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Abstract

The purpose of the present study was to investigate the direction of effects between parents' sources of knowledge and children's involvement in bullying and victimization at school. The participants were 348 early adolescents with a mean age of 13.5 years and their mothers. The children completed the Revised Bullying and Victimization Questionnaire, while the mothers completed the Parental Knowledge Questionnaire. Data were collected in two time points with a 6-month interval. The structural equation model showed that child disclosure and parental control at Time 1 (T1) positively predicted bullying at Time 2 (T2), while parental solicitation at T1 negatively predicted bullying at T2. Conversely, bullying at T1 positively predicted child disclosure and parental control at T2, while victimization at T1 positively predicted parental solicitation at T2 and negatively predicted child disclosure at T2. The results confirmed that the relationship between parental knowledge and bullying is reciprocal and that prior parental solicitation was the only source of knowledge that was negatively related with future involvement in bullying. Interestingly, victimization at T2 was not related with any of the sources of parental knowledge at T1 indicating that parents' effort to know about their youths' socialization may not lead to reducing victimization. Bullying, however, appeared to be negatively predicted by prior parental solicitation indicating that parents' effort to

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know who their children socialize with may indeed operate as a protective barrier. Finally, our study showed that prior victimization is related with less child disclosure, which confirms the assumption that victimized children often hide their experience from their parents.

Keywords

Bullying, child disclosure, parental monitoring, victimization

Introduction

It is well established in the literature that adolescent antisocial behaviors such as peer aggression (e.g., Georgiou, 2008a), substance abuse (e.g., Wood, Read, Mitchell, & Brand, 2004), and conduct problems (e.g., Hinshaw & Lee, 2003) are associated with parental attitudes and actions, some of which operate as protective factors and some as risk factors. Parents often adopt different strategies in order to know more about their adolescents' whereabouts, friendships, and out-of-home activities, in order to intervene when necessary (Stattin & Kerr, 2000).

Healthy development requires that adolescents are granted sufficient space to achieve an independent sense of identity while still maintaining connection with their parents (Dishion, Nelson, & Bullock, 2004). Furthermore, due to normative developmental changes, adolescents themselves expect and demand that their parents give them more independence in their socialization choices and more privacy in their personal relationships (Tilton-Weaver & Marshall, 2008). As a result, the likelihood that parents will know less about their children's social life and out of the house activity increases during adolescence. Thus, the combination of poor parenting surveillance and the individual adolescents' pressing need for autonomy may put the latter at greater risk.

During the transitional period of preadolescent and early adolescent years, children frequently find themselves engaged in school bullying. Bullying is a disturbing social phenomenon from which a significant minority of children and adolescents suffer. There are both short-term and long-term effects on children involved in such experiences (Headley, 2004; Roland, 2002; Seals & Young, 2003), including internalizing and externalizing problems later in life. Therefore, the investigation of correlates of bullying remains a challenge for researchers and practitioners worldwide.

Admittedly, bullying is a distinct type of aggressive behavior involving physical and relational elements. It is defined as a systematic and repeated form of aggression involving peers (Olweus, 1993) including inequality of power between bullies and victims. Three groups of individuals are directly involved in bullying: bullies, victims, and bully/victims (Olweus, 1993). At the beginning of this century, epidemiological studies indicated that the prevalence of bullying in western Europe (e.g., England and Germany) is found to vary between 3% and 23%, and the prevalence of victimization between 8% and 46% using surveys on children 8–12 years of age (e.g., Wolke, Woods, Stanford, & Schulz, 2001). In Cyprus, Stavrinides, Paradeisiotou, Tziogouros, and Lazarou (2010) surveyed 1,645 elementary and high-school students and they found that

the prevalence of bullying among Cyprus students was 17%. The high prevalence of bullying at schools worldwide suggests that it remains a significant challenge that researchers still try to understand why it takes place, while teachers and other school professionals constantly struggle to find ways to solve.

Various parenting practices and familial processes have long been investigated in bullying literature. For example, some authors have focused on the relationship between bullying and parental style (Baumrind, 1991; Georgiou, 2008a). In this line of research, a number of studies found that authoritarian parental style was positively related to bullying and victimization, while permissive parental style was positively related to victimization (e.g., Georgiou, Fousiani, Michaelides, & Stavrinides, 2013). Hence, while the relationship between what parents *do* when they become aware of their children's involvement in bullying is known, very little research has been done in order to understand *when* parents become aware and what they *try to do* in order to gain more knowledge on whether their children become involved in bullying. Thus, the relationship between bullying and sources of parental knowledge has not been sufficiently investigated.

