attempting to understand parenting styles. Additionally, Shek indicated that an interesting question to discuss would be how adolescents' perception of specific parenting practices would give a clearer idea regarding the link between parenting styles and adolescent well-being. The current study attempts to examine something similar; however, instead of parenting practices and psychological well-being, the current study examines the relationships among specific parenting processes, deviance, and academic

achievement in Chinese youth from Taiwan and European American youth from the United States. Lastly, Shek indicates that most of the studies have been conducted in Western societies, and few attempts have been made to study Chinese culture. The current study shares Shek's interest in examining how family functioning (specifically different parenting processes) affects adolescent development and adjustment.

Assessment of family environment in the Shek study was measured using the Paternal/Maternal Parenting Style Scale, Paternal/Maternal Treatment Scale, Self-Report Family Instrument, and the Father/Mother-Adolescent Conflict Scale. School adjustment was measured using specialized items: perception of self academic performance was measured using an item comparing his or own academic performance with a peer's. Another item assessed the respondents' satisfaction with his or her academic performance, and the last item assessed the respondent's rating of his or her conduct. Problem behaviors were assessed using separate specialized items asking the respondent whether he or she had ever smoked or used psychotropic drugs.

Regarding parenting styles, Shek's study generally agreed with previous literature stating that parenting styles are linked to adolescent psychological well-being, school adjustment, and problem behavior. Uniquely, however, Shek found that regardless of how parenting styles are assessed (globally or specifically), there is a link between parenting styles and adolescent adjustment. Shek found that a more positive perception of family functioning is related to better adolescent adjustment, and this finding provides support for previous studies that had similar findings. Results also revealed that less parent-adolescent conflict was linked to better adolescent mental health, school adjustment and less problem behavior. These findings offer mean level comparisons

between lower levels of parent-child conflict and better school adjustment, adolescent mental health and less problem behavior. Traditional Chinese and Taiwanese culture does not encourage parent-child conflicts because children are socialized to be submissive to parents. Based on this cultural script, hypotheses 3 and 4 propose that better communication and more warmth between a parent and their child results in less conflict, and in turn, this results in better adjustment (higher grades and lower rates of deviance).

Shek discusses some possible explanations for his findings. First, family environment may exert a direct or indirect impact on adolescent adjustment. Secondly, it is possible that those with mental health problems, school adjustment problems, and problem behaviors tend to perceive their parents in a negative manner.

Heaven and Ciarrochi (2008) support these findings because in their study that examined conscientiousness, parenting styles, and their effects on academic performance, adolescents who perceived their parents as having a more active and positive role in their lives had less of a decrease in conscientiousness from Time 1 to Time 2 and thus had less of a decrease in academic performance at Time 3.

Communication. Communication is very much related to closeness when describing parent-child relationships. It is very difficult for a parent to be close to a child without displaying good communication, and conversely, good communication reinforces the bond that parents share with their children. As shown in Lau and Leung's 1992 study, good communication, along with a close relationship with the parents, plays an important role in determining the adolescents' locus of control. An internal locus of control is supported by good communication and a close relationship with the parent and

in turn, internal locus of control was shown to have an impact on not only the social aspect of the self, but of the academic aspect as well.

Communication is also important when the parent is trying to establish control in the household. Shek (1995, 2001) showed that an adolescent's perception of parental behavior may play an important role in the effect that it may have. That is, if an adolescent perceives punishment or instruction as hostility or tyranny, the adolescent is less likely to conform to the parents' wishes. Bodman (2005) showed in her study that harmonious conformity may have a significant impact on academic achievement in Chinese youth.

The findings by Lau and Leung (1992), Shek (1995, 2001), and Bodman (2005) are three different examples of how good communication can have a positive impact on a child's academic achievement. The current study, however, calls for a more in depth analysis as to how communication affects academic achievement. To address this, a possible explanation of the results is that the parents have established an understanding with their children regarding expectations and parenting and academics. Clear communication and a close relationship work together to work towards developing academic success. These points are in support of Hypothesis 3; because of their strong communication with their parents – along with a clear understanding of expectations, Chinese youth are expected to report stronger positive relationships between communication and academic achievement than their European American counterparts.

Peer approval/autonomy granting. In the Shek studies (1995, 2001), Shek and his colleagues focused on parental closeness, support, and conflict. Studies of these parent-child relationships clearly suggest that higher levels of closeness and support are

beneficial to adolescent psychological well-being and lower levels of problem behaviors while higher levels of conflict suggest the opposite. However, these studies do not address parental autonomy granting or peer approval. The Wang, Pomerantz, and Chen study in 2007 examined this issue by investigating the role in parents' control in early adolescents' psychological functioning.

The longitudinal study conducted by Wang et al. (2007) compared the effects of parental control and autonomy support on children's functioning in the United States and China. In order to further investigate the question of whether the effects of parents' control on children's development differ in cultures of contrasting orientations (independent vs. interdependent), this study examined the relations over time between distinct dimensions of parental control and several dimensions of early adolescents' emotional and academic functioning in the United States and China. Similar to the Shek studies (1995, 2001), this study is particularly important because it utilizes a Chinese sample. In addition, however, the Wang et al. study also compares the Chinese sample to a United States sample. The children in both samples participated in a 6-month longitudinal study and were asked to report on their parents' psychological control (guilt induction, love withdrawal, etc.), psychological autonomy support, behavioral control (monitoring children's activities and behaviors), and their own emotional and academic functioning. Wang and colleagues cite that presumably, psychological control hurts children because it invades their sense of self and individuality while behavioral control may be beneficial because it provides the guidance that children need without intruding on their individuality.

Wang et al. (2007) discuss the debate over whether the effects of parental control are similar across cultures. This debate is relevant to our current study because this study also examines the relationship between measures of parenting and measures of deviance and academic achievement in both European American families and Chinese families. Wang cites that Asian cultures contrast with Western cultures because Asian cultures emphasize interpersonal connectedness over individuality, and because of this difference, parental control in Asian families may not be associated with an intrusion upon one's sense of individuality. Wang et al. also states that because of the Asian emphasis on interdependence, parental control may have a different meaning than in Western cultures. In Asian cultures such as the Chinese culture, parental control is perceived as less of an intrusion upon their sense of self than in European-American culture and may therefore have less of a negative effect. Because of these dissimilarities, any negative effects of parental control and any positive effects of parental autonomy support on children's development should be weaker, if not absent, in Asia than in the United States.

