PARENTS' PEER RESTRICTION IN THE UNITED STATES AND CHINA: A LONGITUDINAL STUDY OF EARLY ADOLESCENTS

BY

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THESIS

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ABSTRACT

This research examined parents' exertion of control over children's peer relationships in the United States and China. Three times over a year, 934 American and Chinese children (M age = 12.67 years) reported on their parents' peer restriction (i.e., efforts to limit children's connection or time with peers) and their psychological adjustment (i.e., delinquent behavior and internalizing symptoms). Parents' peer restriction predicted decrements in children's psychological adjustment over time similarly in the United States and China. However, children's psychological adjustment predicted parents' peer restriction over time to a greater extent in the United States (vs. China). Thus, culture may contribute to the socialization process involving parents' exertion of control over children's peer relationships, but only via child-driven pathways.

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INTRODUCTION

As children enter adolescence in the West, they increasingly spend time in the company of their peers, often reducing their time with their parents (e.g., Larson, Richards, Moneta, Holmbeck & Duckett, 1996; Lam, McHale & Crouter, 2014). Although this change is normative, parents may be concerned that their children will affiliate with peers who will adversely influence them (e.g., by leading children to engage in delinquent behavior or fostering internalizing symptoms in children via bullying). Consequently, parents may try to manage their children's peer relationships, often via controlling strategies (e.g., by letting their children know they disapprove of certain friends; Tilton-Weaver & Galambos, 2003). Parents may be well intended, but because their attempts often involve controlling strategies (i.e., limiting children's connection or time with peers), they may threaten children's feelings of autonomy, thereby undermining their psychological adjustment (e.g., Soenens, Vansteenkiste, Smits, Lowet, & Goosens, 2007). Indeed, research in the West finds that the more parents convey to their children that they disapprove of particular friends, the more children affiliate with deviant peers and engage in delinquent behavior (e.g., Keijsers et al., 2012; Mounts, 2001, 2011; Soenens et al., 2007; Tilton-Weaver, Burk & Stattin, 2013).

Parents' peer management has been studied almost exclusively in the West (e.g., the United States), which tends to be oriented toward independence. It is unclear whether similar undermining effects are evident in East Asia (e.g., China), which tends to be oriented toward interdependence. On the one hand, research on the effects of controlling parenting in China—as well as other interdependent countries—reveals effects similar to those in the West (e.g., Barber, Stolz, Olsen, Collins & Burchinal, 2005; Cheung, Pomerantz, Qu, & Wang, 2016; Lansford et

al., 2018). On the other hand, the centrality and function of peers may differ in China (vs. the West), particularly during adolescence (e.g., Smart, 1999; Way, Becker & Greene, 2006; Chen & French, 2008), leading parents' peer management to be less detrimental. The central goal of the current research was to elucidate the influence of culture on the role of parents' exertion of control over children's peer relationships in the socialization process in the United States and China. To this end, we examined the reciprocal pathways between parents' peer restriction and children's psychological adjustment in the two countries.

Parents' Selective and Unselective Peer Restriction

Parents contribute to their children's peer relationships in a variety of ways (Ladd & Pettit, 2002; Mounts, 2008). Although the general style of parenting affects children's affiliation with certain peers (e.g., Mounts & Steinberg, 1995), parents also use specific peer management practices to affect children's peer relationships. For example, parents can seek information from children about the time they spend outside home or make rules for children's provision of such information. Such monitoring has been one of the most studied parenting practices, but there is much debate over its effectiveness (e.g., Kerr & Stattin 2000; Stattin & Kerr, 2000; Fletcher et al., 2004). In response, several investigators have turned to parents' more active management practices specifically targeted at children's relationships with their peers. Mounts (2000) identified three specific practices, with the most frequently studied practice being what she labeled prohibiting, which involves negative evaluations about particular peers or limiting children's contact with those peers (e.g., Keijsers et al., 2012; Mounts, 2001, 2004, 2011; Tilton-Weaver et al., 2013; Tilton-Weaver & Galambos, 2003). As this practice focuses on regulating children's connection or time with *particular* peers, it may be considered *selective peer restriction*.

Parents can also use *unselective peer restriction* to manage children's peer relationships. Such practices limit children's exposure to peers in *general*. Parents may convey the priority of other activities (e.g., spending time studying or with family) to children to curb the time children spend with peers or may directly implement rules against time with peers—for example, the no-sleepover rule discussed by Amy Chua (2011) in her personal account of Chinese parenting in *Battle Hymn of the Tiger Mother*. Qualitative research in the United States suggests that unselective peer restriction is a particularly common practice among Chinese American parents, relative to parents of several other ethnicities (Way, Greene, & Mukherjee, 2007). Research in China also indicates that parents use unselective peer restriction frequently (Zhao & Gao, 2014). Unlike selective peer restriction, unselective peer restriction has received little conceptual or empirical attention in terms of its role in children's psychological adjustment.

The Role of Parents' Peer Restriction in Children's Psychological Adjustment

Individuating from parents to establish a distinct identity is often a key endeavor for children as they enter adolescence in the West (e.g., Collins & Steinberg, 2008; Steinberg, 1999; Steinberg & Morris, 2001; Youniss & Smollar, 1985). Peers play a central role in this independence building endeavor (e.g., Brown, 2004; Rubin, Bukowski, Parker, & Bowker, 2008). American children's time with their peers increases over adolescence (e.g., Larson et al., 1996; Lam et al., 2014) with peers becoming a greater source of support and connectedness (e.g., Furman & Buhrmester, 1992; Helsen, Vollebergh, & Meeus, 2000; Pomerantz, Qin, Wang, & Chen, 2009, 2011). American children often view peer relationships as personal such that they should be under their authority more than that of parents (Smetana & Asquith 1994). Thus, not surprisingly, when American parents exert authority over their children's peer lives, children view parents' practices as psychologically controlling (Smetana, 2013; Soenens et al., 2007).

Moreover, even moderate peer management is viewed by American children as indicating they lack competence, with more stringent peer management being interpreted by children as intrusive and reflective of children not mattering to their parents (Kakihara & Tilton-Weaver, 2009). Thus, although parents' peer restriction may be motivated out of concern for their children (Tilton Weaver & Galambos, 2003), it may undermine children's feelings of autonomy, with negative effects for their psychological adjustment (e.g., Deci & Ryan, 1985; Grolnick & Pomerantz, 2009).

In line with this perspective, concurrent studies consistently yield a positive link between parents' selective peer restriction and children's delinquent behavior in the West (e.g., Mounts, 2001, 2002; Updergraff, Kim, Killoren, & Thayer, 2010; Soenens et al., 2007; Soenens, Vansteenkiste, & Niemiec, 2009). Longitudinal studies suggest that this link at least partially reflects a tendency for parents' selective peer restriction to foster delinquent behavior among children. For example, following Dutch children for three years beginning in seventh grade, Keijsers and colleagues (2012) found that parents' communication of disapproval about peers predicted children's' heightened contact with deviant peers over time, which in turn predicted their later delinquency over and above their previous delinquency (see also Tilton-Weaver et al., 2013). However, longitudinal studies have failed to find a consistent effect of parents' selective peer restriction on children's drug use over time in the United States (Mounts, 2001, 2002), perhaps because drug use is quite low among the middle school children studied. Notably, there has not been research linking parents' unselective peer restriction to children's psychological adjustment, but because it involves parents' exerting authority over an area that children view as personal, similar to selective peer restriction, it may have negative effects.

It is unclear whether the negative effects of peer restriction are evident to the same extent in China as in the West given that the centrality and function of peers during adolescence may be different in China (vs. the West; e.g., Chen, 2000; Chen & French, 2008). In terms of centrality, as children navigate the early adolescent years in China, they appear to be less concerned with individuating from parents than are their American counterparts (e.g., Pomerantz et al., 2009, 2011). Moreover, although the teen years are seen as a time of heightened peer orientation in both countries, this is less true in China (Qu, Pomerantz, Cheung, Wang, & Cimpian, 2016). Chinese culture also emphasizes the socialization function of the peer group in helping children learn societal standards and develop societally acceptable behavior (Chen, 2000; Luo, 1996). Peers are often seen as instrumental in that they are an important means to a societally valuable end, such as achievement in school (e.g., Chen, Chang, He, & Liu, 2005; Chen, Kasper, Zhang, Wang & Zheng, 2004; Smart, 1999). This may be particularly true in China during early adolescence when there is much pressure on children to do well given the upcoming high school entrance exam; peers may be an important resource in ensuring children are academically focused (Chen et al., 2004). Thus, peer relationships may be viewed as more under the purview of parents' (vs. children's) authority. Chinese children may not see peer relationships as falling into the personal domain to the same extent as do American children, leading them to view their parents' peer restriction less negatively, which may temper its undermining role in children's psychological adjustment.

Alternatively, despite differences in China and the West in the centrality and function of peers, Chinese children may, similar to their Western counterparts, feel that peer relationships are largely personal as friends provide desired intimacy and emotional support which may be key for Chinese children's need for relatedness. Indeed, Chinese children value the intimate disclosure

and companionship of their friendships over the instrumental assistance their friendship provide (Chen et al., 2004). Moreover, the more Chinese children have problems with their peers (e.g., are victimized), the more prone they are to internalizing symptoms, with positive friendships buffering the negative effects of problems with peers (e.g., Liu et al., 2018). Chinese children may thus experience their parents' peer restriction as threatening, leading it to play an undermining role in their psychological adjustment to the same extent as in the West. Consistent with this perspective, parents' psychological control (i.e., exertion of pressure, intrusiveness, and dominance over children) is similarly predictive over time of decrements in children's psychological adjustment in China and the United States (e.g., Cheung et al., 2016; Wang et al., 2007). In addition, the more parents make decisions for children in the personal domain, which includes decisions related to peers (e.g., who to be friends with) as well as other issues (e.g., what clothes to wear), the more both American and Chinese children are prone to emotional problems two years later (Qin, Pomerantz, & Wang, 2009).

