

Adolescent Disclosure of Information about Peers:  
The Mediating Role of Perceptions of Parents' Right to Know

Hsun-Yu Chan  
University of Wisconsin-Madison  
1025 W Johnson St,  
Madison WI 53706  
Email: hchan9@wisc.edu

B. Bradford Brown  
University of Wisconsin-Madison  
1025 W Johnson St,  
Madison WI 53706  
Email: bbbrown@wisc.edu

Heather Von Bank  
Minnesota State University, Mankato  
102 Wiecking Center  
Mankato, MN 56001  
heather.von-bank@mnsu.edu

Acknowledgement

This research was supported by a grant to the second author by the Wisconsin Alumni Research Foundation. A version of this paper was presented in 2012 biennial conference of Society for Research on Adolescence in Vancouver, Canada. Correspondence should be directed to B. Bradford Brown: 1025 W Johnson St, Madison WI 53706. Email: bbbrown@wisc.edu

\*In press in *Journal of Youth and Adolescence* (February, 2015)

### Abstract

Following the important insight that what parents know about their adolescent offspring depends primarily on what the child tells them, this study examines how attitudes about what parents have a right to know mediate the associations between several factors (quality of parent-child relationships, time spent with family and peers, levels of antisocial and prosocial behaviors, and gender and age) and adolescents' disclosures about peer relations. In two studies of early and middle adolescents ( $N_s = 231, 249$ ;  $M$  ages = 14.5, 13.0; 62%, 51.8% female; 53.7%, 67.5% European American), a new measure of right-to-know attitudes is derived and then applied to four facets of adolescents' experiences with peers: details of activities with peers, issues in specific relationships, and positive and negative peer characteristics. The findings indicate that adolescents are more inclined to disclose certain aspects of their peer relations than others, but these inclinations are related to several factors—especially the quality of mother-child relationships and involvement in antisocial behavior—and mediated by adolescents' attitudes regarding what parents have a right to know about peers. The results are related to autonomy development and parental oversight of adolescent peer interactions.

Key words: disclosure, right to know, parent-child relationship, antisocial behavior

## Introduction

As young people enter adolescence, they begin to spend increasing amounts of time with peers, often away from the watchful eyes of parents or other adults (Brown & Larson, 2009). To monitor their adolescent's behaviors, parents often rely on the child's disclosure of information (e.g., Kerr, Stattin, & Burk, 2010), but adolescents may be reluctant to openly share information about peers because peers constitute a major arena for autonomy development (Brown & Bakken, 2011). Previous studies have examined patterns of disclosure to parents among adolescents in general terms (Keijsers, Frijns, Branje, & Meeus, 2009; Smetana, Metzger, Gettman, & Campione-Barr, 2006); few closely examine specific issues such as peer relations. Only a handful of studies consider adolescents' attitudes about parental authority as well as their disclosure patterns, although both are key elements of autonomy development (Daddis, 2010). The current study considers factors associated with adolescents' disclosure of information about peers to parents, attending to the potential mediating role of adolescents' attitudes about what parents have a right to know, and testing whether the resulting path model varies by adolescents' gender and age.

## Autonomy and Disclosure

Autonomy is an important developmental task for adolescents. It can be conceived as a dynamic process between parents, the authority holders, and adolescents, the autonomy seekers (Bumpus, Crouter, & McHale, 2001; Laursen & Bukowski, 1997). Its developmental course is contingent on parents' interests (or lack of it) in granting autonomy as well as the child's interests in expanding it. Most contemporary scholars view autonomy as multi-faceted, containing emotional, cognitive, and behavioral components (Beyers, Goossens, Vansant, & Moors, 2003; Noom, Deković, & Meeus, 2001). From the perspective of self-determination theory (Soenens, et al., 2007), autonomous adolescents are self-governing and engage in behaviors with a sense of volition (i.e., acting in accordance with personal interests and values). They take responsibility for their own actions and often consult others before acting, but they are motivated to pursue personal interests and maintain personal values and goals (Silverberg & Gondoli, 1996). In this sense, autonomy encompasses both action and cognition (e.g., values or a sense of volition). It does not necessarily undermine the parent-child relationship, especially if parents are willing to grant autonomy and their

offspring are motivated to maintain close bonds with parents. Kagitçibasi (2013) has argued that the gradual emergence of autonomy does not necessarily interfere with close parent-child relationships.

In practice, however, investigators rarely measure autonomy in terms of volitional acts for which individuals take personal responsibility. More often, measures of autonomy focus on thought and action that are not dependent on others' directives. For adolescents, disclosure is a key element of autonomy processes because parents can be conceived of as authority figures who might direct or demand a child's behavior. One way to exercise autonomy is to restrict the information that parents have so that one can make decisions or pursue activities without excessive parental input or oversight (Tilton-Weaver & Marshall, 2008). From this perspective, adolescents' disclosure of peer information should be more strategic (Smetana, Villalobos, Rogge, & Tasopoulos-Chan, 2010), based partly on the child's attitudes about what parents have a right to know.

Disclosure is a two-step process, with both cognitive and behavioral components. Adolescents must first decide who should share in information about their lives, then act accordingly (revealing or withholding information). Others have operationalized the cognitive component in terms of adolescents' beliefs about the legitimacy of parental rule making in various domains (Keijsers & Laird, 2014). We prefer to examine attitudes about what parents have a right to know about peers because we believe it is more directly relevant to disclosure. The more strongly adolescents believe parents have a right to know something, the more likely they are to share that information with parents.

In relation to autonomy, past studies of disclosure have yielded controversial findings. On the one hand, scholars have found that non-disclosure is negatively associated with healthy parent-child relationships and positive psychosocial outcomes (Keijsers et al., 2009; Kerr et al., 2010), suggesting that it is not an effective route to autonomy. On the other hand, studies indicate that as adolescence progresses, young people put increasing restrictions on the domains in which it is legitimate for parents to make rules and exercise oversight of their activities (Smetana et al., 2006). This seems to correspond with a healthy pattern of autonomy gradually increasing with age. One factor that may help to resolve this conundrum is an adolescent's rationale for sharing or withholding information. For example, scholars have found that restrictions on the information disclosed to parents are sometimes motivated by a child's efforts to take more

responsibility for decisions and avoid submitting parents to needless worry (Bakken & Brown, 2010; Marshall, Tilton-Weaver, & Bosdet, 2005). This underscores the value of considering both cognitive and behavioral components of adolescents' autonomy related behavior. In this study, we consider adolescents' attitudes about what parents have a right to know as well as their reports of how much information they disclose to parents.

### **Salience of Peer Relations**

Peer relations constitute an especially salient area in which to consider this issue because they become more intense during adolescence and emerge as an alternative source of influence on young people's attitudes and behavior, often leading adolescents into problematic or health compromising activities (Brown & Larson, 2009). Some studies of adolescents' disclosure and parental authority acknowledge the complexity of peer relations by branding them as "multifaceted" rather than clear exemplars of the personal, prudential, or conventional domains (Nucci, Smetana, Araki, Nakaue, & Comer, 2014). Moreover, parents and adolescents often disagree about the domain into which a particular facet of peer relationships falls (Smetana et al., 2006). Although domain theory can be used to examine adolescents have a right to know (Rote & Smetana, in press), domain theory categories may not be the best way to capture the complexity of adolescent peer relations.

An alternative approach is to employ qualitative interviews or factor analyses of pre-determined items to identify different facets of peer relationships (Brown & Bakken, 2011; Daddis & Randolph, 2010). These studies point to multiple facets of peer relations within a particular type of relationship or across the peer domain as a whole that are fodder for disclosure. Although there has been some assessment of how strongly adolescents believe parents have a right to know about various facets (Brown, Bakken, Nguyen, & Von Bank, 2007) or how much they disclose about different facets, to date there has been no examination of connection between disclosure attitudes and behavior as they pertain to multiple facets of peer relations, specifically.

### **Possible Predictors of Rates of Disclosure About Peers**

Among the various factors possibly associated with adolescents' disclosure patterns, this study focuses on three sets of variables. First is the child's level of involvement with family and peers. A hallmark of adolescence in the dominant U.S. culture is the inclination to spend more time with peers and less with

family. As adolescents' interactions and relationships with peers expand, they have more information to share with parents, but also possibly more to hide if they fear that parents will disapprove and seek to curtail their peer interactions (Nucci et al., 2014; Stattin & Kerr, 2000). Thus, it is unclear whether higher levels of peer involvement will increase or diminish disclosure of information to parents. A high level of family involvement could indicate continuing close ties to parents and consequently be associated with broader disclosure. The results of at least one study are consistent with this reasoning (Laird, Pettit, Dodge, & Bates, 2003), but time spent with family could also presage more limited peer interaction that would leave adolescents with little information about peers to share with parents. In other words, it is difficult to predict how peer and family involvement levels are related to the amount that adolescents disclose to parents about peers.

The time spent with peers may not be as strong a factor in adolescents' disclosure patterns as what they do with that time. Intuitively, one would expect that adolescents would be inclined to hide deviant pursuits from parents and showcase more acceptable activities. In fact, other studies suggest that the more adolescents engage in drug use, delinquent activities, and deviant peer affiliations, the less parents know about their activities (Laird et al., 2003; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006) and the less adolescents reveal to parents (Darling, Cumsille, Caldwell, & Dowdy, 2006; Keijsers et al., 2009). Some evidence further suggests that, over time, these are reciprocal relationships (Laird, Marrero, Melching, & Kuhn, 2012). Scholars have not examined a potential parallel process, in which the more adolescents engage in prosocial behavior, the more they may reveal to parents about their peer relationships and activities. The connection between antisocial or prosocial behavior and disclosure about peers deserves to be clarified.