Three hundred seventy three seventh graders from the United States and 433 seventh graders in China were recruited for this study. Each sample was recruited from one average and one above-average school in their respective countries. Both samples were given two part questionnaires – one in the fall (Wave 1) and one in the spring (Wave 2). Because of the language barrier between the European-Americans and Chinese, special measures were taken so that the measures were meaningful in both the United States and China. Regarding parenting, children reported on their parents' psychological control by responding to an 18-item measure that was created from items taken from existing measures (guilt induction, love withdrawal, authority assertion). To

assess parents' psychological autonomy support, eight items involving choice making and opinion exchange were used from prior research. Parents' behavioral control was measured using 16 items involving solicitation and restriction. Regarding child emotional functioning, three aspects of children's emotional well-being were examined using 16 items to measure positive emotion, 20 items to measure self-esteem and 17 items to measure emotional ill-being. Child academic functioning was measured using items to determine goal investment and learning strategies and grades in four major subjects (language arts, math, social studies, and science in the United States; Chinese, math, English, and biology in China) were obtained from the school.

Results of structural equation modeling estimating the total effects of each dimension of parental control on children's functioning showed that in both countries, parents' psychological control predicted children's dampened functioning mainly in the emotional area (United States: 0.13, China: 0.11). . Parental autonomy support effects, however, were generally found to be stronger in the United States than in China.

Results also showed not only similarities between the cultures, but also some dissimilarities. The results for the United States sample and the Chinese sample were similar because over time, psychological control had mainly detrimental effects on children's emotional functioning, parents' autonomy support had many beneficial effects on children's development, and behavioral control had mainly helpful effects on children's academic functioning. Some dissimilarities included that over time, the beneficial effects of parents' autonomy support on children's emotional well-being, goal investment, and learning strategies were stronger in the United States than in China (SEM showed results of .29, .23, .22, respectively for the United States compared with .19, .12,

.11 for China). Also, parents' psychological control predicted American but not Chinese decreased learning strategies. This finding strongly supports predictions made in the current study; the difference in autonomy granting that the Chinese parents exhibit in relation to the European American parents results in a more negative relationship with academic achievement.

Wang et al. (2007) concluded that the study implies "universalism without the uniformity;" this suggests that there are parenting dimensions that have a universal effect on children's development, but these dimensions do not necessarily have to be identical. The need for autonomy is clearly relevant to a child's development in both the United States and Taiwan. When this autonomy was violated, children suffered emotionally, and when this autonomy was supported, children thrived both emotionally and academically. However, Wang and colleagues also found that the need for autonomy appears to play a bigger role for children in the United States than in Taiwan. This seems to be the case because the beneficial effects of parents' psychological autonomy support were generally stronger in the United States.

D'Ailly (2003) conducted a similar study on parental autonomy granting and the child's perceived control and how they affect Taiwanese children's learning and motivation. Results of the study showed that maternal involvement and autonomy support are important for a child's autonomy and perceived control. Without the mediation of perceived control, autonomy had a small negative effect on academic performance ($\beta = -.06, p < .05$); controlling for perceived control, external motivation orientation was a positive predictor for Chinese children's effort and performance ($\beta = .41, p < .01, r^2 = .17$ and $\beta = .18, p < .01$, respectively).

These findings are in support of Hypothesis 3 of the present study; benefits resulting from autonomy support are stronger in the United States sample because the Western culture stresses autonomy and individualism more strongly than in Asian cultures. Because more emphasis is placed on individualism and a sense of self, intuitively, autonomy support from parents will result in relatively stronger beneficial effects in comparison to the Chinese sample. In terms of psychological control, the reason for it predicting American children's (but not Chinese children's) decreased learning strategies may be because in the Chinese culture, the psychological control is perceived differently by the child as a result of a fundamental cultural difference. This hypothesis also applies to Wang's finding that parents' behavioral control predicted American but not Chinese children's emotional well-being – the Chinese child may perceive the behavioral control differently, and therefore, the negative effects may be mitigated.

Rudy, Sheldon, Awong, and Tan (2007) compared European Canadians and Chinese Canadians to assess their academic motivation in both individual (defined as having "I" as the subject) and inclusive (defined as "my family and I" as the subject) terms by assessing four measures of well-being – depression, anxiety, self-esteem, and self-actualization. Their hypothesis examined whether Chinese Canadians would report lower levels of autonomous academic motivation on both the inclusive and individual measures. Rudy et al. based their assumption on the belief that Chinese children feel a great deal of pressure to succeed academically and are more fearful of parental reaction to academic failure than non-Chinese families.

The sample consisted of 96 Chinese Canadian and 89 European Canadian students from a major university in Toronto. Rudy et al. assessed academic motivation by asking participants to rate statements about why they engaged in academic activities. To differentiate between individual and inclusive terms, the questions were worded by using the self as the subject, and in the other, the family and the self were the subject, respectively. To confirm that Chinese Canadians valued collectivism more than European Canadians, Triandis' Vertical Collectivism Scale was used. Collectivism is important because having a stronger sense of collectivism shows that the individual is more aware of the family's concerns and approval, and thus having an impact on his or her behavior.

Based on an ANCOVAs focused on the two Relative Autonomy Indexes (RAI), the Chinese Canadians felt less autonomous overall on both the inclusive and individual RAI. Chinese Canadians appeared to feel more pressure stemming from external sources than European Canadians. Chinese Canadians reported higher levels of inclusive controlled motivation and lower levels of autonomous individual motivation. As a result, Chinese Canadians reported feeling more controlled and pressured in their family-based behavior, and feeling less autonomous in their individual behavior.

Although this study examines Canadians and not Americans, the overall idea is the same; people of Chinese descent have a more collective mindset than do people of European descent, and as a result, their actions and academic motivation are strongly influenced by familial approval. This sense of collectivism may be a major factor in determining the academic performance and level of deviance exhibited by an adolescent.

A previous study performed by Chao (1996) that examined Chinese and European American mothers' beliefs about their role in their child's school success showed that while Chinese-American mothers conveyed a high investment and sacrifice that they felt like they needed to offer and believed that they can play a significant role in their child's schooling, European American mothers exhibited a less direct approach to teaching and emphasized the importance of social skills instead of academics (Chao, 1996). Chen, Liu, and Li (2000) discovered that maternal warmth had significant contributions to the prediction of emotional adjustment and paternal warmth significantly predicted later social and academic achievement in a longitudinal study that examined parental warmth and its relations to adjustment in Chinese children.

Although parenting may have a profound impact on the child's academic motivation and achievement, it may not be the only factor affecting them. In addition to directly influencing the adolescent to perform better in school or to have a more positive attitude towards school and academic success, parents also affect them indirectly by influencing the adolescent's peer affiliations. Luo's dissertation (2000) examined the relationship between parenting, adolescents' peer affiliations, and adolescents' academic achievement and delinquent behavior outcomes. She hypothesized that perceived parenting would influence adolescents' association with a certain type of friends; she expected that good parenting would influence the adolescent to associate with peers who are academically oriented. As a result, these friends would influence the adolescents' later improvement in school performance. Regarding delinquent behaviors, Luo applied the same hypothesis. That is, she hypothesized that perceived parenting would have an impact on what type of friends an adolescent associated with, and based on prior

evidence, postulated that adolescents from families with poor parenting were expected to choose friends who display deviant behaviors. As a result, these friends would have a negative influence on the adolescent's delinquent behavior.