The Role of Children's Psychological Adjustment in Parents' Peer Restriction

Parents' socialization of children is often a reciprocal process in which parents' practices contribute to children's psychological adjustment, which also shapes parents' practices (e.g., Lollis & Kuczynski, 1997; Sameroff, 2009; Sameroff & Chandler, 1975). The positive link between parents' peer restriction and children's delinquent behavior evident in prior research may partially reflect the tendency for parents to respond with peer restriction to such behavior. Indeed, several investigators argue that parents use peer management when they are concerned about their children (e.g., Mounts, 2000; Tilton-Weaver et al., 2013; Keijers et al. 2012; Gerady, Mounts, Luckner & Valentiner, 2015). In line with this idea, in a concurrent study, Tilton-Weaver and Galambos (2003) found that the more Canadian parents worried about their children's

friendships or behavior, the more apt they were to use selective peer restriction. Notably, parents' worrying appeared to be rooted in reality as it was associated with heightened delinquent behavior among children. However, Keijers and colleagues' (2012) revealed little evidence for child-driven effects, perhaps because such effects were examined over one-year intervals, which may have been too long to detect child-driven effects as parents may calibrate their practices to children's psychological adjustment relatively quickly.

If children's psychological adjustment contributes to parents' peer restriction, a key question is whether this process is similar in the United States and China. American parents may try to achieve an equilibrium between satisfying their children's increasing desire for independence during adolescence and protecting their children against threats to their psychological adjustment from their peer relationships during this time. Indeed, in the United States, children increasingly make more decisions about personal issues without input from parents as they move through adolescence (e.g., Gutman & Eccles, 2007; Qin et al., 2009; Smetana, Campione-Barr, & Daddis, 2004). However, when American parents are concerned about their children's psychological adjustment, they may pull back on permitting their children independence. In this way, American parents may use peer restriction contingently, such that they generally only increase it when children exhibit adjustment problems. A similar child-driven process is possible in China (Xu et al., 2019). However, because less emphasis is placed on independence in China (e.g., Markus & Kityama, 1991; Qin et al., 2009), parents may not be hesitant to use peer restriction; thus, it may not be contingent on fluctuations in children's psychological adjustment. Regardless of children's psychological adjustment, Chinese parents may increase their use of peer restriction over the initial adolescent years given that even in China this phase may be viewed as a time of heightened orientation toward peers (Qu et al.,

2016), which parents may view as interfering with children's constructive behavior (e.g., effort in school).

Overview of the Current Research

Although there is a fair amount of evidence that controlling parenting has similar undermining effects in the United States and China (for a review, see Pomerantz & Wang, 2009), whether such parenting in the peer domain functions similarly in the socialization process in the two countries has not been studied. Given that the centrality and function of peers may differ in the United States and China, examination of parents' peer restriction is key to understanding the breadth of the similarity in the effects of controlling parenting. Thus, we investigated the role of parents' peer restriction in children's psychological adjustment in the United States and China. To capture the reciprocal nature of the socialization process, we examined both "parent-driven" and "child-driven" pathways over-time between parents' selective and unselective peer restriction and children's psychological adjustment (i.e., delinquent behavior and internalizing symptoms) in a three-wave longitudinal study. The study began in the fall of seventh grade when children in both countries started middle school and ended in the fall of eighth grade. During this phase of development American children often view peer relationships as falling within their personal domain, in which parents should have limited authority (Smetana & Asquith, 1994; Smetana & Daddis, 2002). Moreover, American children see the teen (vs. earlier) years as more of a time of peer orientation than Chinese children (Qu et al., 2016). Thus, the centrality and function of peers may likely differ during the early adolescent years. The design of the study also allowed us to explore the developmental context of the socialization pathways, by identifying the trajectories of American and Chinese parents' peer restriction over the early adolescent phase we studied.

The cross lag-panel model (CLPM), which includes over-time pathways between the constructs in both directions (e.g., from parenting to later child adjustment and from child adjustment to later parenting) along with autoregressive paths to account for the stability of the constructs, has been the traditional approach for analyzing longitudinal data on reciprocal pathways between parenting and children's adjustment (for a review, see Keijsers & Roekel, 2018). It has been assumed that in the context of CLPM, cross-lagged parameters are appropriate for detecting the direction of effects in longitudinal correlational data. However, CLPM has been critiqued for failing to separate between- and within-individual variance, which may lead to a directional predominance when no directional effects are present or indicate directional predominance opposite to that of the actual structure of the data (e.g., Hamaker, Kuiper & Grasman, 2015; Berry & Willoughby, 2017). Investigators have argued that it is essential to address this issue for two reasons. First, "smushed" estimates are not interpretable. Second, developmental processes, including that of socialization, are assumed to occur within—rather than between—individuals, making clear estimates of within-individual processes important (e.g., Keijsers et al., 2016). Thus, in our central analyses, we used the random-intercept cross-lag panel model (RI-CLPM; see Figure 1), which disentangles stable between-individual variance from within-individual variance, thereby permitting clearer interpretation of cross-lag estimates (Hamaker et al., 2015).

METHOD

Participants

Participants were 934 children in the United States and China (for other reports based on this data set, see Zhang, Pomerantz, Qin, Logis, Ryan & Wang, 2018, in press). In the United States, there were 420 children (mean age = 12.75 years in the fall of seventh grade; 212 boys) from four public middle schools in the Midwest serving primarily working- to middle-class families. Three schools were in small urban areas; one was in a rural area. According to the 2014 United States Census, the areas served by the schools had population densities ranging from 1523 to 2449 people per square mile. In the small urban areas, 17% to 33% of the population over the age of 25 had at least a 4-year college degree, with median family gross incomes between $27,161 and $58,451. In the rural area, only 6% of the population over the age of 25 had a 4-year college degree or more, with the median family gross income being $34,426. Two of the participating schools were above the state average in terms of academic achievement, one was at the state average, and one was below the state average. Reflecting the ethnic composition of the areas from which children were recruited, children were primarily European American (95%), with 2% African American, and 3% Latino.

In China, there were 514 children (mean age = 12.60 years in the fall of seventh grade; 276 boys) from three public middle schools serving a major urban area in Shandong province, the northeast district of China. As the birthplace to Confucius, Shandong province is considered the cradle of Chinese civilization. It is relatively traditional, with far less exposure to Western culture than large metropolitan areas such as Beijing and Shanghai. The population density of the area from which children were recruited was comparable to those for the areas from which

children were recruited in the United States. There were 1930 people per square mile, with 19% of the population over the age of six having at least a 4-year college degree. The annual discretionary income per capita (i.e., income after deduction of taxes and other mandatory charges) was ￥32,570 (Jinan Statistical Year Book, 2013). Two of the schools were located at the outskirts of the urban area where the population densities, educational attainment, and economic levels were below that for the area as a whole; one school was in the center of the area where the population density, educational attainment, and economic development levels were above that for the area as a whole. The schools differed in their levels of academic achievement, with one high-achieving school, one average-achieving school, and one low-achieving school. Reflecting the ethnic composition of the areas from which children were recruited, over 98% of the participants were of the Han ethnicity, which is the majority ethnicity in China.

Procedure

Beginning in the seventh grade in 2014, children in the United States and China participated in three waves of data collection six months apart with each wave consisting of two 45 min sessions. Wave 1 took place in the fall of seventh grade when both American and Chinese children made the transition to middle school, Wave 2 took place in the spring of seventh grade, and Wave 3 took place in the fall of eighth grade. Trained native research assistants administered surveys to children in their native language in the classroom. Children completed the surveys on their own; they were given a sheet of paper to cover their answers to ensure privacy. In both countries, an opt-out consent procedure was used in which parents received a letter describing what was involved in participating in the study. If they did not want their child to participate, they could contact the school; otherwise, children took part in the research, unless they themselves chose not to do so. Children who did not participate read or did homework quietly in

the classroom while their peers took part in the survey. Participation rates were 94% in the United States and 97% in China. Attrition over the entire study was 6%: At Wave 2, 11 American children and 8 Chinese children dropped out of the study; at Wave 3, an additional 29 American children and 5 Chinese children dropped out. Attrition was mainly due mainly to children deciding they no longer wanted to take part in the study or moving, with the latter being more common in the United States than China. At Wave 1, children who remained in the study for all three waves did not differ from those who dropped out of the study at either Wave 2 or 3 on any of the variables examined in this report, $|t|$s < 1.65, ps > .10.

Measures

The measures were initially developed in English. Standard translation and back-translation procedures (Brislin, 1980) were employed with repeated discussion among a team of English and Chinese experts to modify the wording of the items to ensure equivalence in meaning between the English and Chinese versions (Erkut, 2010). Linguistic factors were taken into account to ensure that the measures were easily comprehensible to children in both countries. Attention was also given to the relevance of the items to the daily lives of both American and Chinese children, with modifications made to address this issue when necessary. The means, standard deviations, and internal reliabilities of the measures are presented in Table 1; the correlations between the measures are presented in Table 2.