Disclosure patterns also may be contingent on the quality of the parent-child relationship. Studies indicate that disclosure is more extensive in families that feature higher levels of parental warmth, responsiveness, or trust (Darling, Cumsille, Peña-Alampay, & Coatsworth, 2009; Soenens et al., 2006). High levels of parent-child conflict, on the other hand, should reduce adolescents' disclosure as young people seek to avoid exacerbating a bad situation (Tilton-Weaver et al., 2010). Because adolescents may have relationships of differing quality with each parent and because the association between each relationship and

the child's disclosure pattern may vary as well (Keijsers et al., 2009), it is prudent to study mother-child and father-child relationships separately.

### **Age, Gender, and Ethnicity**

For disclosure to serve the purposes of autonomy development, it ought to decrease with age. Research findings are generally consistent with this expectation, demonstrating that older adolescents disclose less or believe they have less of an obligation to disclose information to parents than younger adolescents (Brown et al., 2007; Daddis & Randolph, 2010; Keijsers & Poulin, 2013). Findings regarding other demographic characteristics have been more equivocal. Although some investigators report that females are more open with parents (especially mothers) than males (Crouter, Bumpus, Davis, & McHale, 2005; Daddis & Randolph, 2010), this is not always the case, and gender differences are usually modest. Similarly, ethnic differences in adolescents' disclosure within a given society have not been widely examined, but cross-cultural studies reveal both consistencies—e.g., in reasons for sharing information with parents (Hunter, Barber, Olsen, McNeely, & Bose, 2011)—and inconsistencies—e.g., in factors predicting disclosure (Darling et al., 2009)—in patterns of sharing information with parents.

### **Consistency Across Dimensions of Peer Relations**

Finally, results of most previous research suggest that adolescents will not be equally inclined to share information in all aspects of peer relations. In studying romantic relationships, Daddis and Randolph (2010) found that adolescents were more willing to tell parents the name and some basic personal information about their romantic partner than reveal details of their activities with the partner. Others have referred to young people's disinclination to divulge features of peer relations that might generate parental disapproval or unwarranted restrictions (Darling et al., 2006; Smetana et al., 2006; Yau, Tasopoulos-Chan, & Smetana, 2009). Based on these findings, it is reasonable to expect greater disclosure of details about activities with peers or admirable characteristics of the peer group than about features of specific peer relationships or more negative peer group characteristics.

### **Attitude as a Mediator: Parents' Right to Know**

As indicated earlier, theoretical formulations of behavioral autonomy suggest that it encompasses both cognition and action. We postulate that an important aspect of cognitions related to disclosure of information

to parents is an adolescent's attitude about what parents have a right to know. The more adolescents think parents have a right to know about peers, the more information about peers they should share with parents. This follows from domain theory studies indicating that adolescents' attitudes about the legitimacy of parental authority are associated with disclosure in various domains (Smetana & Metzger, 2008); adolescents also claim that parents have less of a right to know about certain domains than others (Rote & Smetana, in press). There is also research evidence linking relevant attitudes to elements we have identified as potential predictors of disclosure of information about peers to parents (Darling, Cumsille, & Martínez, 2007; Darling, Cumsille, & Peña-Alampay, 2005; Keijsers & Laird, 2014). For example, investigators have found that adolescents' beliefs about the legitimacy of parental authority over their affairs are positively associated with positive aspects of parent-child relationships (Smetana, 1995), but negatively associated with levels of antisocial behavior (Laird, et al., 2003).

Combining these factors with theoretical postulates that attitudes influence behavior (Ajzen & Fishbein, 1980), it is sensible to expect that adolescents' attitudes about what parents have a right to know will mediate associations between possible predictors of disclosure and actual levels of disclosure. More specifically, we hypothesized that the degree to which adolescents think parents have a right to know about peer relations will mediate associations between levels of peer and family involvement, prosocial and antisocial behavior, and parent-child relationship quality and levels of their disclosure of information about peers to parents. Figure 1 depicts the study's conceptual model.

### **Current Study**

Building on previous research and focusing on one important aspect of adolescents' lives, we examine how three key sets of factors depicting adolescents' leisure time partners, involvement in conventional and deviant behaviors, and parent-child relationship dynamics are linked to the frequency of disclosing information about peers to parents via the factors' associations with attitudes about what parents have a right to know. We expect to find significant, positive associations between right-to-know attitudes and parent-child warmth as well as prosocial activity, negative associations between right-to-know attitudes and both parent-child conflict and antisocial pursuits, and positive associations between attitudes and behavior (adolescents' disclosure). Patterns of association regarding levels of family and peer involvement are less



certain. Adolescents' disclosure is expected to be greater among females than males, younger than older adolescents, and in regards to more general or positive facets of peer interaction than in more private or negative facets, but the relationship of these demographic characteristics to patterns of association among variables in the conceptual model remains an open question to explore. Before assessing these expectations (in Study 2), it is important to affirm that the target domain, information about peers, has been conceptualized and measured appropriately (Study 1).

### Study 1

Although scholars have acknowledged peer relationships and activities as highly salient aspects of information that young people might share with parents (Brown & Bakken, 2011), to date there has not been a systematic effort to examine adolescents' attitudes about what parents have a right to know about peers or their inclination to actually disclose information about these aspects of their lives. In Study 1 we first interviewed adolescents to discern how they conceptualize the peer domain vis-à-vis information that could be disclosed to parents. Based on this information, we developed and tested an instrument to reliably assess adolescents' attitudes about what parents have a right to know about peers. We focused on right to know, rather than actual disclosure, because we found that conversations about attitudes provided a more comprehensive portrait of young people's understandings of the peer domain.

#### Method

**Initial focus group.** From theoretical and empirical research articles about adolescent peer relations we formulated a semi-structured interview protocol to query young people about peer related issues and events that they might share with parents. A sample of convenience containing 19 adolescents (58% female) ages 11-16 ( $M = 13.2$ ) was recruited to participate in focus group discussions. Five groups were formed, ranging between 3 and 6 members. The sample was rather evenly divided between African American and European American youths (9 each); one participant was Native American.

Group leaders concentrated on probing adolescents' opinions about the types of peer issues they could conceivably discuss with parents and the justifications they had for determining whether or not parents had a right to know about each issue. Focus group interviews were audio-recorded, then transcribed. Content analyses revealed that several themes emerged across groups as justifications for sharing or withholding

information from parents. Each theme tended to apply to different peer issues. The issues were the primary source for identifying items to be included in the forced choice measure of attitudes about what parents had a right to know about peers.

**Sample and procedures.** For the next phase of the study a sample was recruited from students enrolled in selected classes (study halls in the high school; classrooms whose teachers agreed to allow data collection in the middle schools) in grades 7-12 in two middle schools and one high school in a mid-sized Midwestern city. Of 300 students approached, 231 (77%) returned signed parental consent and student assent letters and successfully completed the initial questionnaire. Slightly over half (53.7%) of sample members were European American; 15.2% were African American, 14.3% were Asian, 9.5% identified with multiple ethnic groups, and 7.4% were from other ethnic backgrounds (mostly Hispanic or Native American) or failed to list an ethnic identification. The sample's average age was 14.5; 62% were female. All members of this sample completed a brief self-report questionnaire (Wave 1). Approximately five weeks later (Wave 2), the questionnaire was re-administered to 174 members of the original sample (70% of middle school and 81% of high school students); several middle school classrooms were unavailable for the re-test. Age, gender, and ethnic background were not significantly different in the initial and re-test samples.

**Measures.** In addition to basic demographic information, the questionnaire included a 31-item Right to Know Inventory (RTKI), assessing individuals' attitudes about disclosing information about peers to parents. Each item began with the stem, "Do your parents have the *right to know*", followed by some characteristic of peers or the respondent's interaction or relationship with peers. Items were rated on a 5-point Likert scale (1 = definitely no; 3 = not sure; 5 = definitely yes). They referred to positive and negative behaviors of close friends as well as the broader peer group, information about activities engaged in with peers, and features of the individual's friendships and romantic relationships.

## Results

Responses to the 31 items collected in Wave 1 were submitted to an exploratory factor analysis (EFA) with GEOMIN rotation in *Mplus* 7.1. The initial analysis suggested that a 6-factor solution was optimal, but it included 6 items with high cross loadings or low loadings (i.e., loadings < .30) on all factors. The 6 items were "What you talk about with your friend," "How well the group you hang out with does in school," "If

you are angry with a friend,” “What teachers think about the group you hang out with,” “If one of the crowds at school gets in trouble with the law,” and “Who your closest friends are.” Rerunning the analysis after omitting these items led to a 4-factor solution (see Table 1 for the remaining items and factor loadings). This solution was submitted to a series of confirmatory factor analyses (CFAs) where cross-loading was not allowed. Following model fit and modification indices, the analyses yielded a 14-item inventory with acceptable fit statistics (90% RMSEA CI = [.04, .08], CFI = .95, TLI = .93; see Table 2). The first factor, containing five items, described aspects of an adolescent’s activities with peers (Cronbach  $\alpha = .83$ ). A second, two-item factor depicted features of an adolescent’s specific peer relationships ( $\alpha = .72$ ). The four-item third factor referred to positive characteristics of peers ( $\alpha = .73$ ), whereas the final factor (three items) highlighted negative peer characteristics or behaviors ( $\alpha = .83$ ). The standardized factor loadings ranged from .59 to .84. Comparisons of scale scores, calculated as the mean of item responses, on data from Waves 1 and 2 indicated fairly strong short-term test-retest stability,  $\gamma$ ’s = .75–.84. Repeated measures analysis of variance (ANOVA) was conducted with adolescents’ attitudes about parents’ right to know as the repeated measure, and adolescents’ gender, age, and ethnicity entered as factors. The results indicated that adolescents’ attitudes about how much parents had a right to know varied across different kinds of peer issues (Wilk’s  $\lambda = .87$ ,  $F_{(3,189)} = 9.07$ ,  $p < .05$ ). A follow-up pairwise comparison with Bonferroni adjustment further revealed that participants accorded parents more of a right to know about activities with peers than other aspects of their peer relations. Scale scores did not differ significantly by participants’ gender, age, or ethnicity.