To test these hypotheses, a comparative longitudinal study conducted on 1,040 Chinese middle and high schoolers at Time 1 and 968 at Time 2. Five hundred seventy four European-American participants were included at Time 1 and 598 at Time 2. Luo included parental monitoring, mother-child relationship quality, minor delinquency, parent's educational aspiration, friendship nominations, friendship matching, students' education expectations, and academic achievement as measures.

Luo's results showed that adolescents whose parents had higher aspirations for educational attainment tended to associate with friends who had high education expectations as well. This finding is congruent with her hypothesis and indicates that across the two cultural groups, students who perceived that their parents placed their academic achievement in high regard may also place a high value on education themselves. This may lead to their choosing of friends who also value education. Results also showed that adolescents who perceived higher parental monitoring and a good mother-child relationship tended to associated with friends who had higher educational expectations and school grades. These results are congruent with the hypothesis that measures of Chinese parenting will have a stronger, more positive relationship with adolescent academic achievement as compared with measures of European American parenting. Since good parent-child relationships is expected in a Chinese family and close-knit families allow for higher parental monitoring, it is expected that Chinese adolescents will associate with friends with higher educational

expectations and school grades and thus perform better academically. Regarding delinquency, the impact of poor parenting on deviant peer association was found to be significant across both cultural groups. Luo cites that according to Brook (1990), close relationship with parents will help children choose peers who hold similar values as those of their parents because these children care about and are responsive to parents' opinions about their friends. In contrast, adolescents who do not have a good relationship with the parents may be more susceptible to feelings of self-rejection. In turn, these adolescents may seek out delinquent friends in order to feel accepted and become more likely to perform delinquent behaviors. Also, friends' influence on academic performance was found, but there appeared to be no significant effect of friends' influence on delinquency.

Parental autonomy may be important to an adolescent's development because it gives him or her a sense of independence and self-worth. However, this autonomy may be given and perceived differently by different cultures. Specific cultural belief systems may place a different emphasis on the idea of autonomy granting than others, so it is important to examine specific parenting behaviors rather than parenting styles.

Bodman's (2007) dissertation addressed this idea by attempting to determine whether academic achievement in Chinese adolescents is encouraged through parental patterns of socialization that emphasize either the development of conformity or autonomy in reference to parents. In other words, Bodman analyzed whether academic achievement in Chinese adolescents is a product of an emphasis on a collectivist orientation (conformity to parents) or individualistic orientations (autonomy from parents).

Bodman's dissertation involved 497 (246 male, 251 female) public high school students from Beijing, China. The Survey of High School Students questionnaires were administered by public high school teachers that were trained by the project directors and each student was instructed to complete the questionnaire based on their own experience. The questionnaire measured parental support (perceived warmth, closeness, acceptance of parents), parental use of inductive reasoning, parental punitive behaviors and parental monitoring. Autonomy was split into daily self-governance and goal autonomy and was measured using separate groups of items. Conformity was also split into two separate constructs: planning conformity and harmonious conformity. Academic achievement orientation was measured using items related to orientation to school (i.e. "I try hard in school" and "grades are important to me").

Results of her dissertation revealed that adolescent autonomy regarding daily decisions (daily self-governance) was positively related to academic achievement orientation. Bodman states that a possible explanation for this seemingly disjointed relationship is that because of cultural pressures to excel in education, Chinese parents are likely to encourage self-governance, especially as it pertains to behaviors and activities that can directly influence academic achievement. They do this because of the idea that academic achievement is enhanced when one is self-motivated and directed in their studies, and adolescents who perceive more autonomy in daily decisions are making positive choices in other areas of their lives and are being supported by their parents. In other words, the adolescents' good decision-making is rewarded by the freedom to make decisions. In addition, harmonious conformity was found to be a strong predictor of adolescent academic achievement orientation. Chinese society places a strong emphasis

on academic achievement, and intuitively, Chinese parents are likely to encourage their children to behave in ways that will ensure success in school. Therefore, students who conform to these parenting behaviors are more likely to perform better academically than those who do not. Conformity may carry a negative connotation, but when applied to a Chinese family context, a Chinese youth understands the intent of the parenting behaviors and accepts them when he or she conforms to parenting behaviors. This may result in a closer relationship and better communication with the parent and in turn, result in better academic performance.

Bodman also examined parental support, and it was found to predict adolescent harmonious conformity. This finding is important because since harmonious conformity was found to predict academic achievement orientation, this relationship shows that adolescent conformity acts as a mediator between parental support and academic achievement. Although conformity and autonomy seem like contradictory constructs, Bodman states that they are not mutually exclusive because through supportive, nurturing behaviors, parents encourage conformity in their children. Simultaneously, the children are given increased freedom to govern themselves as they submit to parental demands and expectations. Another parental behavior that positively predicted harmonious conformity was monitoring. A possible explanation of this result is that when parents monitor children's activities, friends, and school performance, they emphasize the importance of these areas and adolescents are more likely to internalize these messages and conform to their parents' values.

Wang, Pomerantz, and Chen (2007) found that although beneficial effects of autonomy support on children were generally stronger in the United States than in China,

parents' psychological control predicted American but not Chinese decreased learning strategies. Luo (2000) discovered that adolescents who had parents with higher aspirations for educational attainment tended to associate with friends who had high educational expectations and Bodman (2005) found that children who conform to parental behaviors that emphasize academic achievement are more likely to perform better academically than those who do not conform. These results effectively fit Jessor's "description" by showing the relationship between various forms of autonomy granting/peer approval and academic achievement. However, this current study is also interested in the underlying quasi-causal process of the relations between measures of parenting processes and measures of academic achievement, and these results help support Hypotheses 1, 2, and 3. Because of Chinese parents' involvement in their children's lives, it is expected that Chinese youth will report lower levels of peer approval/autonomy granting. In turn, it is also expected that Chinese youth will show not only higher levels of academic achievement, but also a more negative relationship between measures of peer approval/autonomy granting and measures of academic achievement.

Research Questions

The current study examines the mean level similarities or differences in levels of parenting constructs as well as the relationships among parenting processes, deviance, and academic achievement in Chinese youth from Taiwan and European American youth from the United States. It examines whether parenting processes differ between Chinese and European American families (Jessor's "description"), but also whether potential differences have differential effects on adolescent deviance and academic achievement across cultures ("explanation").

Hypotheses

Hypothesis I

The first hypothesis focuses on examining potential mean level similarities or differences in levels of parenting constructs. It is expected that there will be mean level differences in parenting dimensions (closeness, communication, peer approval/autonomy granting). Specifically, it is expected that in comparison to their European American counterparts, Chinese youth will report higher levels of closeness and communication but lower levels of peer approval/autonomy granting.