Parents' peer restriction. Children reported on their parents' selective and unselective peer restriction by indicating how often their parents engaged in practices reflective of each type of restriction (1=*Never*, 5=*Very Often*; for the full set of items, see Appendix A). Parents' *selective peer restriction* was assessed with six items about parents' negative evaluation of children's peers, with emphasis on particular peers: Tilton-Weaver and Galambos' (2003) 3-item

communicating disapproval measure (e.g., “Tell you that you cannot spend time with a specific friend”) was supplemented with three additional items to ensure a reliable and comprehensive scale (e.g., “Tell you that they dislike a particular friend of yours”). Eight items were generated for this study to assess *unselective peer restriction*. The items described parents’ attempts to regulate the time children spend with their peers in general (e.g., “Limit how much you communicate over the phone or computer with friends” and “Suggest you do something else when you want to hang out with your friends”).

Children’s psychological adjustment. Children’s *delinquent behavior* was assessed with the five items (e.g., “I hang around with kids who get in trouble”) from Barber, Stolz, and Olsen’s (2005) antisocial behavior measure which they adapted from Achenbach and Edelbrock (1978) and used with children in multiple countries, including the United States and China. These items were supplemented with four (e.g., “I’ve been a part of physical fight”) of the nine items comprising Stattin and Kerr’s (2000) measure of norm-breaking behavior. Children indicated how true (1= *not at all true*; 5=*very true*) each item was of them.

Two types of internalizing symptoms were measures. Children’s *anxiety symptoms* were assessed with Pomerantz and Rudolph’s (2003) adaptation of Reynolds and Richmond’s (1978) anxiety scale. Children indicated how often (1= *never*, 5=*very often*) in the past week they experienced 25 anxiety symptoms (e.g., “I had trouble making up my mind.”). Children’s *depression symptoms* were assessed with Costello, Erkanli, and Angold’s (2006) 13-item depression measure. Children indicated how often (1= *never*, 5=*very often*) they experienced depressive symptoms (e.g., “I felt miserable or unhappy.”) in the past week. Both these measures have been used with children in both the United States and China (e.g., Wang, Pomerantz, & Chen, 2007; Zhang, Pomerantz, Setoh, Qu, & Wang, 2016).

RESULTS

Three sets of analyses were conducted. The first was preliminary in that it was aimed at establishing measurement invariance across the American and Chinese samples over the three waves of assessment. The goal of the second set of analyses was to examine the trajectories of parents' selective and unselective peer restriction over the early adolescent period studied in the two countries. The third set of analyses evaluated the reciprocal relations over time between parents' peer restriction and children's psychological adjustment (i.e., delinquent behavior and internalizing symptoms), with comparisons between the two samples. All three sets of analyses were conducted using two-group nested structural equation modeling (SEM) with MPLUS 8 (Muthén & Muthén, 2017). MPLUS employs full information maximum likelihood estimation in the presence of missing data, which provides less biased estimates than other approaches, such as list- and case wise deletions, as well as mean-imputation (Wothke, 2000; Enders & Bandalos, 2001; Gold & Bentler, 2000).

Measurement Invariance

Sets of confirmatory factor analyses (CFAs) were conducted in the context of SEM to examine metric and scalar measurement invariance between the United States and China and over time for each of the measures. Metric invariance is sufficient and essential for valid comparisons of the associations between constructs; however, if comparisons are to be made between means, scalar invariance, which is more stringent than metric invariance, is required. (e.g., Chen, 2007). In these models, the individual items were used as indicators for the latent construct representing each type (i.e., selective and unselective) of parents' peer restriction. For children's psychological adjustment, the relatively large number of items made such an approach

unwieldy; thus, we used parcels of items, which also contributed to more reliable indicators (Little, Cunningham, Shahar, & Widaman, 2002; Little, Rhemtulla, Gibson, & Schoemann, 2013). When constructing parcels, we followed the item-to-construct balance rule in which loadings from exploratory factor analysis (Little et al., 2002) were used to make equally representative parcels. Specifically, we matched the highest loading item with the lowest loading item for one parcel and repeated this step by matching the second highest loading item with the second lowest loading item for the next one until only one item was left. Following this rule, there were five parcels for delinquent behavior and seven for depressive symptoms at each wave. We used five parcels for anxiety symptoms as we included five items in each parcel (e.g., the two highest loading items with the two lowest loading items and one middle loading item) given that there were 25 items.

A separate set of models was examined for each measure. The latent constructs at each of the three waves for the measure being evaluated were allowed to correlate. The error terms for the same items (or parcels) at different time points were also allowed to correlate as they may share unique variance in addition to contributing to the latent construct; this practice addresses first-order autocorrelated error when testing measurement invariance (Vandenberg & Lance, 2000). For the unselective peer restriction and anxiety measures, the modification indices suggested correlating two of the items' error terms within a particular wave to enhance model fit (McDonald & Ho, 2002); we added the parallel error correlations in the other two waves to ensure consistency over time.

Over-time invariance. We first evaluated the longitudinal invariance of each measure across the three waves within the United States and China, separately. To this end, unconstrained models in which the parameters were freely estimated were compared to constrained models. For

metric invariance, the factor loadings of the same indicators were forced to be equal across the three waves; for scalar invariance both the factor loadings and intercepts were forced to be equal across the three waves. Following Chen's (2007) recommendation, a change in comparative fit index (CFI) of .01 or less and root mean square error of approximation (RMSEA) of .015 or less between the unconstrained and constrained models was taken as evidence of invariance. The unconstrained, CFIs > .93, TLIs >.92, RMSEAs < .08, and constrained, CFIs > .92, TLIs > .91 RMSEAs < .08, models fit the data adequately. Importantly, changes in CFI and RMSEA between the unconstrained and constrained models were all smaller than .01, indicating metric and scalar invariance over time in each country for all of the measures.

Between-country invariance. To evaluate the invariance of the measures between the two countries, we conducted two-group CFAs in which unconstrained models were compared to constrained models. In these latter models, first the factor loadings and then the intercepts of the same indicators were forced to be equal between the two countries. The unconstrained, CFIs > .94, TLIs >.93, RMSEAs < .07, and factor-loading constrained, CFIs > .94, TLIs >.93, RMSEAs < .08, models fit the data adequately for all of the measures. Moreover, the changes in model fit between the unconstrained model and factor-loading constrained model were all smaller than or equal to .01, indicating metric invariance between the United States and China for all of the measures. However, the change in model fit for the model in which the intercepts were also constrained was only smaller than or equal to .01 for the psychological adjustment variables.

We sought to establish partial scalar invariance for the peer restriction measures (Steenkamp & Baumgartner 1998) given that valid inferences about the differences between latent factor means can be made in partial invariance models (Byrne, Shavelson & Muthén,

1989). Using a two-step approach to establish partial scalar invariance (Jung & Yoon, 2016), we first compared the model fit index of the full intercept-equality constraint model to models in which item constraint was freed one at a time to evaluate the influence of each item on model fit. We then used the item that caused the smallest decrease in fit from the metric invariance model as the reference item; and freed the intercept of the item that caused the largest decrease in fit from the metric invariance model while maintaining equality constraints on the intercepts of the other items. This new model was then compared with the metric invariance model. If the change in model fit was less than .01, partial invariance was established. Otherwise, the intercept of the second most influential item (i.e., which caused the second largest decrease in fit from the metric invariance model) was freed. This process was continued until the change in model fit was less than .01. Partial invariance was established by freeing the intercepts of two items (i.e., "Encourage you to spend less time with certain friends" and "Point out a certain behavior, attitude, or characteristic a friend has that you should not adopt") in the selective peer restriction measure; the intercepts of four items (i.e., "Suggest you do something else when you want to hang out with your friends," "Only allow you to do things with friends once you have done other things, such as chores or homework," "Say 'No' to sleepovers with friends—or have a rule against sleepovers," "Limit how much you communicate over the phone or computer with friends") were freed in the unselective peer restriction measure. These partial invariance models fit adequately, CFIs > .94, TLIs >.93, RMSEAs < .07.

Trajectories of Parents' Peer Restriction in the United States and China

To investigate how parents' selective and unselective peer restriction changes over time in the United States and China during early adolescence, we conducted two-group growth curve analyses in the context of SEM with each of type of peer restriction examined in a separate

model. Partial measurement invariance was specified by constraining the intercepts and factor loadings of invariant items to be the same over time and across countries while freeing the intercepts of noninvariant items across countries (see above). For each type of peer restriction, the constructs at each of the three waves were fixed to 1 on the intercept construct and to 0, 1, and 2, respectively at each wave, on the slope construct (see Figure 2). With such specification, the intercept construct reflects parents' peer restriction in the fall of seventh grade (Wave 1) when the study began; the slope construct reflects the linear rate of change in parents' peer restriction across the three waves from the fall of seventh grade to the fall of eighth grade. Differences between the United States and China in the initial level and linear change rate of parents' peer restriction were evaluated by comparing the baseline models in which the intercept and slope were freely estimated to constrained models in which the intercept or slope were forced to be equal between the two countries. A significant chi-square difference ($\Delta\chi^2$) relative to its degrees of freedom between the baseline and the more parsimonious constrained models was indicative that the former fit the data better than the latter, revealing a between-country difference in the intercept or slope.