The 14-item Right to Know Inventory provided an empirically grounded measure of adolescents’ perspectives of what parents have a right to know about peers. The four sets of items emerging from factor analyses represented sensible divisions of adolescents’ experiences with peers. In some respects, the factors aligned with the domain theory approach others have taken to explain adolescents’ disclosure or right-to-know patterns (Rote & Smetana, in press; Rote, Smetana, Campione-Barr, Villalobos, & Tasopoulos-Chan, 2012). Focus group members’ explanations for sharing information about activities with peers reflected parents’ prudential responsibilities, whereas reasons why parents had less right to know about relationship issues often implied that these were personal and confidential matters. Domain theory seemed less relevant to the other two factors or other justifications given by focus group members. In other words, the Right to

Know Inventory provided a comprehensive instrument, well grounded in adolescents' own perspectives and experiences, for examining young people's decisions about disclosing information about peers to parents.

## Study 2

Having identified adolescents' perceptions of the major facets of peer relations and having developed an instrument to measure these facets, we proceeded to examine our expectations about how adolescents' attitudes about what parents have a right to know mediated associations between adolescents' leisure time partners, involvement in prosocial and antisocial behaviors, or quality of relationships with parents and the amount of information about peers that they disclosed to parents.

### Method

**Sample.** The sample included 249 adolescents and one of their parents or guardians from a moderate-sized Midwestern US city. None had participated in Study 1. The adolescents were between 11 and 16 years old—slightly younger, on average ( $M = 13.01$ ), than Study 1 participants—and evenly divided by gender (51.8% female). Similar to the local community, the majority of adolescents (67.5%) identified themselves as European American. Other ethnicities included African American (7.6%), Latino (5.6%), and Asian American (6.4%); 12.4% of the adolescents reported Native American, other, or multiple ethnicities. Most adolescents (75.5%) reported living with two parents, including biological or step-parents and same-sex parents; 22.2% were from single-parent families and 2.3% reported other living arrangements (e.g., foster parents, other relatives). Most adult participants (91.6%) were the adolescent participants' mothers or grandmothers. Two-thirds of the adults had a bachelor's degree or above. About two-thirds of families reported annual household incomes above \$50,000, whereas 2.4% had annual household incomes under \$10,000. Because adult participants served in the parenting role (regardless of their specific relationship to the child), they will be referred to as “parents.”

**Procedure.** Students in sixth, eighth, and tenth grade in randomly selected homerooms or study halls from two public middle schools and one public high school in the community were invited to participate. To qualify for the study, a parent or legal guardian also had to be willing to participate. Overall, 58% of families agreed to participate (signed informed consent from parents and signed assent from students); the response

rate was higher among families of middle school than high school students. Parents and students each received a \$10 gift card for their participation.

All respondents completed self-report questionnaires (in English or Spanish). The questionnaire was group administered to students at school, during non-academic hours; parents used an online survey system or completed a hard copy and mailed it to the investigators. Very few (under 3%) participants completed the Spanish version of the survey and few parents (5%) completed the survey online. Study procedures were approved by the Institutional Review Board of the authors' institution.

**Measures.** In addition to indicating their age, gender, and ethnic background, adolescents completed several measures relevant to the current study. Parents also provided information on several measures, as indicated below.

***Right to know attitudes.*** Adolescent participants completed the Right to Know Inventory to assess what they thought parents had a right to know about their activities with friends, features of their peer relationships, positive characteristics of peers, and negative characteristics of peers. In addition to the 14 items identified for this inventory in Study 1, 11 items were added in an effort to bolster scale reliabilities. Added items were consistent with the themes of the instrument's four scales. Items were answered on a five-point Likert scale (1 = definitely do not; 5 = definitely do have a right to know). EFA showed that a four-factor solution fit the data well, but five items cross-loaded on more than one factor. A follow-up CFA omitting these items suggested that one other item should be removed because its residual variance correlated with several items. With the remaining 19 items, CFA indicated that a four-factor solution fit the data well (90% CI RMSEA = [.05, .07], CFI = .94, TLI = .93). Table 2 displays details of the factor solution, including the content of items for each scale and the items that were removed. The four scales had between 4 and 6 items and featured strong internal consistencies (Cronbach  $\alpha$  ranged from .81 to .88). Scale scores were based on the mean of item responses. Time constraints on survey administration did not permit us to ascertain participants' right-to-know attitudes for each parent, separately.

***Disclosure.*** To examine what adolescents actually disclosed to parents about peers, participants completed a new instrument entitled the Disclosure about Peers Inventory (DAPI) that was adapted from the Right to Know Inventory. On a 5-point Likert scale (1 = definitely not, 5 = definitely yes), participants indicated

whether or not they disclosed information about the 25 peer issues included in the Right to Know Inventory. For the sake of consistency, the 6 items dropped from the Right to Know Inventory were also omitted from the Disclosure about Peers Inventory before CFA was conducted. This analysis indicated that the 19-item, four-factor solution fit the data well (90% CI RMSEA = [.05, .08], CFI = .95, TLI = .94). Cronbach  $\alpha$ 's for the activity (five items), relationship issues (four items), positive characteristics (six items), and negative characteristics (four items) scales were .89, .83, .86, and .90, respectively. Scale scores represented the mean of item responses, with higher scores reflecting higher rates of disclosure to parents. In addition to results of CFAs, evidence of the validity of the Right to Know and Disclosure about Peers Inventories came from assessment of scale intercorrelations. For all four scales, correlations were higher with the corresponding scale in the other instrument than with the 3 other scales (see Table 3). Also, similar to other studies, the more adolescents engaged in antisocial behavior, the less they disclosed or felt parents had a right to know about all aspects of peer interaction.

***Peer and family involvement.*** On a set of items devised for this study, adolescent and adult participants reported the amount of time they (or their adolescent child) spent with various categories of people on a typical weekend. Three items dealt with family members (time spent with siblings, parents, and other relatives), and three items with peers (time spent online with friends, with one or two friends in person, and with a larger group of friends in person). Participants rated each item on a 5-point Likert scale (1 = no time, 2 = 1 or 2 hours, 3 = 3-5 hours, 4 = 6-10 hours, and 5 = more than 10 hours). Response categories were used because adolescents have difficulty giving accurate estimates when asked simply to state the number of hours spent on a given activity. For data analyses, item scores were recoded to the mean number of hours represented by the category (with the final category recoded to 15 hours); then scores for each set of items were summed to create an approximation of hours per weekend spent with family and peers, respectively. As an indicator of validity, the two scales were not significantly correlated, but scores of each type of involvement were positively correlated across reporters (see Table 3). Also, for both adolescent and parent reports, levels of antisocial behavior were positively correlated with peer involvement but negatively correlated with family involvement.

**Prosocial and antisocial behavior.** Adolescents reported the frequency of engaging in 11 activities since the beginning of the school year—5 prosocial (e.g., given help to another student, done volunteer work in the community) and 6 antisocial activities (e.g., cheated on a test, done something you could get arrested for). These items were extrapolated from similar measures in previous studies. Each set of items, which were answered on a 5-point Likert scale (1 = never, 2 = once, 3 = 2-3 times, 4 = 4-5 times, 5 = more often), was averaged to form scale scores. The scales had adequate internal consistencies ( $\alpha = .68$  for prosocial activities and  $.76$  for antisocial activities).

**Parent-child relationship quality.** A shortened version of the Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985) was used to measure two key dimensions of parent-child relationships: closeness and conflict. Adolescent participants first identified the two adults who were most responsible for taking care of them (almost always their mother or stepmother and father or stepfather), then rated each of seven closeness and six conflict items, for each parent separately, on a 4-point Likert scale (1 = not at all; 4 = very much). Mean item scores were calculated for each scale, with higher scores indicating greater closeness or conflict. The closeness scales had acceptable internal consistencies ( $\alpha = .73$  for mother and  $.79$  for father); both conflict scales had high internal consistency ( $\alpha s = .90$ ). Some participants living in divorced or single-parent situations answered for only one parent. Adult participants completed the same scales, rating their relationship with the participating adolescent. The adult-report closeness scale had mediocre internal consistency ( $\alpha = .58$ ) while the conflict scale had high internal consistency ( $\alpha = .91$ ).

Responses to some items were missing for several participants (maximum of 16.9% missing cases on one of the variables); Little's MCAR test yielded a normed  $\chi^2$  ( $\chi^2/df$ ) of 1.75 (Bollen, 1989), which was not statistically significant at  $df = 1$ . This indicated that multiple imputation would be appropriate to handle missing data. A multiple imputation procedure was conducted in *Mplus 7.1* for missing data; 50 data sets were imputed for the path analysis (described below).

**Plan of analyses.** Repeated measures analysis of variance (ANOVA) was used to examine possible gender, age, or ethnic differences in the level of perception of parents' right to know and level of disclosure across the four facets of peer information. Path analysis under the framework of structural equation modeling (SEM) was then conducted to investigate whether adolescents' attitudes about parents' right to know about peer

issues mediated associations between adolescent peer and family involvement (parent- and adolescent-reported), activity patterns (adolescent-reported prosocial and antisocial behaviors), or relationship quality (parent and adolescent reports of parent-child closeness and conflict) and adolescents' disclosure. Separate analyses were conducted on each facet of peer relations. Good model fit would be evidence in support of our hypothesis that right-to-know attitudes mediated associations between personal or relational characteristics and levels of disclosure to parents about peers.