However, in one of the few studies found in this area, Georgiou and Stavrinides (2013) found that child disclosure was negatively correlated to bullying (not victimization), while parental monitoring was found to be statistically unrelated to either bullying or victimization. Since this was a cross-sectional study and only one among the few found in relation to this issue, the relationship between sources of parental knowledge and children's involvement in bullying needs further investigation.

During the past two decades, studies have shown that the development of children's problem behavior, such as bullying, results from a bidirectional interaction between parental and child behavior (Georgiou & Fanti, 2010; Hinshaw & Lee, 2003; Laird, Pettit, Bates, & Dodge, 2003; Lytton, 1990). In these studies, researchers maintain that children are not simply passive recipients of parenting behavior but rather are active participants in shaping their parents' actions. Generally, a number of studies that examine parenting as a risk factor for child conduct problems emphasize that parents and children influence each other in a dynamic, reciprocal, and transactional manner (Fanti, Henrich, Brookmeyer, & Kuperminc, 2008; Kerr & Stattin, 2000).

What can parents do to prevent their children from engaging in risk behavior? Before they can do anything at all, parents need to know the facts. Parental knowledge can derive from two main sources: parental monitoring and child disclosure (Stattin & Kerr, 2000). Parental monitoring is defined as "a set of correlated parenting behaviors involving attention to and tracking of the child's whereabouts, activities, and adaptations" (Dishion & McMahon, 1998, p. 61). It is expressed in two main ways: (a) parents asking their children and their children's friends for information (parental solicitation) and (b) parents imposing rules and restrictions on their children's activities and associations, thereby controlling the amount of freedom children have to do things without telling them (parental control).

The benefits of parental control are still under some debate. Some cross-sectional and longitudinal studies have shown that poorly monitored adolescents tend to be antisocial, delinquent, and even more likely to engage in criminal activity (Cernkovich & Giordano, 1987; Crouter, MacDermid, McHale, & Perry-Jenkins, 1990; Patterson & Stouthamer-Loeber, 1984). In contrast, another line of research claims that parental monitoring and

control may have the opposite than desired effects. For example, a number of studies have shown that perceived maternal monitoring is associated with an increase in adolescent alcohol use (e.g., Webb, Bray, Getz, & Adams, 2002). Also, monitoring was found to be positively correlated with child problematic behavior (Steinberg & Silverberg, 1986).

The findings regarding the effects of child disclosure are clearer. Child disclosure refers to children's free and willing information providing to their parents about where they are during their free time, how they do at school, whether they keep secrets from them, who they socialize with, and what they do when they go out at night (Stavrinides, Georgiou, & Demetriou, 2010). While active parental control and surveillance may be considered by adolescents as invasion of their privacy, the information that adolescents voluntarily offer to their parents promotes more trust between them (Kerr, Stattin, & Trost, 1999), and consequently parents gain more knowledge about their children's behavior (Crouter, Bumpus, Davis, & McHale, 2005). Some researchers have found that child disclosure and subsequently parent-child communication is more beneficial than surveillance and control (e.g., Cernkovich & Giordano, 1987; Stavrinides, 2011). In line with this, Stattin and Kerr (2000) documented the relationship between child disclosure and adolescents' adjustment, showing that child disclosure predicts less norm-breaking behavior.

Hence, a large body of unidirectional, cross-sectional studies suggests that parental knowledge could act as a buffer against children's problem behavior (Mounts, 2001; Sullivan, Kung, & Farrell, 2004). Active monitoring and child disclosure were found to be negatively correlated with children's adjustment problems (Laird et al., 2003; Stattin & Kerr, 2000). On the other hand, a number of longitudinal studies that examine bidirectional effects in terms of parental knowledge and children's adjustment problems (Crouter & Booth, 2003; O'Connor, 2002; Wood et al., 2004) show a reciprocal relationship between the two constructs. Specifically, Laird, Pettit, Bates, and Dodge (2003) using a sample of 396 adolescents over the course of 4 years examined parental knowledge and child delinquency. They found that decreases in knowledge were associated with increases in parent-reported delinquency over time.