Selective peer restriction. As shown in Table 3, American and Chinese parents used selective peer restriction similarly at the beginning of seventh grade as the model with the intercept equality constraint between the two countries, CFI = .94, TLI = .94, RMSEA =.064, fit as well, $\Delta\chi^2$ (1, N = 931) = 0, as the baseline model, CFI = .94, TLI = .94, RMSEA =.064. However, the model with the slope equality constraint between the two countries, CFI = .85, TLI = .84, RMSEA = .101, fit worse, $\Delta\chi^2$ (1, N = 931) = 11.54, $p < .001$, than the baseline model. As shown in Figure 3 (Panel A), on average, parents' selective peer restriction did not change over the three waves in the United States (slope = -0.03, SE = .02, p = .12), but it increased in China

(slope = 0.09, SE = .03, $p < .001$).

Unselective peer restriction. Surprisingly, American parents used unselective restriction more than did their Chinese counterparts at the beginning of seventh grade as the constrained intercept model fit, CFI =.92, TLI = .91, RMSEA = .059, worse, $\Delta\chi^2$ (1, $N = 931$) =37.05, $p < .001$, than the baseline model, CFI = .92, TLI = .91, RMSEA =.058. As was the case for parents' selective peer restriction, the model with the slope equality constraint between the two countries, CFI = .92, TLI = .91, RMSEA = .059, fit worse, $\Delta\chi^2$ (1, $N = 931$) = 5.04, p =.025, than the baseline model. As shown in Figure 3 (Panel B), similar to trajectories for parents' selective peer restriction, parents' unselective peer restriction did not change over the three waves in the United States (slope = -0.03, SE = .02, p = .25), but it increased in China (slope = 0.05, SE = .02, p = .03).

Over-Time Relations Between Parents' Peer Restriction and Children's Psychological Adjustment

We used RI-CLPM to examine the reciprocal pathways between parents' peer restriction and children's psychological adjustment (Hamaker et al., 2015). In a departure from traditional CLPM, as shown in Figure 1, this model adjusts for between-individual differences by including random intercepts capturing the constant level of the constructs (i.e., parents' peer restriction and children's psychological adjustment), thereby permitting estimates of the within-individual processes underlying the pathways over time (i.e., between parents' peer restriction and children's psychological adjustment). Given that most prior research on parenting has used traditional CLPM in examining the pathways over time (e.g., Cheung et al., 2016; Keijsers et al., 2012), we also evaluated the reciprocal pathways with CLPM in a set of supplementary analyses.

Random-intercept cross-lagged panel models (RI-CLPM). Sets of two-group nested

cross-lagged SEM were examined to compare the over-time paths between parents' peer restriction and children's psychological adjustment in the United States and China. Composite scores of the items of each measure were used as manifest variables given the complexity of the RI-CLPM. A separate set of models was evaluated for each type of peer restriction and each type of psychological adjustment (i.e., delinquent behavior, anxiety symptoms, and depressive symptoms), yielding a total of six sets of models. As shown in Figure 1, for each set of models, the variables at each of the three waves were fixed to 1 on the random intercept construct (i.e., the time invariant between-individual variance), thereby leaving within-individual variance in the overtime pathways (i.e., paths a and b) between parents' peer restriction and children's psychological adjustment. The model also adjusted for the within-individual stability with paths between the same constructs (e.g., peer restriction) over time (i.e., from Wave 1 to 2 and Wave 2 to 3; see the c paths) and the concurrent associations (i.e., between peer restriction and psychological adjustment) with correlations between constructs (i.e., at Wave 1) or their errors (i.e., at Wave 2 and 3) at each wave (see the d paths). We also correlated the random intercepts of the constructs to explore the covariance of individual stable means of parents' peer restriction and children's psychological adjustment (see the e path).

The parameters were first freely estimated in an unconstrained model which was compared to constrained models to evaluate differences between the two countries (i.e., the United States vs. China) and the two time periods (i.e., Wave 1 to 2 versus Wave 2 to 3). We started by constraining a single path (e.g., path a Wave 1 to 2) to be equal between the two countries. If the constrained model fit as well as the baseline model, we continued to test the equality in the two countries of the path for the other time period (e.g., path a Wave 2 to Wave 3). If the two paths in that direction did not differ between countries when tested individually, we

constrained them to be equal between countries and proceeded to test whether the paths for the two time periods in that direction differed by constraining Wave 1 to Wave 2 path a to be equal to Wave 2 to Wave 3 path a. This procedure was then repeated for the paths in the other direction (e.g., the b paths). Our most parsimonious model combined all the between-country and over-time equality constraints that were not different as indicated by non-significant chi-square difference tests, with the final estimates being from this most parsimonious model (see Table 4). The country-difference column in Table 4 indicates whether each path differed in the United States and China; when such differences existed, the paths were left unconstrained, but otherwise were constrained to be equal between countries. Notably, when there were country differences in the paths in initial testing, it was not possible to test for time period differences, and thus the two paths were freely estimated over time and across countries. Then, the wave difference column indicates whether the Wave 1 to Wave 2 path differed from the Wave 2 to 3 path when there was no country difference; when there were differences between the two time periods, they were freely estimated over time though still constrained to be equal across countries, otherwise these paths were constrained to be equal over time and across countries.

Selective peer restriction. The baseline and more parsimonious RI-CLPMs including selective peer restriction all fit the data well, $\Delta\chi^2$ s < 3.59, CFIs >.99, TLIs >. 99, RMSEAs < .04. In general, the more parents used selective peer restriction, the poorer children's psychological adjustment over time (i.e., a paths), with the effects being similar in size in the two countries (see the a paths in the top half of Table 4). Specifically, parents' selective peer restriction predicted children's heightened delinquent behavior six months later over and above children's earlier delinquent behavior, with no differences between countries. Such parenting also predicted heightened anxiety symptoms among children similarly in the United States and China.

However, there was little evidence that parents' selective peer restriction contributed to depressive symptoms over time; only in China from Wave 1 to 2 did such parenting predict dampened depressive symptoms, albeit marginally, with this effect, but not others, differing significantly from that in the United States.

In terms of child-driven effects (i.e., b paths), parents' selective peer restriction tended to be sensitive to children's psychological adjustment in the United States, but not China (see the b paths in the top half of Table 4). The more children engaged in delinquent behavior, the more parents used selective peer restriction six months later, taking into account parents' earlier selective peer restriction, in the United States, but not China, with the difference being significant. It was also the case that American but not Chinese children's anxiety symptoms predicted heightened selective peer restriction among parents over time, but this difference was only marginal. A similar trend was evident for children's depressive symptoms: Children's heightened depressive symptoms predicted heightened selective peer restriction among parents significantly more strongly in the United States than China where such a link was not evident.

The correlation between the random intercepts (i.e., the e path between the time invariant individual means in Figure 1) reflects the rank-order association between the individual means of parents' peer restriction and children's psychological adjustment—that is, the association between the between-family variation in the two variables. As shown Table 4 (see the last column), concurrently, in families where parents used more selective peer restriction relative to others, children's psychological adjustment was poorer than in other families. Two group comparisons indicated that this association was similar in China and the United states, $\Delta\chi^2$s(1, 931) < 1.99, *p*s > .15, with the exception of depressive symptoms for which the association was stronger in China, $\Delta\chi^2$ (1, 931) = 5.53, p =.018

Unselective peer restriction. The baseline and the more parsimonious RI-CLPMs including unselective peer restriction all fit the data adequately, $\Delta\chi^2$ s < 4.69, CFIs >.99, TLIs >. 94, RMSEAs <.08. Although parents' unselective peer restriction sometimes did not predict children's psychological adjustment over time (i.e., a paths), when it did do so, it predicted poorer psychological adjustment over time, with the effects being similar in size in the two countries (see the a paths in the bottom half of Table 4). Specifically, parents' unselective restriction did not predict children delinquent behavior, except in the United States from the spring of seventh grade (Wave 2) to the fall of eighth grade (Wave 3). Parents' unselective peer restriction consistently predicted children's heightened anxiety, but not depressive, symptoms over time with the pathways for both types of internalizing symptoms being similar in the United States and China.

In terms of child-driven effects (i.e., b paths), parents' unselective peer restriction generally appeared to be sensitive to children's psychological adjustment in both countries, with the exception of delinquent behavior for which this was the case only in the United States (see the b paths in the bottom half of Table 4). The more children engaged in delinquent behavior, the more parents used unselective restriction six months later in the United States, but not China, with this difference being significant. It was also the case that the more children experienced anxiety symptoms, the more parents used unselective peer restriction six months later, with these paths being similar in the two countries. Depressive symptoms also predicted heightened unselective restriction over time, but only from the fall of seventh grade (Wave 1) to the spring of seventh grade (Wave 2), with no differences between the United States and China in the paths over either of the two periods.

Examination of the correlations (i.e., e paths) between the random intercepts revealed

positive associations between between-family variation in parents' unselective peer restriction and children's psychological adjustment with the exception of delinquent behavior in the United States (see the last column of Table 4). Multi-group comparisons indicated that the associations were stronger for all three dimensions of children's psychological adjustment in China (vs. the United States), $\Delta\chi^2$s (1, 931) > 8.30, ps < .01.

Traditional cross-lagged panel models (CLPM). We conducted traditional CLPM using a model similar to that for the RI-CLPM except that the random intercepts were not included. In addition, given that traditional CLPM is simpler than RICLPM, we used latent variables for parents' peer restriction and children's psychological adjustment with the individual items or parcels of items (see above) as indicators. As in the trajectory analyses, we used partial measurement invariance for the peer restriction constructs as suggested by the measurement invariance analyses (see above). (Analyses using the manifest variables as in the RI-CLPM yielded results practically identical to those reported below in terms of size and significance.)