Hypothesis II

The second set examines potential mean level similarities or differences in levels of deviance and academic achievement among Chinese and European American youth. Chinese youth are expected to report lower levels of deviance but also higher levels of academic achievement in comparison to their European American counterparts.

Hypothesis III

The third set of hypotheses focuses on the relationships between parenting measures (closeness, communication, peer approval/autonomy granting) and measures of academic achievement between Chinese and European American youth. It is expected that in comparison to their European American counterparts, there will be a stronger positive relationship between measures of closeness, communication and measures of academic achievement and a more negative relationship between measures of peer approval/autonomy granting and measures of academic achievement for Chinese youth.

Hypothesis IV

The fourth set of hypotheses focuses on the relationships between parenting measures (closeness, communication, peer approval/autonomy granting) and measures of deviance between Chinese and European American youth. It is expected that in comparison to their European American counterparts, there will be a stronger negative relationship between measures of closeness, communication and measures of deviance and a more positive relationship between measures of peer approval/autonomy granting and measures of deviance for Chinese youth.

Method

Procedures

Data from the International Study of Adolescent Development (ISAD) were used for this study. A standard data-collection protocol was used across all study locations. It was approved by a university International Review Board (IRB) and consisted of a self-report data-collection instrument that included instructions on how to complete the survey, a description of the ISAD project, and assurances of anonymity. The questionnaires were administered in classrooms by project staff or teachers who had received extensive verbal and written instructions. This was done to maintain a standardized protocol across all study locations. All students had 1 to 2 hours to complete the survey. The survey was translated from English to Mandarin Chinese for the Taiwanese sample and back-translated by bilingual translators to ensure accuracy.

Sample

Data were collected from convenient samples of adolescents in Taiwan ($n = 906$) and the United States ($n = 877$). In both locations, medium-sized cities of similar size were selected for participation. Cities and schools were sampled in each country based on established relationships. For both countries, the entire student population was invited to participate at each school. The schools represented an age range of approximately 14 to 22 years so a group of students within a specific age range, namely, between 15.00 and 19.99 years was selected (mean age = 16.52 years (Taiwan); 16.32 years (United States)),

58.6% male (Taiwan); 50.3% (United States), 81% two-parent families (Taiwan); 71.6% (United States)) See Table 1 for complete sample description.

Measures

All participants were asked to fill out the same questionnaire including age, sex, school grades, family process variables, and measures of externalizing and internalizing behaviors.

Age. Adolescents were asked to indicate their birth month and year. To maintain anonymity of the participants, we will not ask for the day. Instead, the 15th day of the respective month will be used to calculate the ages.

Sex. Participants were asked to indicate their sex on a single item: “What is your gender?” Responses were given as “1 = male” and “2 = female.”

Table 1
Descriptive Statistics of Taiwanese and United States Samples

	Taiwan n = 906		United States n = 627	
	n	%	n	%
Age	16.52 years		16.32 years	
Sex				
Male	531	58.6	315	50.3
Female	375	41.6	311	49.7
Home Situation				
Biological parents	734	81	448	71.6
Biological mother only	40	4.4	61	9.7
Biological father only	18	2.0	15	2.4
Biological mother and stepfather	8	0.9	54	8.6
Biological father and stepmother	12	1.3	19	3.0
Biological parent and significant other	72	7.9	7	1.1
Other	22	2.4	22	3.5
SES				
Executive	24	2.6	234	40.4
Professional	241	26.6	203	35.1
Semi-Professional	221	24.4	86	14.9
Clerical	75	8.3	37	6.4
Semiskilled	137	15.1	14	2.4
Laborer	197	21.7	5	0.9

Home situation. An adolescent's home situation was measured with a single item: "Which of the following home situations best applies to you?" Responses included "1 = biological parents," "2 = biological mother only," "3 = biological father only," "4 = biological mother and stepfather," "5 = biological father and stepmother," "6 = biological parent and significant other," and "7 = other."

Socioeconomic status (SES). Participants rated a single item for family income: "From the following options, please select an estimated annual income of your family." There were five responses to choose from; these were different for each country and adjusted to reflect local currency as well as common income range. For the U.S. sample, the following response options were provided: "1 = 20,000 or less," "2 = \$20,000 to \$35,000," "3 = \$35,000 to \$60,000," "4 = \$60,000 to 100,000," and "5 = \$100,000." For the Taiwanese sample, the following response options were provided: "1 = under 400,000 Yen," "2 = above 400,000 to under 600,000 Yen," "3 = above 600,000 to under 1 million Yen," "4 = above 1 million to under 1.2 million Yen," and "5 = above 1.2 million Yen." Participants were also asked to rate years of parental education of both parents. These responses were adjusted for each national context to capture country-specific educational structure, yet to maintain a consistent quasi-scalar measure of years of parental education. U.S. respondents selected one of the following categories: "1 = does not apply," "2 = he finished elementary or junior high school (through 9th grade)," "3 = he finished high school (through 12th grade)," "4 = he finished some college or technical school," "5 = he has a college degree (4 years)," and "6 = he finished a graduate degree (advanced degree, e.g., masters or doctorate). For subsequent analyses, we used the first socioeconomic status measure.

Family and parenting process. The Adolescent Family Process (AFP) measure (Vazsonyi et al., 2003) was used to assess parenting processes for both mothers (mother, stepmother, or female caretaker) and fathers (father, stepfather, or male caretaker). The scale includes 25 maternal items and 25 paternal items in seven subscales, however the current study will focus on only three, namely closeness, communication, and peer approval (Appendix B). The closeness subscale included six items asking about parental involvement in school, affection, and trust. The communication subscale included nine items regarding how often the respondent discusses personal issues (boys/girls, sex, personal decisions, etc.) with the parents and how often the respondent asks the parent for advice (problems at school, future job plans, etc.). Lastly, the peer approval subscale includes three items regarding how often the parent approves of the respondent's friends.

Deviance. Lifetime deviance was measured by the 55-item Normative Deviance Scale (NDS) (Vazsonyi et al., 2002; Vazsonyi et al., 2001). The purpose of this scale is to capture norm-violating conduct across different cultures; items were originally developed with the purpose of being able to do so independent of cultural definitions of crime and deviance, but rather with a focus on behaviors found in general adolescent populations. The current investigation focused on three subscales of the NDS (alcohol use, drug use, and school misconduct) as well as the total deviance score composed of vandalism (8 items: e.g., “smashed bottles on the street, school grounds, or other areas”), alcohol use (7 items: e.g., “consumed alcoholic beverage [e.g., beer, wine, or wine coolers] before you were 21 [16 in other countries]”), drug use (9 items: e.g., “used ‘soft’ drugs such as marijuana [grass, pot]”), school misconduct (7 items: e.g., “been sent out of a classroom because of ‘bad’ behavior [e.g., inappropriate behaviors, cheating, etc.]”), general

deviance (11 items: e.g., ‘‘avoided paying for something [e.g., movies, bus or subway rides, food, etc.]’’), theft (7 items: e.g., ‘‘stolen, taken, or tried to take something worth between \$10 and \$100’’ [1200 to 12,000 Yen]’’), and assault (6 items: e.g., ‘‘hit or threatened to hit a person’’). Responses were given on a 5-point Likert - type scale and identified lifetime frequency of behaviors (1 = never, 2 = one time, 3 = 2–3 times, 4 = 4–6 times, and 5 = more than 6 times). Item number thirteen was removed from the dataset because it was not asked in the questionnaires given in the Taiwanese sample.