The findings provided support for bidirectional associations, as less knowledge predicted more delinquency 1 year later, while more delinquency predicted less parental knowledge 1 year later. Furthermore, Willoughby and Hamza (2011) showed that high levels of child problem behavior predicted lower levels of parental control. Conversely, the same study also showed that low control and high solicitation predicted more children's problem behavior, thus showing evidence for bidirectional effects. Additionally, Pardini, Fite, and Burke (2008) found bidirectional associations between parental knowledge and child conduct problems. Specifically, they showed that increased parental knowledge inhibits adolescent problem behavior and that parents tend to disengage from the knowledge-gaining process when children engage in problem behavior.

To summarize, children whose parents are not well informed about their daily activities, whereabouts, and peers are more likely to engage in delinquency and other forms of socially undesirable behavior (Crouter & Head, 2002). From a child effects perspective, findings strongly support the argument that bidirectional effects explain better the association between parental knowledge and children's behavior problems (e.g., Laird et al., 2003).

Even though parental knowledge has been extensively examined as a parameter of child risk behavior there are still some gaps in the literature. First, the relationship between sources of parental knowledge and bullying and victimization has not been sufficiently investigated. Also, the picture is still unclear about the possible beneficial effects of either parental monitoring or child disclosure (Laird et al., 2003; Webb et al., 2002). Finally, researchers have typically used cross-sectional research designs to examine factors related to parental knowledge and only a few longitudinal studies have been identified.

The present study aims at examining whether various sources of parental knowledge such as parental monitoring (i.e., control and solicitation) as well as child disclosure predict changes in bullying and victimization. At the same time, the opposite direction of effects will be investigated. That is, whether bullying and victimization experiences predict specific sources of parents' knowledge. Our main hypothesis is that child disclosure will predict negatively bullying and victimization. That is, higher disclosure will predict lower involvement in bullying and victimization. This is based on the assumption that voluntary disclosure, rather than questioning or controlling, may be more effective in informing parents and in affecting adolescents (Crouter et al., 2005). Furthermore, child disclosure is a process that promotes healthy family climate and high-quality parent-child relationship. Hence, we expect that adolescents who willingly disclose information to their parents will benefit from this positive family climate and be less likely to become either bullies or targets for victimization attacks. Also, based on earlier studies (Cernkovich & Giordano, 1987; Crouter et al., 1990; Patterson & Stouthamer-Loeber, 1984), we hypothesize that tighter parental monitoring (control and solicitation) will negatively predict bullying and victimization, because this type of parenting will act as a protective mechanism for adolescents.

On the basis of the transactional model (Crouter & Booth, 2003; O'Connor, 2002; Wood et al., 2004), we further hypothesize that an opposite direction of effects will be observed. That is, we expect that the existence of problematic behavior such as bullying and victimization in adolescence will predict positively parental monitoring and negatively child disclosure. In other words, we expect that worrying parents will try harder to solicit information from their potentially wrongdoing or victimized adolescents in order to help them and also that they will tighten their monitoring methods.

The present study

The purpose of the present study was to examine the direction of effects between parental sources of knowledge and adolescent bullying and victimization between Time 1 (T1) and Time 2 (T2) using a longitudinal design. The main assumption was that particular parental sources of knowledge predict child bullying or victimization and conversely, bullying and victimization behavior predicts changes in parental knowledge (Stattin & Kerr, 2000; Stavrinides, Paradeisiotou, Tziogouros, & Lazarou, 2010). Based on the literature outlined above, the following research hypotheses were stated:

1. Parental monitoring (i.e., parental control and solicitation) at T1 will predict negatively bullying and victimization at T2.
2. Child disclosure at T1 will predict negatively bullying and victimization at T2.

3. Bullying and victimization at T1 will predict positively parental monitoring at T2.
4. Bullying and victimization at T1 will predict negatively child disclosure at T2.

Method

Participants

The initial sample of the first phase of this study was 400 early adolescents and their mothers. On the second phase, however, 52 mothers (13%) did not return the questionnaire, or they returned it incomplete and they were, therefore, excluded from the final sample.