Selective peer restriction. The baseline and the more parsimonious CLPMs including parents' selective peer restriction fit the data adequately, $\Delta\chi^2$ s < 3.62, CFIs > .94, TLIs > .93, RMSEAs < .06. As shown in Table 5, the findings were quite similar to those yielded by the RI-CLPM in that selective peer restriction consistently predicted heightened delinquent behavior and anxiety symptoms among children similarly in the United States and China (i.e., a paths); the one exception was that this path for anxiety symptoms did not reach significance from Wave 1 to 2 in China, where it was significantly smaller than in the United States. There was also a tendency not evident in the RI-CPLM for parents' selective peer restriction to predict heightened depressive symptoms from Wave 2 to 3 similarly in the two countries. The most major difference between the analytic approaches was that children's psychological adjustment predicted

heightened selective peer restriction over time *similarly* in the two countries in the CLPMs (i.e., b paths), with only the path from delinquent behavior to such parenting from Wave 1 to 2 being stronger in the United States than China.

Unselective peer restriction. The baseline and more parsimonious CLPMs including parents' unselective peer restriction fit the data adequately, $\Delta\chi^2$ s < 6.02, CFIs > .92, TLIs > .91, RMSEAs < .05. The findings were quite similar to those yielded by the RI-CLPM in that unselective peer restriction did not predict delinquent behavior over time, but did predict heightened anxiety and depressive symptoms (i.e., a paths), with the exception that such parenting did not predict depressive symptoms from Wave 1 to 2 (see Table 5). All of these parent-driven paths were similar in size in the United States and China. The child-driven effects (i.e., b paths) were also similar to the RI-CLPM. The more children had psychological adjustment problems, the more parents used unselective peer restriction, but such a tendency was evident only from Wave 1 to 2 for delinquent behavior and depressive symptoms. All the child-driven paths were similar in size in the two countries.

DISCUSSION

Although growing research on parents' peer management practices suggests that parents' restriction of children's peer relationships during adolescence undermines children's psychological adjustment (e.g., Keijsers et al., 2012, Tilton-Weaver et al., 2013), parents' peer management has been examined almost exclusively in the West. The current research took a step toward elucidating the socialization process involving parents' peer management by examining reciprocal pathways between parents' peer restriction and children's psychological adjustment over early adolescence in the United States and China. Increments in parents' peer restriction predicted decrements in children's psychological adjustment over time similarly in the two countries. However, decrements in children's psychological adjustment predicted increments in parents' peer restriction over time to a greater extent in the United States than China. Thus, like parents' control in other domains (e.g., the academic; e.g., Cheung et al. 2016), culture does not appear to modulate the effects of parents' peer restriction on children in the United States and China, but it does appear to modulate the effects of children's psychological adjustment on parents' peer restriction.

The Role of Parents' Peer Restriction in Children's Psychological Adjustment

In the current research, consistent with research on parents' tendency to exert control over their children in general (e.g., Barber, Stolz, Olsen, Collins & Burchinal, 2005; Cheung et al, 2011; Wang et al., 2007) and specifically in the academic domain (Cheung et al, 2016), the more parents restricted children's peer relationships, the poorer children's psychological adjustment six months later over and above children's earlier psychological adjustment. In only two of 12 cases in our central analyses (i.e., RI-CLPMs), was parents' peer restriction more predictive of

decrements in children's psychological adjustment in the United States (vs. China). Thus, it appears that despite the peer domain differing in the two countries in its centrality and function (e.g., Way et al., 2006; Chen & French, 2008; Qu et al., 2016), controlling parenting in this domain has a similar undermining effect. It will be important for future research to obtain a deeper understanding in regard to American and Chinese children's views of the peer domain to understand if and how such views matter when it comes to parents' peer restriction. However, even without such information, the findings of the current research add to the growing body of research that contradicts cultural relativistic views of controlling parenting (e.g., Chao, 1994) in broadening the domains in which there is similarity in controlling parenting in the United States and China.

As in prior concurrent research conducted with American families (e.g., Soenens et al., 2007, 2009) and longitudinal research conducted with Dutch families (Keijsers et al., 2012), selective peer restriction (i.e., parents communicate disapproval or limit children's contact with particular peers) predicted heightened delinquent behavior among children over time. In addition, the current research went beyond prior research in examining the links over time not only with children's delinquent behavior, but also children's internalizing symptoms as manifest in their anxiety and depressive symptoms. In both the United States and China, the more parents used selective peer restriction, the more children experienced anxiety, but not necessarily depressive, symptoms. Parents' unselective peer restriction (i.e., parents limit children's contact with peers in general), which has not received empirical attention in terms of its role in children's psychological adjustment, also appeared to have undermining effects, but only for children's anxiety symptoms. The early adolescent years examined in the current research may represent the start of a new stage of peer relationships for children and new strategies of peer

management for parents. As children enter adolescence and seek to establish their independence from parents, they may view their choice of friends as personal and thus under their own jurisdiction (Asquith & Smetana, 1994). As such, the first stage of feeling controlled in the peer context may be the development of anxiety symptoms because children may struggle to balance their preferences, and even status in the peer group, with their parents' expectations. When parents exert control over children's peer lives, one strategy children may take is to be more secretive and disclose less (Tilton-Weaver, 2014), potentially yielding more anxiety about whether their parents know about their secrecy while also receiving less support from parents. This may set the foundation for later depression, which is often preceded by anxiety (Cole, Peeke, Martin, Truglio and Seroczynski, 1998).

Interestingly, although both parents' selective and unselective peer restriction consistently predicted heightened anxiety symptoms among children over time, only parents selective peer restriction consistently predicted delinquent behavior among children over time. It may be that because selective peer restriction involves parents' communication of their disapproval of their children's choice of peers, children experience psychological reactance (Brehm, 1966) at having what they view as their personal freedom threatened. As a consequence, they may heighten their affiliation with deviant peers of whom their parents disapprove, which may increase their delinquency (Keijsers et al., 2012). In contrast, unselective peer restriction involves parents' communicating that time with peers in general should be limited, often because other activities (e.g., family life or academic work) are of more importance. In this case, although children may feel that their autonomy is being undermined which may foster internalizing symptoms, they may also understand that parents have prudential concerns about which parents and their children are aligned in terms of the legitimacy of parents' authority (Smetana & Asquith, 1994).

The Role of Children's Psychological Adjustment in Parents' Peer Restriction

Parents' socialization of children is often a reciprocal process in which parents' and children mutually shape one another (e.g., Sameroff, 2009). The positive concurrent link between parents' peer restriction and children's delinquent behavior documented in prior research may partially reflect the tendency for parents to respond with peer restriction to such behavior. Although Tilton-Weaver and Galambos (2003) found that the more Canadian parents worried about their children's friendships or behavior, the more apt they were to use selective peer restriction, the idea that children's delinquent behavior may elicit parents' peer restriction has only been examined by Keijsers and colleagues' (2012) longitudinal study with Dutch children, which did not find evidence for a child-driven pathway. The one-year lags in this study may have been too long to reveal such a pathway because parents' responses may be relatively immediate. Indeed, examining six-months lags, the current research found that the more children experienced psychological adjustment problems, the more parents subsequently used peer restriction over and above their earlier peer restriction.

Such apparent contingent responding was more common in the United States than China. Specifically, in the central analyses (i.e., RI-CLPM), the more children engaged in delinquent behavior, the more their parents used both selective and unselective peer restriction in the United States but not China. A similar pattern was evident when it came to children's internalizing symptoms predicting parents' selective peer restriction. Given that peer restriction did not change among American parents, but increased among Chinese parents from our trajectory analysis, it is possible that American parents attempt to achieve an equilibrium between satisfying children's increasing desire for independence and protecting children against threats from their peer relationships. They may refrain from increasing their peer restriction over early adolescence, but

when they become concerned about their children's psychological adjustment, they may step in with peer restriction. In contrast, Chinese parents may not restrain from using peer restriction as children enter adolescence because less emphasis is placed on independence in China (Wang & Hsueh, 2000). Thus, regardless of their children's psychological adjustment, Chinese parents may increase their use of peer restriction over the initial adolescent years given that even in China early adolescence may be viewed as a time of heightened peer orientation (Qu et al., 2016), during which parents may be viewed as interfering with children's constructive behavior. Interestingly, children's internalizing symptoms predicted parents' unselective peer restriction over time similarly in the United States and China. Future research is needed to understand why in the majority of cases the differences between the two countries differ across the different types of parents' peer restriction and children's psychological adjustment.

Comparing Traditional Cross-lag Model and Random Intercept Cross-Lag Model

A key strength of the current research was that in addition to taking the traditional cross-lagged panel model (CLPM) approach, we took the random intercept cross-lag panel model (RI-CLPM) approach. This is important given statistical and conceptual critiques of the CLPM (Hamaker et al., 2015; Dietvorst et al., 2018). However, in regard to parents' peer restriction predicting children's psychological adjustment(i.e., parent-driven pathways), the two approaches generally yielded quite similar findings. When it came to the "child-driven" pathways, however, the findings were somewhat different in terms of whether the pathways were similar in the United States and China. In line with the critique that CLPM can yield significant pathway estimates when such pathways do not exist as CLPM pools between and within variance (e.g., Hamaker et al., 2015), we found "child-driven" pathways in China in the CLPM that sometimes were not evident in the RI-CLPM. Although this difference in the two models could be due to

statistical issues, it could also be due to Chinese parents being attuned to when their children are having psychological adjustment difficulties compared to their peers, but not necessarily when they have difficulties compared to their earlier adjustment.