Academic achievement. Academic achievement was measured with one item: ‘‘What are the average grades you usually get at school?’’ Responses included: a. = mostly A’s, b. = mostly A’s and B’s, c. = mostly B’s, d. = mostly B’s and C’s, e. = mostly C’s, f. = mostly C’s and D’s, g. = mostly D’s and lower (responses were the same in the Taiwanese version).

Results

Plan of Analysis

In order to test hypotheses I and II, scale scores for each of the three parenting constructs, deviance, and academic achievement for both the Taiwanese and European American sample will be computed; this includes estimating reliability estimates. Next, one-way ANOVAs will be used to test hypotheses I and II, whether mean levels of parenting constructs, deviance, and academic achievement differ by culture. To address hypotheses III and IV, linear regression analyses will be completed in each sample, with follow-up z -tests of whether the magnitude of effects by parenting constructs differ by cultural context. Maternal and paternal scale scores, correlations, and regression analyses will be listed separately. Correlation analyses were also run for both samples (See Table 2 and Table 3).

Scale Scores

Hypothesis I. Results of descriptive analyses and ANOVAs run for both samples revealed some interesting findings regarding hypotheses I and II. Based on hypothesis I, it was expected that Chinese adolescents would report higher mean levels of closeness and communication, but lower mean levels of peer approval/autonomy granting in comparison to their European American counterparts. The descriptive analyses show, however, that for both mothers and fathers, European American adolescents reported higher mean levels of closeness and communication than Chinese adolescents from

Taiwan. In agreement with hypothesis I, Chinese adolescents from Taiwan reported lower mean levels of peer approval than European American adolescents (See Table 4).

Hypothesis II. Based on hypothesis II, it was expected that Chinese adolescents would report lower mean levels of deviance and higher mean levels of academic achievement than their European American counterparts. As Table 4 shows, the Deviance measure was skewed, so a logarithmic transformation was conducted on the measure (Post-transformation skewness statistics – Taiwan: 1.64; US: 0.57).

These transformed values were used in subsequent regression and correlational analyses. Descriptive analyses show that in relation to European American adolescents, Chinese adolescents from Taiwan scored lower on measures of deviance than European American adolescents.

Table 2
Correlation Table (Maternal)

	1	2	3	4	5	6	7	8	9
Age		-0.03	0.00	-0.03	0.01	0.07	0.08*	0.12**	0.03
Sex	-0.07*		-0.07	-0.08	0.10*	0.32***	0.14***	-0.22***	0.14***
Family Structure	0.00	0.01		0.26***	0.11**	-0.03	0.08*	-0.13**	0.14***
SES	0.00	-0.02	0.00		0.06	-0.03	0.02	-0.06	0.16***
Closeness (M)	-0.02	-0.05	0.12***	-0.01		0.60***	0.59***	-0.37***	0.27***
Communication (M)	-0.04	0.05	0.07*	0.07	0.61***		0.45***	-0.31***	0.20***
Peer Approval (M)	0.07*	-0.09*	0.08*	0.07	0.44***	0.39***		-0.33***	0.32***
Deviance	0.19***	-0.20***	-0.07*	0.08*	-0.16***	-0.07*	-0.08*		-
Academic Achievement	-0.11**	0.08*	0.01	-0.02	-0.14***	0.15***	0.08*	-0.15***	0.43***

Note: US scores are in upper half and Taiwanese scores are in lower half. (M) denotes maternal score

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

Table 3
Correlation Table (Paternal)

	1	2	3	4	5	6	7	8	9
1. Age		-0.03	0.00	-0.03	0.02	0.06	0.06	0.12**	0.03
2. Sex	-0.07*		-0.07	-0.08	0.05	-0.03	0.06	-0.22***	0.14***
3. Family Structure	0.00	0.01		0.26***	0.20***	0.05	0.13***	-0.13**	0.14***
4. SES	0.00	-0.02	0.00		0.16***	0.18***	0.07	-0.06	0.16***
5. Closeness (P)	-0.04	-0.01	0.16***	0.06		0.63***	0.58***	-0.35***	0.29***
6. Communication (P)	-0.03	-0.07*	0.11***	0.08*	0.60***		0.47***	-0.21***	0.23***
7. Peer Approval (P)	0.03	-0.12***	0.15***	0.07	0.48***	0.44***		-0.36***	0.30***
8. Deviance	0.19***	-0.20***	-0.07*	0.08*	-0.14***	-0.02	-0.03		-0.43***
9. Academic Achievement	-0.11**	0.08*	0.01	-0.02	0.13***	0.11***	0.05	-0.15***	

Note: US scores are in upper half and Taiwanese scores are in lower half. (M) denotes maternal score

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

However, the results do not support the hypothesis that Chinese adolescents from Taiwan will score higher on measures of academic achievement – results showed that European American adolescents scored higher. ANOVAs confirm that the differences in mean levels of parenting constructs, deviance, and academic achievement are statistically significant (see Table 4).

Regression Analyses

Hypothesis III. In order to test hypotheses III and IV, regression analyses were used. In addition, z -scores were calculated to compare regression coefficients. Based on hypothesis III, it was expected that in comparison to their European American counterparts, there would be a stronger positive relationship between measures of closeness, communication and measures of academic achievement and a larger negative relationship between measures of peer approval/autonomy granting and measures of academic achievement for Chinese youth. Table 5 shows the results from the regression analyses where parenting dimensions predicted academic achievement, controlling for the effects by age, sex, family structure, and SES. Maternal closeness had a significant positive effect on academic achievement in the Taiwanese sample ($\beta = 0.12, p < .05$); no significant relationship was found based on the US sample. Analyses based on paternal measures of closeness provide evidence of no significant effects by closeness on academic achievement in either sample. Again, comparative analyses confirmed no statistically significant difference ($z = 0.50$).