To examine the consistency of the hypothesized model across gender and age, a multiple group analysis was conducted in conjunction with the path analysis stated above under an SEM framework. Designating age and gender as grouping variables we compared the  $\chi^2$  difference between the fully constrained and unconstrained models. Age was clustered into three groups: 11 to 12, 13 to 14, and 15 to 16 years old. Possible moderating effects of ethnicity were not examined because of low sample size in some of the ethnicity cells.

To assess potential bias because of sample size, a bootstrap procedure was performed in the path analysis with resampling of 1,000 times to determine the robustness of the estimates (Schumacker & Lomax, 2004). To test the reasonableness of the causal ordering of variables assumed in the path model, analyses were rerun reversing the order of mediator and outcome variables. The Bayesian Information Criterion (BIC) was used to determine whether the original or reversed model fit the data better.

## Results

**Demographic differences in right-to-know attitudes and disclosure.** The means, standard deviations, and intercorrelations for study variables are presented in Table 3. To examine differences in disclosure patterns or right-to-know attitudes across the four facets of peer relations, as well as possible variations by age, gender, or ethnicity, two repeated measures ANOVAs were conducted in which the facets of peer relations comprised the within-subject measure for the Right to Know Inventory and Disclosure about Peers Inventory scales, respectively. There was a significant main effect for the repeated measure (Wilk's  $\lambda = .92$  and  $.89$ ,  $F_{(3,235)} = 6.50$  and  $F_{(3,233)} = 9.43$  for the Right to Know Inventory and Disclosure about Peers Inventory, respectively,  $ps < .05$ ). Post-hoc analyses using a Bonferroni procedure indicated that adolescents were significantly more likely to disclose information about their activities with friends than positive or negative



characteristics of peers, which, in turn, were subject to greater disclosure than details of specific peer relationships. Similar post-hoc analyses indicated that adolescents felt parents had a significantly greater right to know about their activities with peers than any other facet of peer relations (with no significant differences among the remaining three facets). There was a significant main effect for age in both analyses ( $F_{(1,237)} = 19.85$  and  $F_{(1,235)} = 22.20$  for the Right to Know Inventory and Disclosure about Peers Inventory, respectively,  $p < .05$ ). Follow-up linear trend analyses on each subscale indicated that, except for disclosing details of relationship issues, the amount of information about peers that adolescents thought parents had a right to know or actually disclosed to parents decreased across age. Neither gender nor ethnicity was a significant factor in these analyses, and there were not significant higher-order interactions.

Univariate ANOVAs on other study variables revealed several instances of gender differences (see Table 4). Girls reported higher levels of prosocial behavior, closeness to mothers, and family involvement; boys reported greater closeness to fathers. Follow-up linear trend analyses on significant main effects for the age clusters indicated that, across the age range of the sample, adolescents reported a quadratic change of family involvement peaking at mid adolescence ( $t = 2.19, p < .05$ ), a linear increase in antisocial behavior and conflicts with mother ( $t = 2.84$  and  $2.05$ , respectively,  $ps < .05$ ), and a linear decrease in the closeness with fathers ( $t = 2.80, p < .05$ ). Parent reports did not show significant linear age (of adolescent) trends.

Ethnic differences were more limited. Post-hoc analyses with a Bonferroni adjustment procedure on three variables displaying significant ethnic differences revealed that African American adolescents tended to report more antisocial behaviors than Asian American ( $t = 3.40, p < .01$ ) and European American adolescents ( $t = 2.96, p < .05$ ). Latino adolescents recorded higher levels of family involvement than their European Americans peers ( $t = 3.56, p < .01$ ), and youths in the multiethnic or “other” category had higher rates of conflict with fathers than Latino adolescents ( $t = 2.91, p < .05$ ) and European American participants ( $t = 3.36, p < .01$ ). Because ethnic differences were sporadic and unpatterned, and because of low frequencies in some ethnic categories, ethnicity was dropped from subsequent analyses.

**Test of mediating model.** The path models across different facets of disclosure content fit the data fairly well; nearly all the model fit indices fell in an acceptable range (see Table 5 for details). Two factors were consistently associated with adolescents’ attitudes about what parents had a right to know about peers: the

closer adolescents felt toward mothers, the more they thought parents had a right to know about all aspects of their peer relations, whereas the more they were involved in antisocial activities, the less they thought parents had a right to know. The higher adolescents' self-reported involvement with peers, the less they claimed that parents had a right to know about relationship issues or negative characteristics of peers. The more prosocial behavior adolescents reported, the more they thought parents had a right to know about their activities with friends and, somewhat surprisingly, peers' negative characteristics. Only one parent-reported variable was associated with adolescents' attitudes about disclosure: the more parents perceived the child spending time with family members, the more the child indicated that parents had a right to know about negative peer characteristics.

Perceptions of parents' right to know emerged as a strong mediator: It not only had substantial associations with disclosure behavior (standardized path coefficients = .78 – .84,  $ps < .05$ ) but also mediated the associations of other variables with disclosure behavior across all four facets of disclosure content (i.e., the direct effects were not statistically significant). These results supported our expectation that attitudes about parents' right to know play a mediating role between factors that might prompt disclosure and what adolescents actually tell parents about peers. Multiple group analyses using gender ( $\Delta\chi^2 = 2.17, 2.32, 2.28,$  and  $.74$  for peer activity, peer relationship, peer prosocial, and peer antisocial characteristics, respectively,  $\Delta df = 27, ps > .05$ ) or age ( $\Delta\chi^2 = 26.74, 8.19, 17.25,$  and  $12.96$  for peer activity, peer relationship, peer prosocial, and peer antisocial characteristics, respectively,  $\Delta df = 54, ps > .05$ ) as the grouping variable revealed that these two demographic variables did not moderate the mediation model across any facets of peer information.

**Test of alternate causal model.** Path analysis is often conducted to verify causal relationships between variables (e.g., Kenny, 2008). This process was obfuscated by the cross-sectional nature of the present data, although the findings are consistent with Laird et al.'s (2003) longitudinal analyses. To assess the credibility of the causal ordering specified in our model, we compared it to an alternative model by repeating the path analysis but with the mediator and dependent variables reversed (i.e., the Disclosure about Peers Inventory score as the mediator and the Right to Know Inventory score as the outcome).

The BIC index was used to determine if the reversed models outperformed the original model, given that these were nested models (see Table 5; Kaplan, 2009). The original model outperformed the reversed model for disclosure of relationship issues and peers' negative characteristics, but underperformed the reversed model for revelations of peer activity details and prosocial characteristics of peers. Differences in BIC scores were consistently modest.

### **Discussion**

Over the course of adolescence, young people tend to have increasing opportunities to engage in activities without close supervision by parents or other adults. Our study adds to the increasing evidence of the importance and complexity of adolescents' disclosure as a means for parents to remain informed about key facets of their children's lives. Unlike other studies that measured disclosure in general terms (e.g., Kerr et al., 2010) or across several social domains (e.g., Smetana, et al., 2006), our study focused on one area of heightened concern among parents: the child's experiences and relationships with peers. The findings point to several aspects of adolescents' lives that are associated with their degree of disclosure and to the role of adolescents' attitudes about what parents have a right to know about peers as a mediator of these relationships.

#### **Disclosure About Peers**

Like Daddis and Randolph (2010), who focused on romantic relationships, we identified several distinctive aspects of peer relationships that were the subject of disclosure to parents. The aspects that we discerned have strong face validity because they were derived directly from adolescents. Careful analyses of focus group interviews, followed by factor analyses of items derived from these interviews, uncovered four primary facets of peer relations that adolescents perceive. Generally speaking, young people were more inclined to disclose basic details of their activities with peers than positive or negative characteristics of peers, and least likely to share specifics of individual relationships (close friendships or romantic interests). Study participants also felt parents had more of a right to know about activities with peers than other facets of their peer world. This could be because they recognized and understood parents' obligation to exercise some oversight of a child's activities, but it also may signal a child's recognition that without parental approval of their peer related activities their access to peers could be sharply reduced (Tilton-Weaver &

Marshall, 2008). Underlying adolescents' disinclination to share information about specific relationships so freely may be their concerns about maintaining a peer's trust, protecting more intimate details of a relationship, or fear that revealing certain details might prompt parents to restrict access to these highly valued peer associates. Regarding romantic relationships, Daddis and Randolph (2010) found that adolescents were more reluctant to tell parents who they liked or relationship details (sexual involvement, content of conversations) than basic information about activities with the romantic partner.

In all but one facet of peer relations, there was a decrease across the age of our sample in what study participants felt parents had a right to know about peers. The age differences matched trends in several short-term longitudinal studies of disclosure, more generally measured, across various portions of the age span that we examined (Cheung, Pomerantz, & Dong, 2013; Keijsers et al., 2009; Laird et al., 2013). Like other investigators, we regard this as evidence of growing autonomy from parents. Older adolescents may feel more comfortable taking responsibility for decisions about peer activities without extensive adult input. They also may recognize more readily their peers' preferences to avoid adults' close scrutiny of their lives. The one exception to this age trend dealt with features of specific relationships, which tended to prompt comparatively low levels of disclosure across the age span of the study. Even younger adolescents seem to recognize the need for more privacy when it comes to negotiating specific peer relationships. Features of this facet seem most consistent with the personal domain that studies based on social domain theory consistently identify as having low levels of disclosure (Smetana et al., 2006). This is the aspect of peer relations in which young people may feel the sharpest need for more autonomy relatively early in adolescence.