The RI-CLPM also yielded country difference in the random intercept correlations—that is, the rank-order correlations of individuals' stable means on the variables across time. For example, a positive correlation of the random intercepts of selective restriction and delinquent behavior indicates that parents who use more selective restriction compared to others have children who engagement in more delinquent behavior compared to others. In the current research, there was a pattern of stronger random intercept correlations between parents' peer restriction, particularly for unselective peer restriction, and children's adjustment in China than in the United States, which may indicate that between family differences have already accumulated in China but not in United States at early adolescence. However, it could also indicate that such differences play a more central role in the socialization process involving peer restriction in China (vs. the United States).

Limitations and Future Directions

The current findings should be interpreted in light of several limitations. First, we used children's reports of all the constructs. This is of concern because previous research shows that children's reports of controlling parenting are only modestly associated with mothers' reports and even more weakly associated with trained observers' reports (e.g., Cheung et al., 2016; Pettit, Laird, Bates, Dodge, & Criss, 2001). Yet, it is possible that children perception of their parents' controlling behaviors are more salient to their experiences of psychological adjustment, such that even if parents do not perceive their practices as controlling, children perceive them to be undermining. To address the possible inflation of the associations observed from relying on

children as reporters, our models took into account the concurrent associations and associations of time invariant random intercepts. Moreover, research on controlling parenting in the academic domain did not find that the reporter (i.e., child, parent, or trained observer) modulated the similarity in the United States and China of the strength of the effects of such parenting (Cheung et al., 2016). Future research using multiple reporters of parents' peer restriction will be fruitful.

Second, the samples used in current research do not represent the diversity of the United Stated and China given there may be substantial variation within each country in terms of geography (e.g., rural versus urban), social class, ethnic background (e.g., Mexican American versus European American in the United States), and other factors. Thus, questions remain concerning within culture variation in parents' peer restriction. For example, in the United States, families cultural background may shape the meaning parents and children assign to the peer domain and parents' authority over it, leading the effects of parents' peer restriction. For example, research examining other types of peer management finds that such parenting is associated with delinquent behavior among European American children more than African American and Latinx children (Mounts, 2004). There may also be differences due to cultural heritage within China because our Chinese sample came from a traditional area of China, which is famous of being the hometown of Confucius. Moreover, our Chinese sample was collected in Jinan, a city which is neither very Westernized like major cities such as Beijing or Shanghai, nor a typical rural area as it is the capital city of Shandong province. It is unclear to what extent the findings are generalizable to more urban or more rural areas. For example, it possible that had we examined children in rural areas, where there is less exposure to Western ideas and values, we would have found more differences in the role of parents' peer restriction in the socialization process between United States and Chinese samples.

Third, we looked at a thin slice of development as we followed children only over the first year of middle school (i.e., from the fall of seventh grade to the fall of eighth grade), as well as one aspect of parents' peer management as we examined only peer restriction. It is unclear if our findings would be evident in other stage of adolescence as children might be more resistant to parents' opinion when they start to individuate from parents during early adolescence but more receptive to parents' opinion entering later adolescence. Indeed, Tilton-weaver and colleagues (2013) found that effect of parents' communicating disapproval varied with children's age, with the most negative effects being in middle school (versus elementary and high school).

Fourth, in examining parents' selective peer restriction we only looked at parents' disapproval and did not look at their approval of peers, which may be a key facet of parents' selective peer restriction. Tu and colleagues (Tu, Erath, Pettit, & El-Sheikh, 2014) examined parents talking with their children about *both* the pros and cons of hanging out with certain peers. They found this type of peer management predicted increased friendship quality over time only for children who were physiologically under aroused, which may reflect less sensitivity to peer stress. Future research on parents' peer selective restriction should investigate if both peer disapproval and approval have similar effects in the United States and China. Also, we did not examine the potential mechanisms of the effect from parents' peer restriction in two countries. Although some evidence suggests that the dynamics and influence of peer social status are similar in the two countries, there are also differences (Zhang et al., 2018, in press). Whether parents' peer restriction contributes to children's psychological adjustment via affiliation with particular peer groups as found in the Netherlands in predicting delinquency (Keijsers et al., 2012) or through other mechanisms (e.g., heightened secrecy) needs attention.

Conclusions

The current study advances knowledge about controlling parenting in the United States and China. Despite the differences in the centrality and function of peers in the two countries, parents' control in the peer domain appears to undermine children's psychological adjustment to the same extent in the United States and China. Specifically, parents' peer restriction predicted subsequent increments in children's delinquent behavior and anxiety symptoms six month later in both countries. However, these dimensions of children's psychological adjustment often predicted parents' peer restriction over time to a greater extent in the United States (vs. China). Thus, culture may contribute to the socialization process involving parents' exertion of control over children's peer relationships, but only via child-driven pathways.

TABLES AND FIGURES

Table 1

Means, Standard Deviations, and Internal Reliabilities of the Variables

		United States			China		
Variable	Time	*M*	*SD*	*α*	*M*	*SD*	*α*
Selective peer restriction	Wave 1	2.36	0.91	.84	2.47	1.05	.88
	Wave 2	2.33	1.00	.90	2.58	1.00	.88
	Wave 3	2.28	0.94	.90	2.63	0.99	.90
Unselective peer restriction	Wave 1	2.63	0.68	.77	3.74	0.88	.87
	Wave 2	2.62	0.73	.82	3.83	0.95	.88
	Wave 3	2.56	0.76	.85	3.76	0.93	.90
Delinquent behavior	Wave 1	1.38	0.51	.83	1.29	0.39	.79
	Wave 2	1.47	0.63	.86	1.38	0.60	.91
	Wave 3	1.57	0.77	.92	1.39	0.64	.93
Anxiety symptoms	Wave 1	2.06	0.90	.96	2.18	0.87	.96
	Wave 2	2.07	1.05	.98	2.26	0.90	.97
	Wave 3	2.14	1.02	.98	2.29	0.96	.98
Depressive symptoms	Wave 1	1.82	0.86	.94	2.11	0.86	.92
	Wave 2	1.88	0.96	.94	2.20	0.93	.94
	Wave 3	1.94	1.01	.96	2.25	0.92	.94

Note. All measures are rated in five-point Likert scale.

Table 2

Correlations between Variables

Variable		Selective restriction			Unselective restriction			Delinquent behavior			Anxiety symptoms			Depression symptoms		
		W1	W2	W3	W1	W2	W3	W1	W2	W3	W1	W2	W3	W1	W2	W3
Selective restriction	W1	-	.49	.42	.61	.35	.28	-.02	.07	.06	.22	.24	.20	.23	.22	.17
	W2	.54	-	.56	.26	.53	.32	.18	.24	.20	.29	.32	.29	.30	.34	.24
	W3	.44	.52	-	.25	.44	.61	.11	.27	.18	.21	.33	.34	.23	.26	.41
Unselective restriction	W1	.63	.41	.32	-	.46	.38	-.08	-.02	-.06	.17	.16	.04	.19	.09	.06
	W2	.43	.61	.35	.59	-	.50	.08	.16	.11	.19	.26	.19	.22	.25	.18
	W3	.42	.44	.65	.49	.53	-	-.02	.18	.09	.08	.22	.22	.10	.14	.32
Delinquent behavior	W1	.16	.13	.19	.14	.17	.18	-	.63	.44	.29	.32	.22	.44	.35	.26
	W2	.19	.18	.16	.10	.17	.11	.49	-	.40	.28	.49	.24	.37	.39	.31
	W3	.09	.20	.17	-.01	.09	.09	.25	.42	-	.19	.22	.38	.23	.17	.20
Anxiety symptoms	W1	.29	.22	.22	.33	.30	.23	.31	.21	.10	-	.56	.48	.68	.57	.41
	W2	.22	.26	.23	.27	.32	.28	.33	.24	.15	.67	-	.54	.55	.70	.54
	W3	.23	.30	.26	.21	.27	.28	.17	.26	.30	.58	.63	-	.46	.50	.67
Depression symptoms	W1	.40	.30	.25	.46	.36	.30	.28	.21	.09	.65	.53	.46	-	.69	.50
	W2	.24	.37	.24	.28	.39	.28	.31	.35	.22	.57	.67	.59	.68	-	.63
	W3	.31	.32	.30	.32	.33	.34	.26	.34	.23	.52	.61	.66	.60	.65	-

Note. The correlations for the United States are presented in the upper triangle; the correlations for China are presented in the lower triangle. All correlations above .09 are significant in China and all correlations above .10 are significant in the United States ($p < .05$).

Table 3

Trajectories of Parents' Peer Restriction

	Intercept				Slope			
	United		China		United		China	
	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Means								
Selective peer restriction	2.37***	.04	2.37***	.04	-.03	.02	.09***	.02
Unselective peer restriction	2.56***	.03	2.18***	.04	-.03	.02	.05*	.02
Variances								
Selective peer restriction	.51***	.08	.67***	.09	.13**	.04	.09*	.04
Unselective peer restriction	.18***	.03	.42***	.06	.04*	.02	.04*	.02

Note. Est = Estimate. For each of the estimates, different mean values (e.g., in the selective peer restriction intercept estimate) in the United States and China indicate a significant ($p < .05$) difference between the two countries. The variances of the intercepts and the slopes were freely estimated for each country and thus different estimates do not necessarily indicate significant differences between the two countries.