Table 4
Scale Score Table

	Taiwan n = 906					United States n = 627				
	Items	Alpha	Mean	SD	Skewness	Alpha	Mean	SD	Skewness	F Value
Closeness (M)	6	0.81	3.57	0.77	-0.55	0.84	3.98	0.85	-1.14	95.96***
Closeness (P)	6	0.85	3.26	0.86	-0.49	0.87	3.77	0.93	-0.75	117.54***
Communication (M)	9	0.87	2.51	0.74	0.10	0.89	2.89	0.91	-0.04	82.16***
Communication (P)	9	0.90	2.10	0.78	0.60	0.90	2.51	0.90	0.24	88.71***
Peer Approval (M)	3	0.72	3.07	0.94	-0.06	0.81	3.98	0.92	-1.11	352.18***
Peer Approval (P)	3	0.79	2.87	1.02	0.04	0.86	3.82	1.04	-0.95	309.73***
Deviance	54	0.92	1.31	0.33	3.24	0.97	1.82	0.78	1.30	310.66***
Academic Achievement	1		3.04	1.70	0.65		5.37	1.53	-0.89	737.64***

Note: (M) denotes Maternal Scale, (P) denotes Paternal Scale

*** $p < .001$

Thus, findings partially support predictions by hypothesis III, namely that maternal closeness for the Taiwanese sample displayed a more positive effect on academic achievement, but the differences between the two samples were not statistically significant as predicted.

Unexpectedly, no significant relationship was found between maternal communication and academic achievement in either sample. Also, no difference between the coefficients was found based on the comparison ($z = 1.44$). The paternal communication scale did not result in a statistically significant effect on academic achievement for either the Taiwanese or US sample. The z -score showed that there was no statistically significant difference in effects between the two groups ($z = 0.15$). These results did not support hypothesis III; maternal and paternal measures of closeness did not have a stronger positive relationship with measures of academic achievement in Taiwanese youth as compared to their European American counterparts.

Maternal peer approval was strongly and positively associated with academic achievement for the United States sample; no parallel effects were found in the Taiwanese sample. The comparative analysis did provide evidence of a statistically significant difference between the two groups ($z = -3.45$). Related, paternal peer approval showed a strong positive relationship with academic achievement based on the US sample; no effect was found based on the Taiwanese sample. Follow-up tests also confirmed a statistically significant difference in this relationship between the two groups ($z = 2.30$). These results partially support our hypotheses; although the relationship between measures of parental peer approval and academic achievement was not

significant for the Taiwanese sample, the relationship was more negative than the results from the US sample.

Hypothesis IV. Based on hypothesis IV, it was expected that in comparison to their European American counterparts, there would be a stronger negative relationship between measures of closeness, communication and measures of deviance and a larger positive relationship between measures of peer approval/autonomy granting and measures of deviance among Chinese youth. Table 6 shows that both maternal and paternal closeness displayed a statistically significant negative relationship with deviance among Chinese youth from Taiwan and among European American youth. The associations between maternal or paternal measures of closeness and deviance were not significantly different. These results do not support hypothesis IV because although the Taiwanese sample had the more negative relationships (maternal: $\beta = -0.19$ versus $\beta = -0.16$; paternal $\beta = -0.16$ versus $\beta = -0.14$), the comparison of regression coefficients provided no evidence that there was a significant difference between the two groups ($z = 0.71$ (maternal), $z = 0.00$ (paternal)). Maternal communication was negatively associated with deviance in the Taiwanese sample but not so in the US sample. Comparisons of the regression coefficients indicated a significant difference between the two samples ($z = 2.14, p < .05$).

Table 5

Regression Table Predicting Academic Achievement Controlling for Age, Sex, SES and Family Structure

<i>Predictors</i>	Taiwan n=906			United States n=627			
	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	<i>z</i>
Age	-0.14***	-0.14	0.04	0.02	-0.03	0.05	
Sex	0.05	0.17	0.13	0.08	-0.25	0.13	
SES	-0.02	-0.03	0.06	0.13**	-0.19	0.06	
Family Structure	-0.03	-0.14	0.17	0.09*	-0.29	0.14	
Closeness (M)	0.12*	0.26	0.11	0.09	0.16	0.10	0.67
Closeness (P)	0.08	0.17	0.10	0.06	0.10	0.10	0.50
Communication (M)	0.06	0.14	0.11	0.00	0.01	0.09	1.44
Communication (P)	0.08	0.17	0.10	0.09	0.15	0.09	0.15
Peer Approval (M)	0.04	0.08	0.08	0.20***	0.34	0.08	2.30**
Peer Approval (P)	0.00	0.00	0.08	0.16**	0.24	0.08	2.12**

Note: (M) denotes Maternal Scale, (P) denotes Paternal Scale

*** $p < .001$ ** $p < .01$ * $p < .05$

Measures of maternal peer approval in the United States were significant predictors of deviance; it was not associated with deviance in the Taiwanese sample. Thus, the comparison of regression coefficients provided evidence of a significant difference between the two groups ($z = 4.00$). Similarly, the paternal measures of peer approval were significantly associated with deviance, but no such effect was found among Taiwanese youth. Consequently, comparisons provided evidence of a significant difference between the two groups ($z = 4.00$). These results support hypothesis IV; relationships between both maternal and paternal peer approval and deviance in the Taiwanese sample were stronger (or existed) among Taiwanese youth, but the same was not true for the US sample (maternal: $\beta = -0.13$ (US) versus $\beta = -0.08$ (Taiwan); paternal: $\beta = 0.24$ (US) versus $\beta = -0.03$ (Taiwan)).

Table 6

Regression Table Predicting Deviance Controlling for Age, Sex, SES and Family Structure

<i>Predictors</i>	Taiwan n=906			United States n=627			<i>z</i>
	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	
Age	0.16***	0.01	0.00	0.14***	0.02	0.01	
Sex	-0.22***	-0.04	0.01	-0.14***	-0.05	0.01	
SES	0.07	0.01	0.00	-0.04	-0.01	0.01	
Family Structure	-0.05	-0.01	0.01	-0.11**	-0.04	0.02	
Closeness (M)	-0.19***	-0.02	0.01	-0.16**	-0.03	0.01	0.71
Closeness (P)	-0.16***	-0.02	0.01	-0.14*	-0.02	0.01	0.00
Communication (M)	0.11*	0.01	0.01	-0.09	-0.02	0.01	2.14*
Communication (P)	0.08	0.01	0.01	-0.01	0.0	0.01	0.71
Peer Approval (M)	-0.08	-0.01	0.00	-0.13**	-0.03	0.01	4.00***
Peer Approval (P)	-0.03	0.00	0.00	-0.24***	-0.04	0.01	4.00***