Although rates of disclosure differed across age and across facets of peer interactions, two factors were consistently associated with how much adolescents revealed to parents about peers: closeness to mothers and level of antisocial activity. Several studies have pointed to some aspect of parenting or the quality of parent-child relationships as a determinant of disclosure (Hunter et al., 2011; Keijsers et al., 2009; Tilton-Weaver, 2014). Our study is unusual in considering multiple qualities of parent-child bonds separately for mothers and fathers. This approach yields the intriguing result that closeness to mother—not closeness to father or conflict with either parent—is a consistent correlate of disclosure. The salience of mothers over fathers is not surprising, given the inclination of adolescents to discuss more with mothers (Noller & Baqi,

1985; Smetana, et al., 2006). The salience of positive over negative aspects of parent-child relationships may be more surprising because, intuitively, one might expect parent-child conflict to diminish disclosure as much as closeness augments it. Bivariate correlations in our data indicated negative associations between disclosure and parent-child conflict, but in the more comprehensive regressions, mother-child closeness consistently dominated other indicators of the parent-child relationship. A question for future, longitudinal research is whether mother-child closeness can slow the pace of diminishing disclosure about peers across adolescence, keeping autonomy development on a steady course.

The negative association between antisocial activity and disclosure about peers was also consistent with other research indicating that adolescents with relatively high rates of delinquent behavior tended to disclose less to parents about their lives, in general (Ahmad, Smetana, & Klimstra, in press; Laird et al., 2013; Keijsers, Branje, VanderValk, & Meeus, 2010). Because adolescents' antisocial activity is likely to occur in the company of peers (Dishion & Tipsord, 2011), those who reported high levels of antisocial behavior probably had more peer associates and peer activities that would garner parents' disapproval. With more to hide, they tended to share less and believe that parents had less of a right to know about their peer affairs. A higher rate of antisocial activity also was associated with lower quality parent child relationships (less closeness, more conflict), suggesting that antisocial adolescents' disinclination to share information with parents was not only strategic (to avoid parental restrictions on peer activities) but also interpersonal (not sensing parents' trust or support).

Complementing these consistent correlates of disclosure were more situation-specific factors concerning peer involvement and prosocial behavior. The more time adolescents spent with peers, the less they tended to reveal to parents about their closest relationships or more negative features of the peer group. Levels of peer involvement may have been an indicator of more intense individual relationships or broader peer interactions that encompassed a wider range of behavior (peer involvement and antisocial behavior were weakly correlated). In other words, spending more time with peers may have led to behaviors that adolescents felt were too personal to share with parents or imprudent to share, for fear of parental restrictions on their activities.

Ironically, however, the other specific factor associated with disclosure displayed a different dynamic. The more adolescents were involved in prosocial behavior, the *more* likely they were to share details of their peer activities and the negative characteristics of peers with parents. Young people who have established a pattern of prosocial behavior are likely to be involved in more conventional activities with friends, or to interact with peers who also engage in prosocial deeds more frequently (Brown & Larson, 2009), giving them little reason to shield information about these activities from parents. They may also be willing to reveal misbehavior of the broader peer group, knowing that their parents trust them not to get involved in such activities (prosocial behavior was correlated with more positive mother-child relationships). Of course, a different causal ordering is also possible here, in which young people who have grown accustomed to disclosing extensively to parents will tend to engage in higher levels of prosocial activity with peers to maintain strong parent-child bonds and/or avoid parental interference in their peer activities or relationships.

Taken together, the findings seem to provide a contradictory portrait of disclosure about peers as an aspect of autonomy development, just as has been observed across other studies of disclosure in more general terms. Age changes in disclosure and attitudes about sharing information with parents about peers follow expectations of increasing autonomy across adolescence, but significant correlations between low rates of disclosure about peers and high levels of antisocial activity suggest that nondisclosure may not lead to healthy autonomy. The resolution of this contradiction may lie in factors not included in our study. We did not differentiate conditions of disclosure—whether the information about peers that adolescents shared with parents was volitional or forced (Kearney & Bussey, in press). We also did not probe for the disclosure or nondisclosure strategies that adolescents employed, differentiating between full or partial disclosure, or between avoiding conversations about peers and keeping secrets or lying about peer events and relationships. Other studies suggest that behavioral characteristics or outcomes vary as a function of strategies that adolescent use (Cumsille, Darling, & Martínez, 2010; Laird et al., 2013).

### **Attitudes about What Parents Have a Right to Know**

One important factor on which we did focus attention was adolescent's attitudes about what parents had a right to know about peers. Consistent with the theoretical postulate that attitudes frame individuals'

action (Ajzen & Fishbein, 1980), we found that right-to-know attitudes were a powerful mediator in the disclosure process. A more accurate statement of the study's key findings would be that the closer adolescents were with their mother and the less involved in antisocial activity, the more they believed that parents had a right to know about peers, which in turn was associated with how much they disclosed about activities and experiences with peers. Our tests of the credibility of causal ordering specified in our model were equivocal, supporting the sequence of variables we specified in some facets of peer relations, countermanding it in other facets. This most likely is due to the reciprocal pattern of relationships that others have found in longitudinal studies of disclosure with variables similar to those that we examined, as well as more general studies of relations between attitudes and behavior. Among Chinese youths, for example, Qin and Pomerantz (2013) found a reciprocal relationship between adolescents' sense of responsibility to parents (somewhat related to our "right to know" construct) and levels of disclosure. Laird et al. (2013) reported a negative reciprocal relationship between antisocial activity and rates of disclosure. Tilton-Weaver et al. (2010) noted that parents' negative responses to information that adolescents disclosed served to weaken the parent-child relationship and discourage further disclosure. Longitudinal studies of disclosure about peer issues are likely to find a similar reciprocal relationship between right-to-know attitudes and disclosure, and it is likely that the "predictors" of disclosure about peers are, to some extent, outcomes as well.

Although a significant mediator in our model and a very strong correlate of disclosure, right-to-know attitudes should not be regarded as a deterministic feature of adolescents' disclosure to parents about peers. There may be instances in which young people divulge information about peers even when they do not feel parents have a right to know it. There also may be instances in which adolescents defer from sharing information even though they feel that parents have a right to be informed. Victims of peer bullying report that they often don't inform parents because they feel embarrassed or are fearful that telling will make matters worse (e.g., DeLara, 2012). Adolescents' rationale for disclosing information or their justifications for attitudes about what parents have a right to know should be incorporated into future studies about disclosure processes (e.g., Bakken & Brown, 2010; Marshall et al., 2005). Comments from focus group participants in Study 1, for example, suggested that attitudes about what parents have a right to know may be efforts to protect the confidentiality of close friends or their own reputation as trustworthy among peers.

Such attitudes also might reflect efforts to remove the cognitive dissonance when an adolescent's own values or beliefs depart from those of parents and lead them into peer activities that parents would dislike.

A final noteworthy finding is that parent reports of adolescent behavior or the quality of the parent-child relationship did not carry much weight in our final statistical models. Others have found that parents' perceptions are significant predictors of disclosure (Padilla-Walker, Harper, & Bean, 2011; Soenens et al., 2006), but these studies have not included adolescent reports of the same variables. Having multiple perspectives (both parent and adolescent reports) is an important strength of this study, but as others have discovered (Keijsers et al., 2010; Tilton-Weaver et al., 2010), adolescents' own perceptions of their activities and relationships often overshadow parent reports as predictors or correlates of important behaviors such as attitudes about what parents have a right to know or disclosure of information to parents. This is an important cautionary note for those who rely exclusively on parents' (or teachers' or others') reports of adolescent behavior.

### **Limitations and Future Directions**

This study provided an assessment of adolescents' perceptions of what parents have a right to know and their inclination to disclose information to parents about a specific but highly salient aspect of their lives: relationships and activities with peers. Our assessment tool was carefully derived to reflect adolescents' own understanding of the peer domain, and then applied to a sample of early and middle adolescents to reveal factors that were consistently or conditionally associated with disclosure behavior. We included parent as well as adolescent assessment of key variables, but ultimately showed that adolescents' reports overshadowed parents' ratings in our empirical models.

Because our data were gathered at a single time point, we cannot be certain of the causal ordering of the conceptual model's variables. Indeed, previous longitudinal work points to the probability of reciprocal effects among variables. Further, although ethnic background was not a major factor in our analyses, others have noted ethnic differences in disclosure patterns (Yau et al., 2009). Future research with a more ethnically balanced sample should explore potential differences in disclosure about peer issues, specifically. It would also be useful to extend this study to older adolescents whose autonomy strivings may further affect the type and degree of information about peers that they are willing to share with parents.



Time constraints did not permit us to examine possible differences in how much or what type of information about peers adolescents shared with each parent, or difference in what they thought mothers or fathers had a right to know about peers. Future studies should assess how consistently various factors are associated with disclosure to each parent, or perhaps compare adolescents who disclose equally to both parents versus those who favor one parent over another.

We urge caution in generalizing our study findings beyond the realm of peer relations. The same factors may not be as salient, and right-to-know attitudes may not be as strong a mediator, in young people's disclosure to parents about other aspects of their lives.

Like family relationships, peer relations are culturally embedded. A useful next step for research would be to determine whether youths in other cultures share the same understanding of facets of peer relations that emerged in our U.S. samples, and whether there are similar patterns of more delimited disclosure with age and more cautious disclosure about certain facets of peer relations (especially details of specific, close relationships). Contrasting more family oriented or collectivistic cultures with more individualistic or peer oriented contexts would also be informative. Such work would build effectively on insights from this study about how family-peer linkages help to shape the psychosocial development of young people across adolescence.