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

Table 4

Random-Intercept Cross-lag Panel Model (RI-CLPM) Estimates

	Standardized Estimates				Country Difference $\Delta\chi^2(\Delta df=1)$		Wave Difference	Intercept Correlation Unstandardized (SE)	
	Wave 1 – Wave 2		Wave 2 – Wave 3						
Variable	U.S.	China	U.S.	China	W1-W2	W2-W3	$\Delta\chi^2(\Delta df=1)$	U.S.	China
Selective restriction									
Delinquent behavior								.01(.03) $_a$	.06(.02) $_a$ **
Path a	.15***	.14***	.12***	.11***	.01	.40	1.19		
Path b	.37***	-.04	.30***	.08	11.00***	9.35**	-		
Anxiety								.15(.05) $_a$ **	.19(.04) $_a$ ***
Path a	.09*	.13*	.10*	.11*	1.42	.04	2.15		
Path b	.15^{+}	-.04	.18*	.03	3.01^{+}	2.87^{+}	-		
Depression								.08(.07) $_a$	.25(.04) $_b$ ***
Path a	.07	-.12^{+}	.04	.05	4.18*	.34	-		
Path b	.26**	.00	.17^{+}	-.07	4.32*	4.14*	-		
Unselective restriction									
Delinquent behavior								-.03(.02) $_a$	.05(.02) $_b$ *
Path a	.05	.05	.21*	.02	.88	4.37*	-		
Path b	.39**	.03	.30***	.05	6.09*	8.44**	-		
Anxiety								.04(.03) $_a$	.17(.04) $_b$ ***
Path a	.09**	.17**	.11**	.15**	1.75	2.68	.11		
Path b	.20***	.15***	.24***	.17***	.04	.08	.21		
Depression								.04(.04) $_a$	.23(.04) $_b$ ***
Path a	-.06$_a$	-.09$_a$	.04$_b$	.06$_b$	.02	.74	3.89*		
Path b	.23$_a$ **	.16$_a$ **	.05$_b$	.07$_b$	1.62	1.96	4.05*		

Note. Estimates are for cross-lagged paths labeled in Figure 1, with path a representing peer restriction to psychological adjustment and path b representing psychological adjustment to peer restriction. Different subscripts were used to indicate wave effects and country difference in random intercept correlation; dash indicates wave equality cannot be imposed when there is difference in the paths between the two countries. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 5

Estimates for the Cross-Lagged Paths from Latent Cross-Lag Panel Model (CLPM)

	Standardized Estimates (Unstandardized Estimates, Standard Error)				Country Difference $\Delta\chi^2(\Delta df=1)$		Wave Difference
	Wave 1 – Wave 2		Wave 2 - Wave 3				
Variable	U.S.	China	U.S.	China	W1-W2	W2-W3	$\Delta\chi^2(\Delta df=1)$
Selective restriction							
Delinquent behavior							
Path a	.11 (.08, .02) ***	.13 (.08, .02) ***	.09 (.08, .02) ***	.11 (.08, .02) ***	.28	.01	.16
Path b	.24 (.49, .12) ***	.05 (.12, .12)	.10 (.15, .05) ***	.10 (.15, .05) ***	4.59***	1.21	-
Anxiety							
Path a	.17 (.19, .06) ***	.06 (.05, .03)	.14 (.15, .03) ***	.15 (.15, .03) ***	4.32*	.24	-
Path b	.11 (.11, .02) ***	.10 (.11, .02) ***	.13 (.11, .02) ***	.11 (.11, .02) ***	1.62	.33	.78
Depression							
Path a	.06 (.07, .05)	-.06 (-.05, .04)	.08 (.09, .03) **	.09 (.09, .03) **	3.92*	1.03	-
Path b	.16 (.18, .04) $_a$ ***	.15 (.18, .04) $_a$ ***	.06 (.05, .04) $_b$	.06 (.05, .04) $_b$	1.28	.59	5.12*
Unselective restriction							
Delinquent behavior							
Path a	.03 (.02, .02)	.04 (.02, .02)	.02 (.02, .02)	.03 (.02, .02)	.28	.69	.50
Path b	.16 (.28, .08) $_a$ ***	.09 (.28, .08) $_a$ ***	.04 (.06, .05) $_b$	.04 (.06, .05) $_b$	.07	.28	4.13*
Anxiety							
Path a	.06 (.09, .02) ***	.10 (.09, .02) ***	.07 (.09, .02) ***	.09 (.09, .02) ***	.70	.04	.13
Path b	.12 (.10, .02) ***	.08 (.10, .02) ***	.13 (.10, .02) ***	.10 (.10, .02) ***	.75	.73	.03
Depression							
Path a	-.04 (-.05, .03) $_a$	-.06 (-.05, .03) $_a$	.08 (.10, .03) $_b$ **	.11 (.10, .03) $_b$ **	.18	.53	11.58***
Path b	.16 (.16, .04) $_a$ **	.12 (.16, .04) $_a$ **	.04 (.03, .03) $_b$	.03 (.03, .03) $_b$	.02	1.12	3.65+

Note. Estimates are for cross-lagged paths labeled in Figure 2, with path a representing peer restriction to psychological adjustment six months later and path b representing psychological adjustment to peer restriction six months later. Wave effects were indicated by different letter subscripts; dash indicates wave equality cannot be imposed when there is difference in the paths between the two countries. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

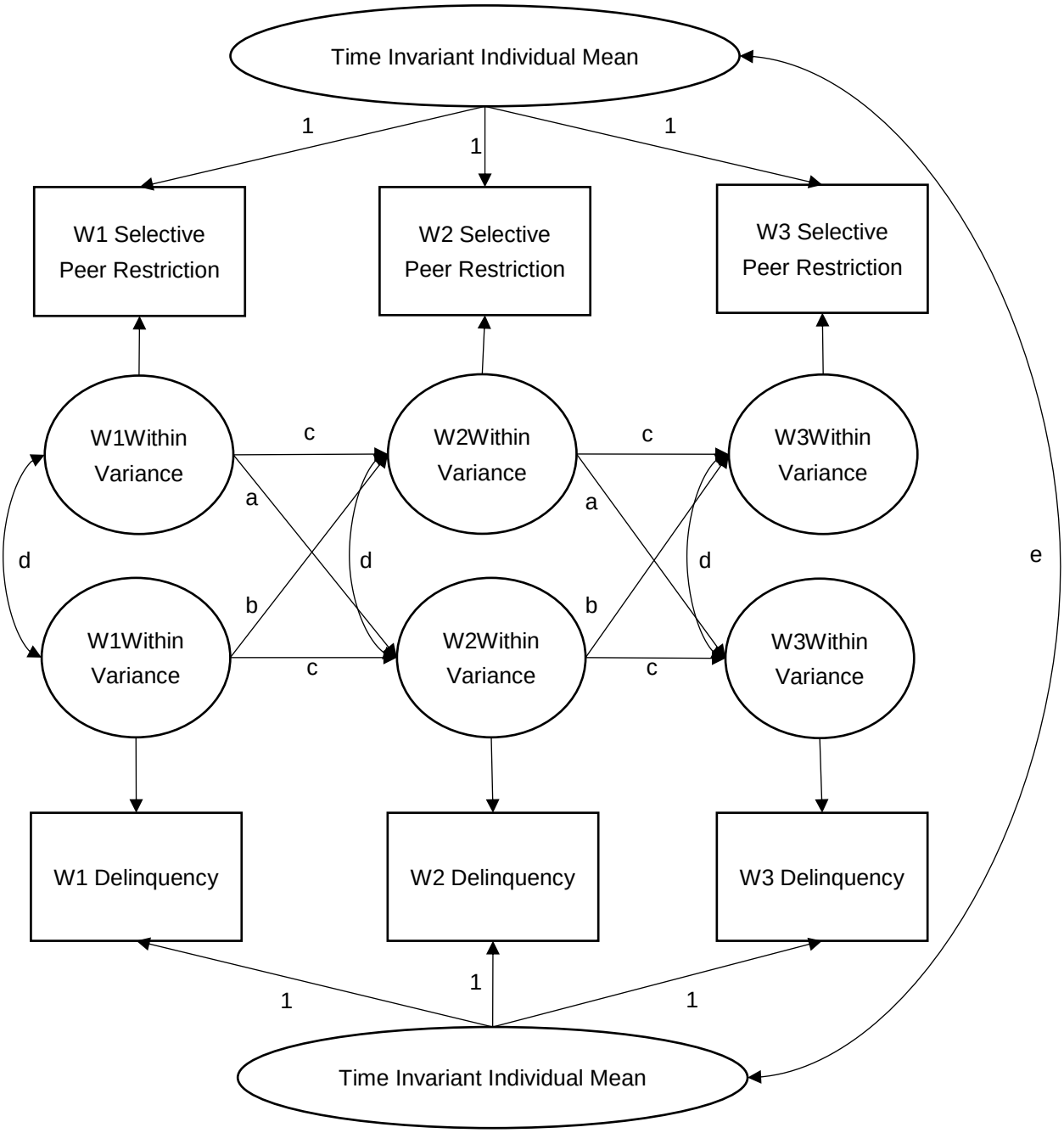


Figure 1. Illustration of Random Intercept Cross Lag Panel Model (RI-CLMP).