Note: (M) denotes Maternal Scale, (P) denotes Paternal Scale

*** $p < .001$ ** $p < .01$ * $p < .05$

Discussion

The current investigation brings empirical evidence to bear on the question of whether mean levels of parenting processes differ between Chinese and European American families, but perhaps more importantly, whether these differences also have differential effects on measures of adolescent deviance and academic achievement. First, findings indicated that in the US sample, youth perceived that parents had significantly higher mean levels of closeness and communication in comparison to Taiwanese adolescents. This suggests that although filial piety and conformity are a part of the way Chinese youth from Taiwan are raised, they did not report higher perceived levels of closeness and communication from their parents as was predicted. Chao (1994) suggests that the method “guan,” or “training,” is associated with positive outcomes and that authoritarian parenting therefore does not result in negative outcomes for Chinese students. However, McBride-Chang and Chang (1998) suggest that in a sample derived from high-achieving students from Hong Kong, students are more likely to rate their parents as authoritative than authoritarian. Also, studies have shown that the idea of “training” is more consistent with authoritative parenting than authoritarian parenting (Stewart, Bond, Zaman, McBride-Chang, Rao, Ho, Fielding, 2009; Stewart, Bond, Kennard, Ho, Zamman, 2002). This suggests that in the current study, Taiwanese students who rate parents as displaying lower levels of closeness and communication may indeed have parents who are more authoritarian and thus display more negative outcomes

than their European American counterparts. In fact, these results may suggest that the idea of “guan” that is present in Chinese families actually results in more negative outcomes for adolescents and perhaps even worse adjustment, something that is not consistent with previous conceptual and empirical work (i.e. Shek, 2001; Chao, 1994).

Second, the current investigation also found evidence that Taiwanese adolescents scored lower in measures of deviance than European American adolescents did. This result was consistent with study hypotheses; however, contrary to expectations, Taiwanese youth also scored lower in academic achievement than European American youth. This is consistent with recent findings by Pong et al. (2009). Based on their analysis, authoritarian parenting is negatively associated with children’s school achievement, while authoritative parenting is positively associated. This suggests that the cultural traits mentioned in their 2009 article did not have the expected positive influence on deviance and academic achievement. Stewart et al. (2009) had also stated that “guan” may not necessarily be unique to Chinese culture; it is actually a trait that is more authoritative than authoritarian. This notion supports the findings that European American youth had generally more positive outcomes than Taiwanese youth.

Implications of Findings on Academic Achievement

Evidence from regressions indicated that maternal closeness was only modestly and positively associated with academic achievement in the Taiwanese sample; on the other hand, paternal closeness was unrelated to academic achievement in the Taiwanese sample. Peer approval was positively associated with academic achievement in the US sample. On the other hand, no relationship between maternal and paternal peer

approval/autonomy granting and academic achievement was found in the Taiwanese sample. Parental peer approval did not have a significant relationship with academic achievement in the Taiwanese sample. However, based on pairwise z -tests, there were significant differences between the two samples in the relationships between maternal and paternal peer approval/autonomy granting and academic achievement, where Taiwanese youth reported a more negative relationship than the US sample. This result is consistent with the hypothesis that there would be a more negative relationship between measures of peer approval/autonomy granting and academic achievement in the Taiwanese sample than in the European American sample.

Implications of Findings on Deviance

It is also important to consider the implications of additional findings, namely that maternal and paternal closeness in both samples were negatively associated with adolescent deviance, and equally important, there was no statistically significant difference between Chinese and American youth. This suggests that despite mean level differences in measures of closeness, there is no evidence to suggest that Taiwanese parental closeness had a stronger negative relationship with deviance as was expected based on cultural explanations. As argued previously, mainland Chinese and Taiwanese cultures place great emphasis on the family as a whole, and children are raised to be respectful and submissive to parents (and authority figures). Because of this and a sense of respect and submission among Taiwanese adolescents, it was predicted that closeness would have a larger negative relationship with deviance as compared to European American adolescents, but findings do not support this. Similarly, it was expected that the relationships between communication and deviance among Taiwanese adolescents

and their parents would be stronger than those found in American families because of the cultural differences and the perceived emphasis on the family in Taiwan. Specifically, it was expected that because of a sense of filial piety, respect, and conformity, not only would the level of parent-adolescent communication would be high, but also that a larger negative relationship would be found with deviance. Again, contrary to expectations, a negative relationship was found among European American youth from the United States, but none was found for Chinese youth from Taiwan.

It was also expected that reports from Taiwanese youth on parental peer approval and its relationship to deviance would be stronger as compared to their European American counterparts. However, results show that maternal and paternal peer approval in the US sample had a significant negative relationship with deviance; no such relationship was found in the Taiwanese sample. Thus, in conclusion, predictions developed based on a cultural argument (i.e. Shek, 2001; Chao, 1994) about the influence of perceived parenting on both deviance and academic achievement among Taiwanese adolescents as compared to European American youth were simply not supported. Perceived parenting among Taiwanese adolescents did not seem to indicate unique benefits by how Taiwanese parents parent; in fact, z-tests largely suggest that perceived parenting in Taiwan has very similar effects on adolescent adjustment as found in the United States.

Limitations

There are a number of limitations that require discussion when considering the results of the current study. First of all, the samples gathered from both the United States and Taiwan were convenience samples. This means that although the sample sized were

relatively large, they were more than likely not a representative sample of their respective countries. These convenience samples may have contributed to the lack of support for the hypotheses stated in the current study. A nationally representative sample of each country would have added additional validity to the findings of the current study.

Another issue is that the current study was based exclusively on self-report measures. Self-report measures introduce the possibility of social desirability bias, that is, respondents may respond to items in a way that will be viewed favorably by others. For instance, this kind of bias may have been present in items such as the academic achievement measure; it is typically undesirable to be viewed as a low achiever, so respondents may indicate that their grades are higher than they actually are. Another limitation to consider is lack of a parental measure. Since all the measures were based on adolescent reports, the parental input was missing. According to Pong et al. (2009), students were more likely to rate their parents as more authoritative and permissive than the parents rated themselves. This means that the parenting dimensions rated by the adolescents may not necessarily agree with ratings from the parent and thus, it may show a distorted picture as to what is actually happening. Finally, the measure for peer approval/autonomy granting may not necessarily translate to how much autonomy the adolescent actually receives. Furthermore, how the parent feels about the adolescents' friends may not have an effect at all on how the adolescent feels about them. Perhaps a more effective measure would be to develop items that assess the frequency with which the parent controls the behavior of the adolescent, therefore quantifying the autonomy.

Conclusion

It has been well documented that parenting methods vary greatly across cultures, namely, Chinese parenting has been reported as more authoritarian than European American parenting methods (Chao, 1994). It has also been documented that despite the supposed authoritarian parenting, Chinese youth do not display the negative effects normally attributed to authoritarian parenting (i.e. Shek, 2001). The current study presents some empirical evidence on the issue of the differing effects of parenting on adolescent outcomes in two vastly different cultures.