### **Conclusion**

This study adds to the literature on adolescents' disclosure of information to parents by engaging in a detailed examination of what adolescents disclose about one important facet of their lives: their interactions and relationships with peers. By delving more deeply into the peer sphere, this study reveals the complex web of factors underlying adolescents' cognitions and actions regarding the information that they share with parents. Through focus group interviews with adolescents we discerned four major facets of peer relations that serve as arenas for disclosure for young people. Rates of disclosure varied significantly across these facets and, with one exception, tended to decline as the age of study participants increased. The age differences were consistent with a portrait of disclosure as an aspect of normative increases in healthy autonomy across adolescence. Yet, consistently positive associations across facets of peer relations between disclosure and close mother-child relationships, and negative associations between disclosure and

participation in antisocial behavior, suggested that restricted disclosure to parents about peers was not necessarily a sign of healthy autonomy development. To resolve these seemingly contradictory findings, closer examination of the circumstances surrounding disclosure is warranted.

A particularly prominent factor to emerge in our study is adolescents' attitudes about what parents have a right to know about peers. This factor was highly correlated with disclosure levels and mediated associations between disclosure about peers and several personal and interpersonal variables. Its mediational role was consistent with traditional views that attitudes shape behavior, although there was evidence suggesting that, in the case of disclosure of information about peers, association between right-to-know attitudes and disclosure might be reciprocal. Further research into the rationales underlying adolescents' attitudes would be helpful. In certain facets of peer relations, attitudes about what parents have a right to know may be shaped by strategic concerns (sharing or withholding information to assure more control over what one can do with peers); in other facets, interpersonal issues may dominate (efforts to maintain close and trusting relationships with peers or parents). The study provides a firm foundation for exploring the particular features of adolescents' disclosures to parents about peers as these change across adolescence and potentially affect autonomy development.

### References

- Ahmad, I., Smetana, J. G., & Klimstra, T. (in press). Maternal monitoring, adolescent disclosure, and adolescent adjustment among Palestinian refugee youth in Jordan. *Journal of Research on Adolescence*. doi: 10.1111/jora.12133
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Bakken, J. P., & Brown, B. B. (2010). Adolescents' secretive behavior: African American and Hmong adolescents' strategies and justifications for managing parents' knowledge about peers. *Journal of Research on Adolescence*, 20, 359-388. doi: 10.1111/j.1532-7795.2010.00642.x
- Beyers, W., Goossens, L., Vansant, I., & Moors, E. (2003). A structural model of autonomy in middle and late adolescence: Connectedness, separation, detachment, and agency. *Journal of Youth and Adolescence*, 32, 351-365. doi: 10.1023/A:1024922031510
- Bollen, K. A. (1989). *Structural equation models with latent variables*. New York, NY: Wiley.
- Brown, B. B., & Bakken, J. P. (2011). Parenting and peer relationships: Reinvigorating research on family-peer linkages in adolescence. *Journal of Research on Adolescence*, 21, 153-165. doi: 10.1111/j.1532-7795.2010.00720.x
- Brown, B. B., Bakken, J. P., Nguyen, J., Von Bank, H. G. (2007). Sharing information about peer relations: Parent and adolescent opinions and behaviors in Hmong and African American families. *New Directions for Child and Adolescent Development*, 116, 67-82. doi: 10.1002/cd.189
- Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3<sup>rd</sup> ed.) (pp.74-103). New York, NY: Wiley
- Bumpus, M. F., Crouter, A. C., & McHale, S. M. (2001). Parental autonomy granting during adolescence: Exploring gender differences in context. *Development Psychology*, 37, 163-173. doi: 10.1037/0012-1649.37.2.163

- Cheung, C. S.-S., Pomerantz, E. M., & Dong, W. (2013). Does adolescents' disclosure to their parents matter for their academic adjustment? *Child Development, 84*, 693-710. doi: 10.1111/j.1467-8624.2012.01853.x
- Crouter, A. C., Bumpus, M. F., Davis, K. D., & McHale, S. M. (2005). How do parents learn about adolescents' experiences? Implications for parental knowledge and adolescent risky behavior. *Child Development, 76*, 869-882. doi: 10.1111/j.1467-8624.2005.00883.x
- Cumsille, P., Darling, N., & Martínez, M. L. (2010). Shading the truth: The patterning of adolescents' decisions to avoid issues, disclose, or lie to parents. *Journal of Adolescence, 33*, 285-296. doi: 10.1016/j.adolescence.2009.10.008
- Daddis, C. (2010). Adolescent peer crowds and patterns of belief in the boundaries of personal authority. *Journal of Adolescence, 33*, 699-708. doi: 10.1016/j.adolescence.2009.11.001
- Daddis, C., & Randolph, D. (2010). Dating and disclosure: Adolescent management of information regarding romantic involvement. *Journal of Adolescence, 33*, 309-320. doi: 10.1016/j.adolescence.2009.05.002
- Darling, N., Cumsille, P., Caldwell, L. L., & Dowdy, B. (2006). Predictors of adolescents' disclosure to parents and perceived parental knowledge: Between- and within-person differences. *Journal of Youth and Adolescence, 35*, 659-670. doi: 10.1007/s10964-006-9058-1
- Darling, N., Cumsille, P., & Martínez, M. L. (2007). Adolescents' as active agents in the socialization process: Legitimacy of parental authority and obligation to obey as predictors of obedience. *Journal of Adolescence, 30*, 297-311. doi:10.1016/j.adolescence.2006.03.003
- Darling, N., Cumsille, P., & Peña-Alampay, L. (2005). Rules, legitimacy of parental authority, and obligation to obey in Chile, the Philippines, and the United States. *New Directions for Child and Adolescent Development, 2005*(108), 47-60. doi: 10.1002/cd.127
- Darling, N., Cumsille, P., Peña-Alampay, L., & Coatsworth, D. (2009). Individual and issue-specific differences in parental knowledge and adolescent disclosure in Chile, the Philippines, and the United States. *Journal of Research on Adolescence, 19*, 715-740. doi: 10.1111/j.1532-7795.2009.00608.x

- DeLara, E. W. (2012). Why adolescents don't disclose incidents of bullying and harassment. *Journal of School Violence, 11*, 288-305. doi: 10.1080/15388220.2012.705931
- Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology, 62*, 189-214. doi: 10.1146/annurev.psych.093008.100412
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016-1024. doi: 10.1037/0012-1649.21.6.1016
- Hunter, S. B., Barber, B. K., Olsen, J. A., McNeely, C. A., & Bose, K. (2011). Adolescents' self-disclosure to parents across cultures: Who discloses and why. *Journal of Adolescent Research, 26*, 447-478. doi: 10.1177/0743558411402334
- Kagitçibasi, Ç. (2013). Adolescent autonomy-relatedness and the family in cultural context: What is optimal? *Journal of Research on Adolescence, 23*, 223-235. doi: 10.1111/jora.12041
- Kaplan, D. (2009). *Structural equation modeling: Foundations and extensions* (2<sup>nd</sup> ed.). Los Angeles, CA: Sage.
- Kearney, J., & Bussey, K. (in press). The longitudinal influence of self-efficacy, communication, and parenting on spontaneous adolescent disclosure. *Journal of Research on Adolescence*. doi: 10.1111/jora.12148
- Keijsers, L., Branje, S. J. T., VanderValk, I. E., & Meeus, W. (2010). Reciprocal effects between parental solicitation, parental control, adolescent disclosure, and adolescent delinquency. *Journal of Research on Adolescence, 20*, 88-113. doi: 10.1111/j.1532-7795.2009.00631.x
- Keijsers, L., Frijns, T., Branje, S., & Meeus, W. (2009). Developmental links of adolescent disclosure, parental solicitation, and control with delinquency: Moderation by parental support. *Developmental Psychology, 45*, 1314-1327. doi: 10.1037/a0016693
- Keijsers, L., & Laird, R. D. (2014). Mother-adolescent monitoring dynamics and the legitimacy of parental authority. *Journal of Adolescence, 37*, 515-524. doi: 10.1016/j.adolescence.2014.04.001
- Keijsers, L., & Poulin, F. (2013). Developmental changes in parent-child communication throughout adolescence. *Developmental Psychology, 49*, 2301-2308. doi: 10.1037/a0032217

- Kenny, D. A. (2008). Reflections on mediation. *Organizational Research Method, 11*, 353-358. doi: 10.1177/1094428107308978
- Kerr, M., Stattin, H., & Burk, W. J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence, 20*, 39-64. doi: 10.1111/j.1532-7795.2009.00623.x
- Laird, R. D., Marrero, M. D., Melching, J. A., & Kuhn, E. S. (2013). Information management strategies in early adolescence: Developmental change in use and transactional associations with psychological adjustment. *Developmental Psychology, 49*, 928-937. doi: 10.1037/a0028845
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Change in parents' monitoring knowledge: Links with parenting, relationship quality, adolescent beliefs, and antisocial behavior. *Social Development, 12*, 401-419. doi: 10.1111/1467-9507.00240
- Laursen, B., & Bukowski, W. M. (1997). A developmental guide to the organisation of close relationships. *International Journal of Behavioral Development, 21*, 747-770. doi: 10.1080/016502597384659
- Marshall, S. K., Tilton-Weaver, L. C., & Bosdet, L. (2005). Information management: Considering adolescents' regulation of parental knowledge. *Journal of Adolescence, 28*, 633-647. doi: 10.1016/j.adolescence.2005.08.008
- Noller, P., & Baqi, S. (1985). Parent-adolescent communication. *Journal of Adolescence, 8*, 125-144. doi: 10.1016/S0140-1971(85)80042-7
- Noom, M. J., Deković, M., & Meeus, W. (2001). Conceptual analysis and measurement of adolescent autonomy. *Journal of Youth and Adolescence, 30*, 577-595. doi: 10.1023/A:1010400721676
- Nucci, L., Smetana, J., Araki, N., Nakaue, M., & Comer, J. (2014). Japanese adolescents' disclosure and information management with parents. *Child Development, 85*, 901-907. doi: 10.1111/cdev.12174
- Padilla-Walker, L. M., Harper, J. M., & Bean, R. A. (2011). Pathways to parental knowledge: The role of family process and family structure. *Journal of Early Adolescence, 31*, 604-327. doi: 10.1177/0272431610366246
- Qin, L., & Pomerantz, E. M. (2013). Reciprocal pathways between American and Chinese early adolescents' sense of responsibility and disclosure to parents. *Child Development, 84*, 1887-1895. doi: 10.1111/cdev.12088