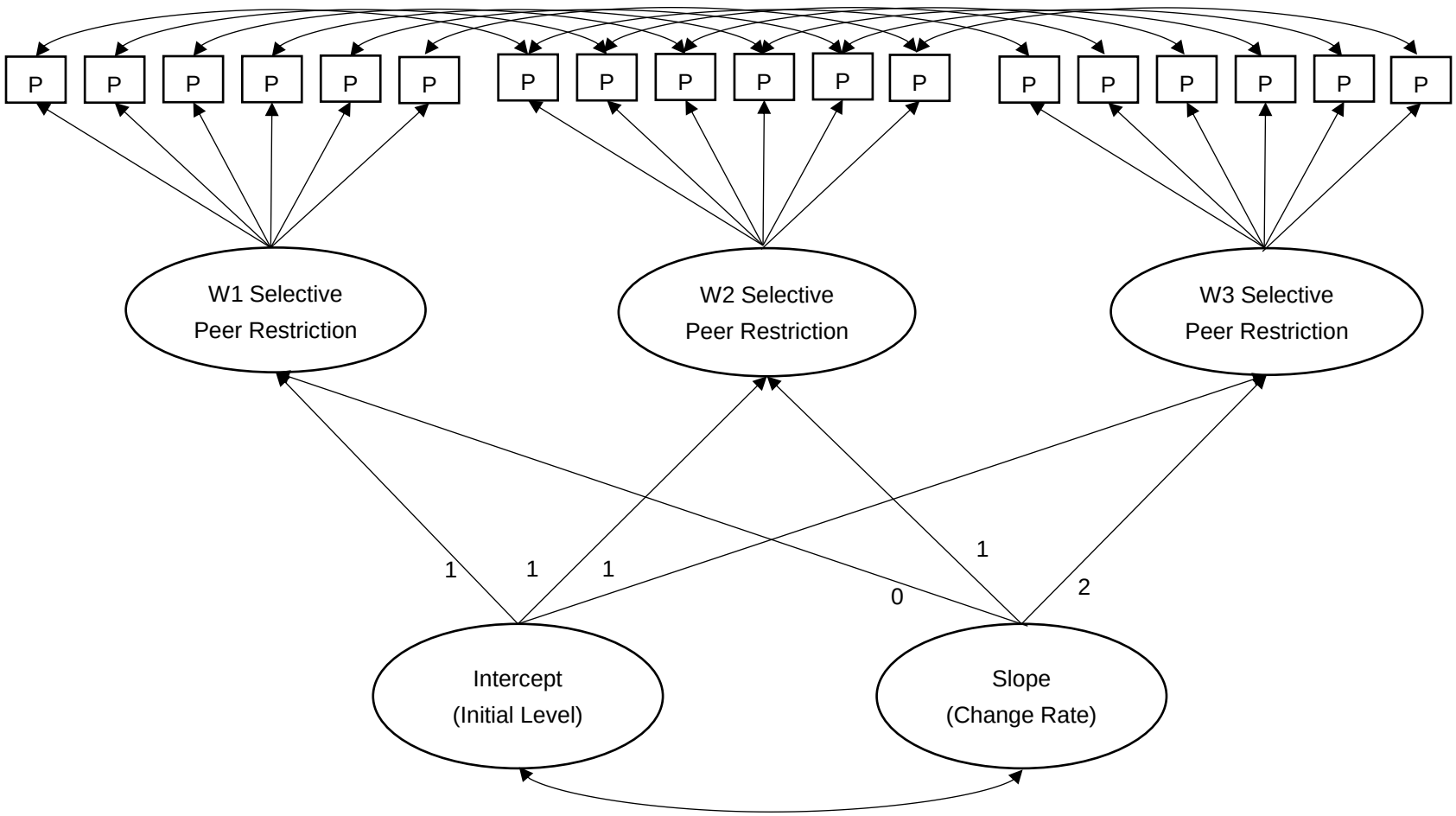
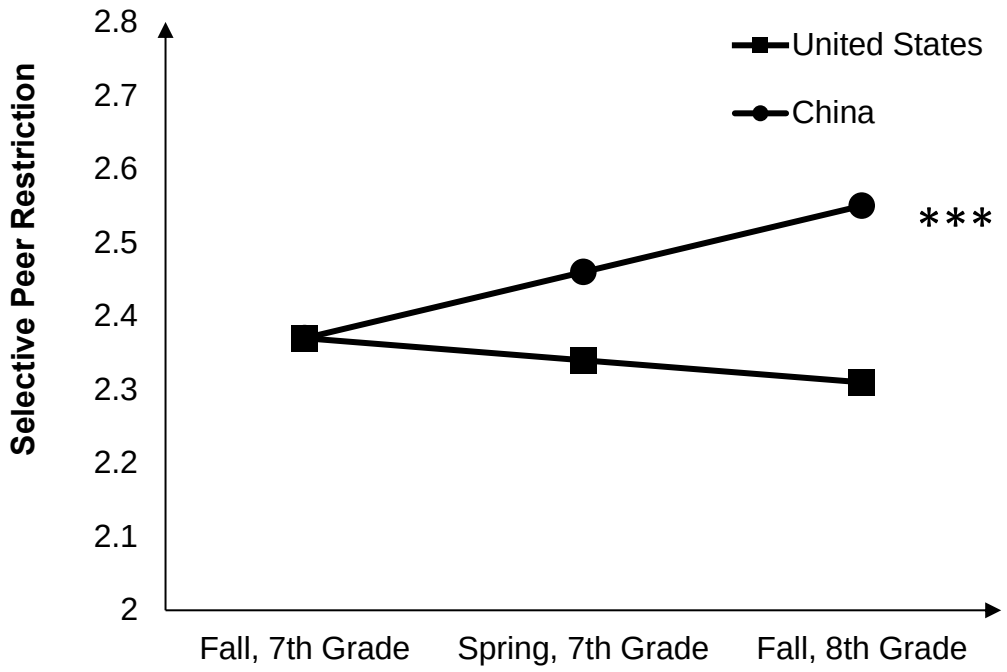


Figure 2. Illustration of latent growth curve model

Panel A



Panel B

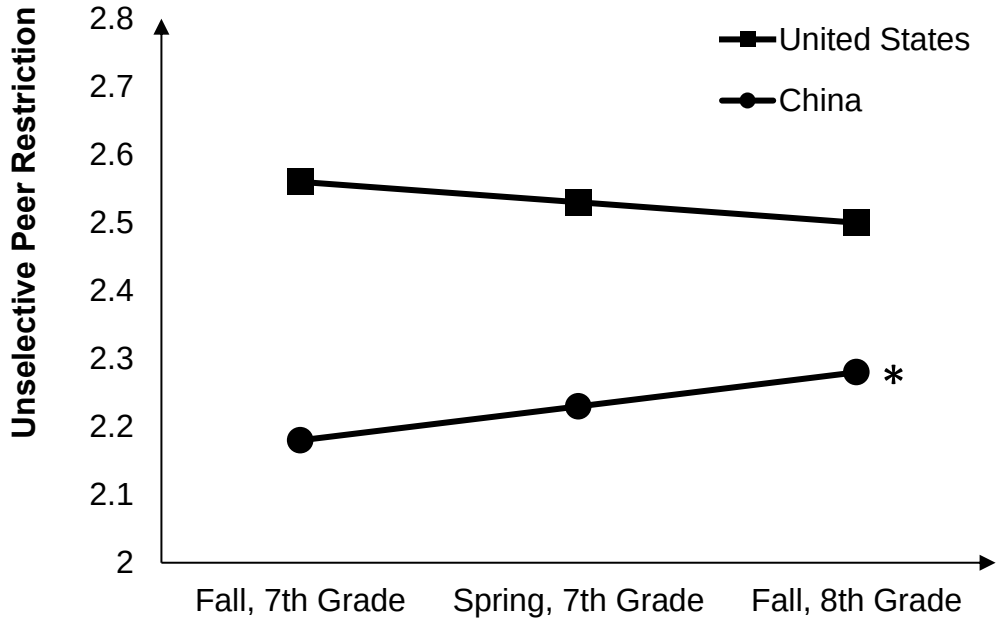


Figure 3. Trajectories of Parents' selective peer restriction (Panel A) and Unselective peer restriction (Panel B) over early adolescence in the United States and China. *Note*. The trajectories are estimated from the SEM growth-curve analyses. $^{*}p < .05$. $^{***}p < .001$.

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APPENDIX A: PARENTS' PEER RESTRICTION ITEMS

Selective Peer Restriction

1. Encourage you to spend less time with certain friends.
2. Tell you that you could not spend time with a specific friend.
3. Say no to an activity with certain friends, because they thought it would be bad for you.
4. Point out a certain behavior, attitude, or characteristic a friend has that you should not adopt.
5. Tell you that they dislike a particular friend of yours.
6. Let you know that they don't like how you act when you are with a specific friend.

Unselective Peer Restriction

1. Suggest you do something else when you want to hang out with your friends.
2. Let you know they would prefer for you to stay home rather than go out with friends.
3. Make sure you don't spend too much time with friends.
4. Only allow you to do things with friends once you have done other things, such as chores or homework.
5. Limit how much time you spend with your friends.
6. Let you know that hanging out with friends is less important than other things.
7. Say "No" to sleepovers with friends – or have a rule against sleepovers.
8. Limit how much you communicate (for example, talking or texting) over the phone or computer with friends.