Almost surprisingly, the results of the current study not only fail to support the hypotheses, but also contradict some of the findings of previous literature. The concept of “guan,” or “training” is a unique Chinese parenting trait (Chao, 1994), but instead of being a beneficial trait that negates the supposed negative effects of authoritarian parenting, the results of the current study show that, based on mean level comparisons, it perhaps even has a negative effect on adolescent adjustment. Not only is the results of the current study controversial, as it relates to previous literature, it also presents the question of what role “guan” actually plays in Chinese parenting – or if it even exists. With the evidence that the current study provides, it is possible that despite the claims that Chinese culture emphasizes filial piety, conformity, and obedience in their children, strict and controlling parenting may still have a negative effect on adolescent outcomes.

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Appendix A. The Normative Deviance Scale (NDS)

Have you ever

Vandalism

1. Smashed bottles on the street, school grounds, or other areas?
Intentionally damaged or destroyed property belonging to your parents or other family members (e.g., brothers or sisters)?
2. Intentionally damaged or destroyed property belonging to a school, college, or university?
3. Intentionally damaged or destroyed other property (e.g., signs, windows, mailboxes, parking meter, etc.) that did not belong to you?
4. Intentionally damaged or destroyed property belonging to your employer or at your workplace?
5. Slashed or in any way damaged seats on a bus, in a movie theater, or something at another public place?
6. Written graffiti on a bus, on school walls, on rest room walls, or on anything else in a public place?
7. Committed acts of vandalism when coming or going to a football game or other sports event?

Alcohol use

1. Consumed hard liquor (e.g., tequila, whiskey, vodka, or gin) before you were 21
(Taiwan: 18)?
2. Consumed alcoholic beverages (e.g., beer, wine, or wine coolers) before you were 21
(Taiwan: 18)?
3. Got drunk (intentionally) just for the fun of it (at any age)?

4. Got drunk just to fit in and be part of the crowd (at any age)?
5. Lied about your age to buy alcohol before you turned 21 (Taiwan: 18)?
6. Had an older brother/sister or friend buy alcohol for you?
7. Bought alcohol for a brother/sister or friend?

Drug use

1. Used tobacco products regularly (e.g., cigarettes, chew, snuff, etc.)?
2. Used “soft” drugs such as marijuana (grass, pot)?
3. Used “hard” drugs such as crack, cocaine, or heroin?
4. Gone to school when you were drunk or high on drugs?
5. Gone to work when you were drunk or high on drugs?
6. Gone to a concert when you were drunk or high on drugs?
7. Gone to a club/dance/party when you were drunk or high on drugs?
8. Gone to a club/dance/party to get drunk or high on drugs?
9. Sold any drugs such as marijuana (grass, pot), cocaine, or heroin?

School misconduct

1. Cheated on school tests (e.g., cheat sheet, copy from neighbor, etc.)?
2. Been sent out of a classroom because of "bad" behavior (e.g., inappropriate behaviors, cheating etc.)?
3. Been suspended or expelled from school?
4. Stayed away from school/classes when your parent(s) thought you were there?
5. Intentionally missed classes over a number of days for "no reason," just for fun (e.g., there was no family emergency)?
6. Been in trouble at school so that your parents received a phone call about it?
7. Skipped school/work (pretending you are ill)?

General deviance

1. Intentionally disobeyed a stop sign or a red traffic light while driving a vehicle?
2. Been on someone else's property when you knew you were not supposed to be there?
3. Failed to return extra change that you knew a cashier gave you by mistake?
4. Tried to deceive a cashier to your advantage (e.g., flash a larger bill and give a smaller one)?
5. Let the air out of the tires of a car or bike?
6. Lied about your age to get into a nightclub/bar?
7. Made nuisance/obscene telephone calls?
8. Avoided paying for something (e.g., movies, bus or subway rides, food, etc.)?
9. Used fake money or other things in a candy, coke, or stamp machine?
10. Shaken/hit a parked car just to turn on the car's alarm?
11. Stayed out all night without informing your parents about your whereabouts?

Theft

1. Stolen, taken, or tried to take something from a family member or relative (e.g., personal items, money, etc.)?
2. Stolen, taken, or tried to take something worth \$10 USD or less (Taiwan: 1200 Yen or less) (e.g., newspaper, pack of gum, mail, money, etc.)?
3. Stolen, taken, or tried to take something worth between \$10 and \$100 USD (Taiwan: 1200 to 12,000 Yen) (e.g., shirt, watch, cologne, video game cartridge, shoes, money)?
4. Stolen, taken, or tried to take something worth more than \$100 USD (Taiwan: 12,000 Yen) (e.g., leather jacket, car stereo, bike, money, etc.)?
5. Stolen, taken, or tried to take something that belonged to "the public" (e.g., street signs, construction signs, etc.)?
6. Stolen or tried to steal a motor vehicle (e.g., car or motorcycle)?

7. Bought, sold, or held stolen goods or tried to do any of these things?

Assault

1. Hit or threatened to hit a person?
2. Hit or threatened to hit your parent(s)?
3. Hit or threatened to hit other students/peers or people?
4. Used force or threatened to beat someone up if they didn't give you money or something else you wanted?
5. Been involved in gang fights or other gang activities?
6. Beaten someone up so badly they required medical attention?

Appendix B: The Adolescent Family Process Measure

Closeness

1. My mother often asks about what I am doing in school.
2. My mother gives me the right amount of affection.
3. One of the worst things that could happen to me would be to find out that I let my mother down.
4. My mother is usually proud of me when I finish something at which I've worked hard.
5. My mother trusts me.
6. I am closer to my mother than are a lot of kids my age.

Support

1. My mother sometimes puts me down in front of other people.
2. Sometimes my mother won't listen to me or my opinions.
3. My mother sometimes gives me the feeling that I'm not living up to her expectations.
4. My mother seems to wish I were a different type of person.

Monitoring

1. My mother wants to know who I am with when I go out with friends or on a date.
2. In my free time away from home, my mother knows who I'm with and where I am.
3. My mother wants me to tell her where I am if I don't come home right after school.
4. When I am not at home, my mother knows my whereabouts.
5. In general, my mother does not care much with whom I spend my free time or where I go.

Conflict

1. How often do you have disagreements or arguments with your mother?
2. How often do you purposely not talk to your mother because you are mad at her?
3. How often do you get angry at your mother?

Communication

1. How often do you talk to your mother about the boy/girl whom you like very much?
2. How often do you talk to your mother about questions or problems about sex?
3. How often do you talk to your mother about other things that are important to you?
4. How often do you talk to your mother about things you have done about which make you feel guilty?
5. How often do you talk to your mother about major personal decisions?
6. How often do you talk with your mother about problems you have at school?
7. How often do you talk with your mother about your job plans for the future?
8. How often do you talk with your mother about problems with your friends?
9. How often do you talk with your mother about how well you get along with your teachers?

Peer approval

1. How often does your mother approve of your friends?
2. How often does your mother approve of your boyfriend/girlfriend?
3. How often does your mother like when you go out with your friends?