- Rote, W. M., & Smetana, J. G. (in press). Beliefs about parents' right to know: Domain differences and associations with change in concealment. *Journal of Research on Adolescence*. doi: 10.1111/jora.12194
- Rote, W. M., Smetana, J. G., Campione-Barr, N., Villalobos, M., & Tasopoulos-Chan, M. (2012). Associations between observed mother-adolescent interactions and adolescent information management. *Journal of Research on Adolescence*, 22, 206–214. doi: 10.1111/j.1532-7795.2011.00776.x
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2<sup>nd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum.
- Silverberg, S. B., & Gondoli, D. M. (1996). Autonomy in adolescence: A contextualized perspective. In G. R. Adams, R. Montemayor, & T. P. Gullotta (Eds.), *Psychosocial development during adolescence: Progress in developmental contextualism* (pp. 12-61). Thousand Oaks, CA: Sage.
- Smetana, J. G. (1995). Parenting styles and conceptions of parental authority during adolescence. *Child Development*, 66, 299-316. doi: 10.1111/j.1467-8624.1995.tb00872.x
- Smetana, J. G., & Metzger, A., (2008). Don't ask, don't tell (your mom and dad): Disclosure and nondisclosure in adolescent-parent relationships. In M. Kerr, H. Stattin, & R. C. M. E. Engels (Eds.), *What can parents do? New insights into the role of parents in adolescent problem behavior* (pp. 65-87). New York, NY: John Willey & Sons.
- Smetana, J. G., Metzger, A., Gettman, D., & Campione-Barr, N. (2006). Disclosure and secrecy in adolescent-parent relationships. *Child Development*, 77, 201-217. doi: 10.1111/j.1467-8624.2006.00865.x
- Smetana, J. G., Villalobos, M., Rogge, R. D., & Tasopoulos-Chan, M. (2010). Keeping secrets from parents: Daily variations among poor, urban adolescents. *Journal of Adolescence*, 33, 321-331. doi: 10.1016/j.adolescence.2009.04.003
- Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Goossens, L., Beyers, W., et al. (2007). Conceptualizing parental autonomy support: Adolescent perceptions of promotion of independence

- versus promotion of volitional functioning. *Developmental Psychology*, *43*, 633-646. doi: 10.1037/0012-1649.43.3.633
- Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology*, *42*, 305-317. doi: 10.1037/0012-1649.42.2.305
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*, 1072-1085. doi: 10.1111/1467-8624.00210
- Tilton-Weaver, L. C. (2014). Adolescents' information management: Comparing ideas about why adolescents disclose to or keep secrets from their parents. *Journal of Youth and Adolescence*, *43*, 803-813. doi: 10.1007/s10964-013-0008-4
- Tilton-Weaver, L. C., Kerr, M., Pakalniskeine, V., Tikic, A., Salihovic, S., & Stattin, H. (2010). Open up or close down: How do parental reactions affect youth information management? *Journal of Adolescence*, *33*, 333-346. doi: 10.1016/j.adolescence.2009.07.011
- Tilton-Weaver, L. C., & Marshall, S. K. (2008). Adolescents' agency in information management. In M. Kerr, H. Stattin, & R. C. M. E. Engels (Eds.), *What can parents do? New insights into the role of parents in adolescent problem behavior* (pp. 11-41). New York, NY: John Wiley & Sons.
- Yau, J. P., Tasopoulos-Chan, M., & Smetana, J. G. (2009). Disclosure to parents about everyday activities among American adolescents from Mexican, Chinese, and European backgrounds. *Child Development*, *80*, 1481-1498. doi: 10.1111/j.1467-8624.2009.01346.x



Table 1

*Unstandardized Factor Loadings of the Right to Know Inventory*

Item	Activity	Relationship	Prosocial	Antisocial
Activities do with friends	.62	.40		.47
Change in plans when with friends	.67			
Friends who you will be with	.80			.38
Adults supervising the activity when with friends	.67	.30		.36
Where you will be when with friends	.77	.30		.37
Dating someone <sup>+</sup>		.82		
Breaking up with boy/girlfriend	.31	.89		
Having a fight with closest friend <sup>+</sup>	.31	.52	.44	.33
Having a fight with steady boy/girl friend	.36	.66	.37	.38
How well crowds get along in school <sup>+</sup>		.36	.58	
What teachers think of the group you hang out with <sup>+</sup>		.35	.60	.48
If friend involved in extracurricular activity <sup>+</sup>			.74	
If the people in your group have boy/girlfriend <sup>+</sup>		.48	.63	.33
What religion your friend follows			.60	
If your friend is a good student			.59	.46
Which crowds in school tend to get good grades			.75	.33
If your friend helps you out of a jam <sup>+</sup>		.41	.54	.45
If your friend gets an honor or award			.64	
Friend gets in trouble with the law	.38	.32	.38	.71
Friend is involved in drugs and alcohol	.40	.31	.34	.87
Friend does something your parents would disapprove of	.35	.30	.47	.75
If your friend gets into trouble at school <sup>+</sup>		.35	.57	.67
What crowds in school do drugs <sup>+</sup>	.30		.46	.68
How intimate you are w/boy/girlfriend <sup>+</sup>	.43	.51		.64
If you are doing illegal acts w/friends <sup>+</sup>	.47	.34		.74

*Note.* Cell entries are results from EFA after omitting the 6 cross-loaded items. Only factor loadings greater than .30 are reported.

<sup>+</sup> Items omitted after CFA

Table 2

*Standardized Factor Loadings and Internal Consistency of the Right to Know Inventory (RTKI) and Disclosure About Peers Inventory (DAPI)*

Scale (Cronbach $\alpha$ ) / Item	Study 1	Study 2	
	RTKI	RTKI	DAPI
<i>Activity with peers</i>	(.83)	(.85)	(.89)
Activities do with friends	.67	.73	.79
Change in plans when with friends	.67	.74	.76
Friends who you will be with	.78	.78	.86
Adults supervising activity when with friends	.68	.68	.74
Where you will be when with friends	.76	.79	.81
<i>Relationship issues</i>	(.72)	(.81)	(.83)
Information about friendship	--	.76	.75
Break up with boy/girlfriend	.67	.68	.74
Attracted to someone	--	.67	.67
Fight with your steady boy/girl friend	.84	.79	.90
<i>Peers' prosocial characteristics</i>	(.73)	(.85)	(.86)
Friends' religion	.59	.67	.71
Friend is a good student	.59	.77	.70
Friend helps out a lot at home	--	.70	.74
Crowds in school tend to get good grades	.75	.70	.72
Friends gets a special honor or award	.63	.64	.63
Friend's family?	--	.67	.72
<i>Peers' antisocial characteristics</i>	(.83)	(.83)	(.90)
Friend gets in trouble with the law	.76	.70	.75
Bad things friends do	--	.82	.89
Friend is involved in drugs and alcohol	.84	.79	.82
Friend does something parents would disapprove of	.76	.76	.84
<i>Fit indices</i>			
Chi-square coefficient ( <i>df</i> )	123.35*** (71)	253.76*** (141)	252.07*** (141)
90% CI RMSEA	[.04, .08]	[.05, .07]	[.05, .07]
CFI	.95	.95	.96
TLI	.93	.94	.95

Note. Cell entries are results from CFA.

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

Table 3

*Means, Standard Deviations, and Intercorrelations among Study Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 Age	--																				
2 RTKI activities with peers	-.22***	--																			
3 RTKI relationship issues	-.13*	.57***	--																		
4 RTKI positive peer features	-.24***	.51***	.49***	--																	
5 RTKI negative peer features	-.35***	.67***	.62***	.45***	--																
6 DAPI activities with peers	-.21**	.86***	.52***	.47***	.64***	--															
7 DAPI relationship issues	-.12	.51***	.80***	.44***	.51***	.52***	--														
8 DAPI positive peer features	-.24***	.54***	.47***	.79***	.47***	.56***	.52***	--													
9 DAPI negative peer features	-.39***	.62***	.59***	.44***	.82***	.62***	.57***	.51***	--												
10 Family involvement	-.14*	.14*	.22**	.17**	.24***	.23***	.25***	.21**	.27***	--											
11 Peer involvement	.21**	-.23***	-.19**	-.09	-.27***	-.19**	-.13*	-.13*	-.32***	-.06	--										
12 Prosocial behaviors	-.12	.30***	.19**	.10	.26***	.32***	.22***	.17**	.19**	.06	-.02	--									
13 Antisocial behaviors	.34***	-.49***	-.33**	-.31***	-.47***	-.48***	-.25***	-.42***	-.42***	-.20**	.27***	-.11	--								
14 Closeness with mother	-.19**	.44***	.53***	.29***	.45***	.47***	.54***	.35***	.41***	.28***	-.03	.30***	-.26***	--							
15 Conflict with mother	.26***	-.42***	-.25***	-.21**	-.41***	-.43***	-.24***	-.23***	-.37***	-.17*	.19**	-.11	.40***	-.34***	--						
16 Closeness with father	-.26***	.25***	.31***	.23**	.40***	.20**	.28***	.28***	.30***	.20**	-.14	.18*	-.28***	.48***	-.27***	--					
17 Conflict with father	.07	-.26***	-.10	-.08	-.24***	-.24***	-.13	-.06	-.14*	-.11	.13	-.02	.29***	-.16*	.50***	-.39***	--				
18 Family involvement (P)	-.14*	.13	.07	.04	.24***	.17**	.06	.11	.25***	.22**	-.09	-.05	-.13	.09	-.12	.19**	-.03	--			
19 Peer involvement (P)	.17*	-.14*	-.14*	-.12	-.22**	-.17**	-.12	-.13*	-.16*	-.21**	.37***	-.10	.28**	-.12	.18*	-.16*	.17*	-.06	--		
20 Closeness with child (P)	.03	.06	.08	-.04	.08	.10	.05	.003	.05	.18**	.10	.14*	-.11	.13	-.10	.06	-.12	.14*	-.10	--	

21 Conflict with child (P)	.03	-.16*	-.10	-.03	-.09	-.16*	-.11	-.08	-.07	-.14*	.03	-.12	.12	-.13	.33***	-.06	.28***	.01	.10	-.31***	--
Mean	13.01	4.19	3.31	3.45	3.48	4.10	3.06	3.30	3.05	12.40	11.53	3.06	1.49	3.31	2.25	3.16	2.11	14.23	9.09	3.09	1.97
SD	1.48	.76	.99	.92	1.06	.86	1.10	.97	1.24	8.80	8.58	.82	.63	.50	.72	.63	.73	8.51	6.63	4.14	.50

*Note.* (P) = parent generated score; other variables are based on adolescent report.

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

Table 4

*Gender Differences on Study Variables*

Variable	Male		Female		ANOVA <i>F</i>
	M	S.D.	M	S.D.	
<i>Adolescent's report</i>					
Parents' Right to Know about:					
Activities with peers	4.07	.75	4.30	0.76	5.14*
Relationship issues	3.25	.93	3.38	1.04	ns
Positive peer characteristics	3.55	.85	3.36	0.97	ns
Negative peer characteristics	3.39	1.07	3.56	1.05	ns
Disclosure to parents about:					
Activities with peers	3.94	0.91	4.25	0.80	7.89**
Relationship issues	2.87	1.02	3.25	1.14	8.17**
Positive peer characteristics	3.27	0.97	3.33	0.97	ns
Negative peer characteristics	2.98	1.25	3.12	1.23	ns
Prosocial behavior	2.86	0.79	3.24	0.82	12.59***
Antisocial behavior	1.52	0.65	1.46	0.62	ns
Family involvement	11.26	8.90	13.45	8.60	6.08*
Peer involvement	11.19	8.13	11.84	8.99	ns
Closeness with mother	3.24	0.45	3.38	0.53	5.34*
Conflict with mother	2.22	0.74	2.28	0.70	ns
Closeness with father	3.26	0.47	3.07	0.74	4.59*
Conflict with father	2.04	0.65	2.17	0.80	ns
<i>Parent's report:</i>					
Family involvement	14.47	8.61	14.01	8.49	ns
Peer involvement	9.69	6.95	8.55	6.34	ns
Closeness to child	3.09	0.40	3.09	.043	ns
Conflict with child	1.98	0.52	1.96	0.48	ns

*Note.* Mean scores are adjusted for age and ethnicity. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Table 5

*Path Analysis Coefficients for Analysis of Each Facet of Peer Relationships (N = 249)*

Dependent variable Predictor	Activities with peers		Relationship issues		Positive peer characteristics		Negative peer characteristics	
	B (SE)	$\beta$	B (SE)	$\beta$	B (SE)	$\beta$	B (SE)	$\beta$
<i>Right to know</i>								
(Intercept)	4.06 (.70)		.07 (.83)		3.67 (.90)		3.01 (.89)	
Gender	-.13 (.09)	-.08	.04 (.12)	.02	.32 (.12)	.17*	-.05 (.12)	-.03
Age	-.001 (.03)	-.001	.04 (.04)	.06	-.06 (.04)	-.10	-.08 (.04)	-.12*
Prosocial behavior	.15 (.05)	.17**	.04 (.07)	.03	.05 (.07)	.04	.15 (.07)	.12*
Antisocial behavior	-.35 (.09)	-.29***	-.26 (.10)	-.16*	-.30 (.11)	-.21**	-.34 (.11)	-.20**
Family involvement	-.002 (.01)	-.02	.01 (.01)	.07	.01 (.01)	.10	.01 (.01)	.06
Peer involvement	-.01 (.01)	-.10	-.02 (.01)	-.14*	.004 (.01)	.04	-.01 (.01)	-.11
Closeness with mother	.36 (.12)	.24**	.88 (.14)	.45***	.36 (.15)	.20*	.44 (.15)	.21**
Conflict with mother	-.13 (.07)	-.13	-.04 (.10)	-.03	-.04 (.10)	-.03	-.22 (.09)	-.15*
Closeness with father	-.01 (.09)	-.01	.07 (.12)	.05	.06 (.11)	.04	.17 (.11)	.11
Conflict with father	-.12 (.08)	-.12	.08 (.10)	.06	.05 (.09)	.04	-.02 (.09)	-.01
Family involvement (P)	.01 (.01)	.06	-.004 (.01)	-.03	-.001 (.01)	-.01	.02 (.01)	.14**
Peer involvement (P)	.003 (.01)	.03	-.003 (.01)	-.02	-.004 (.01)	-.03	-.01 (.01)	-.04
Closeness with child (P)	-.08 (.10)	-.04	-.004 (.13)	-.01	-.25 (.14)	-.12	-.04 (.13)	-.02
Conflict with child (P)	-.03 (.09)	-.02	-.02 (.11)	-.002	.02 (.12)	.01	.09 (.12)	.04
R <sup>2</sup>	.42		.35		.21		.45	
<i>Disclosure</i>								
(Intercept)	.29 (.35)		.42 (.39)		.93 (.42)		1.17 (.59)	
Right to know	.95 (.04)	.84***	.88 (.04)	.79***	.83 (.05)	.79***	.91 (.05)	.78***
Gender	-.10 (.06)	-.06	-.27 (.08)	-.12**	-.22 (.08)	-.11**	.02 (.09)	.01
Age	-.01 (.02)	-.02	-.01 (.03)	-.01	-.03 (.03)	-.05	-.10 (.04)	-.12**
R <sup>2</sup>	.73		.66		.64		.69	
<i>Fit indices</i>								
$\chi^2$ (df = 12)		8.78		.09		6.00		3.52
95% RMSEA		[.00, .05]		[.00, .001]		[.00, .02]		[.00, .001]
CFI		1.00		1.00		1.00		1.00
TLI		1.00		1.00		1.00		1.00
BIC		853.58		1195.20		1161.72		1219.78
BIC (reversed model)		843.29		1206.14		1137.32		1245.18

---

*Note.* “(P)” = parent-generated score; other variables are based on adolescent report. The 95% confidence interval of the coefficient estimates is available upon request.

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

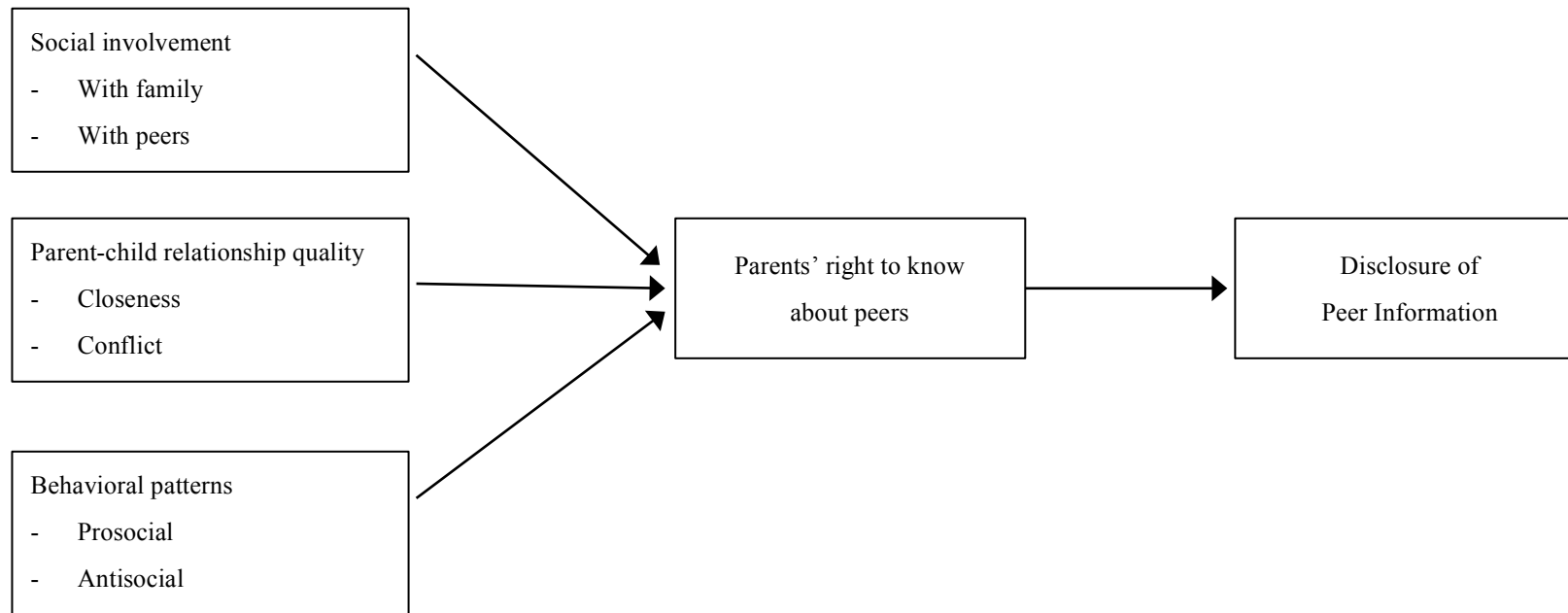


Figure 1

*Conceptual path model*