The participants of the two phases were 348 early adolescents (168 boys and 180 girls) attending seventh and eighth grade in Cyprus public high schools (mean age = 13.50 years, $SD = 1.10$ years) and their mothers. Participants were selected randomly from eight public high schools from two educational districts in Cyprus (Nicosia and Larnaca). The schools were randomly selected in order to generate a sample of students from all socioeconomic groups and geographic areas. The socioeconomic data of the participants show that 28.8% of the sample comes from families of low socioeconomic status, 55.6% from middle socioeconomic status, while 15.6% from high socioeconomic status, reflecting the general socioeconomic distribution of Cypriot families. Prior research shows that mothers are the main disciplinary agents in the Cypriot family (Georgiou, 2008b) and therefore they were included in the design rather than fathers.

Instruments

Revised bullying and victimization questionnaire. This questionnaire includes two subscales: one measuring bullying and one measuring victimization experiences. Each subscale consists of 10 items based on the original questionnaire initially constructed by Olweus (1996). The revised bullying and victimization questionnaire (BVQ-R) has been recently used in a number of studies in Cyprus after its adaptation in Greek language (Georgiou, 2008a; Georgiou & Stavrinides, 2008, 2012; Kyriakides, Kaloyirou, & Lindsay, 2006). Items from the bullying subscale include statements such as “Other children complain that I hit them,” “I want other children to do as I say,” and “Other children are afraid of me.” Items from the victimization subscale include statements such as “I was called bad names by another child,” “Other children spread rumors or lies about me,” and “Other children play nasty tricks on me, threatened or blackmailed me.” Children responded to each item on a 5-point Likert-type scale. Cronbach’s α reliabilities for the victimization and bullying subscales were .85 and .78 for T1, respectively, while Cronbach’s α reliabilities for the victimization and bullying subscales for T2 were .79 and .82, respectively.

Parental knowledge questionnaire. Sources of parental knowledge were measured by means of an adaptation of Stattin and Kerr’s (2000) questionnaire. The parental knowledge questionnaire includes two main dimensions: parental monitoring (parental control and solicitation) and child disclosure. A 15-item instrument was created including three

subscales: parental control, parental solicitation, and child disclosure, with each subscale consisting of 5 items. Mothers responded on each of the following 15 items using a 5-point Likert-type scale (1 = *never* and 5 = *always*).

Parental control. Examples of the items included in this subscale are the following: “Does your child need to have your permission to stay out late on a weekday evening?” “Does your child need to ask for your permission before he/she decides with his/her friends what they will do on a Saturday evening?” and “If your child stays out until late one night, do you require that he/she explains what he/she has been doing and who he/she was with?” Cronbach’s α reliabilities for the parental control subscale were .66 at T1 and .63 at T2.

Parental solicitation. Examples of items included in the parental solicitation subscale are the following: “How often do you talk to your child’s friends when they come over to your house?” “During the past month, have you talked to the parents of your child’s friends?” and “During the past month, have you talked to your child about how he/she spends his/her free time?” Cronbach’s α reliabilities for the parental solicitation subscale were .77 at T1 and .75 at T2.

Child disclosure. Examples of child disclosure subscale are the following: “How often does your child talk to you about his/her achievement in various school subjects?” “How often does your child talk to you about a usual day at school?” and “Does your child keep many secrets from you regarding his/her free time?” Cronbach’s α s for the two times that mothers responded on this subscale were .80 and .82, respectively.

Procedure. The researchers provided all necessary ethical information regarding volunteer participation, anonymity, and parental consent. The children were asked to answer all the questions honestly according to their own subjective experience. Both children and their mothers were given a sealed envelope that contained the respective measures for children and parents. The children completed the BVQ-R in 10 min of one teaching hour and returned it immediately to the researcher. Once the children returned their questionnaire, a unique code number was placed on each one and a sealed envelope with the parent’s questionnaire was matched and sent to the mother of each child. The same procedure was repeated 6 months later using the same matching system. Therefore, data were collected in two phases, which were termed T1 and T2.

Statistical analysis procedure. Following a descriptive analysis of the measured characteristics and bivariate correlations between the observed variables, structural equation modeling (SEM) was applied to investigate the associations between parental sources of knowledge and bullying and victimization between T1 and T2 (Model 1; Figure 1). SEM provides a test of an overall model fit in addition to individual effects. Furthermore, as a latent factor methodology, it controls for measurement error in the latent constructs (Marcoulides & Schumacker, 1996).

In stage one, two separate confirmatory factor analyses were applied on the covariance matrix of the data using maximum likelihood estimation from each of the two instruments separately to ascertain acceptable model fit with the latent variables of

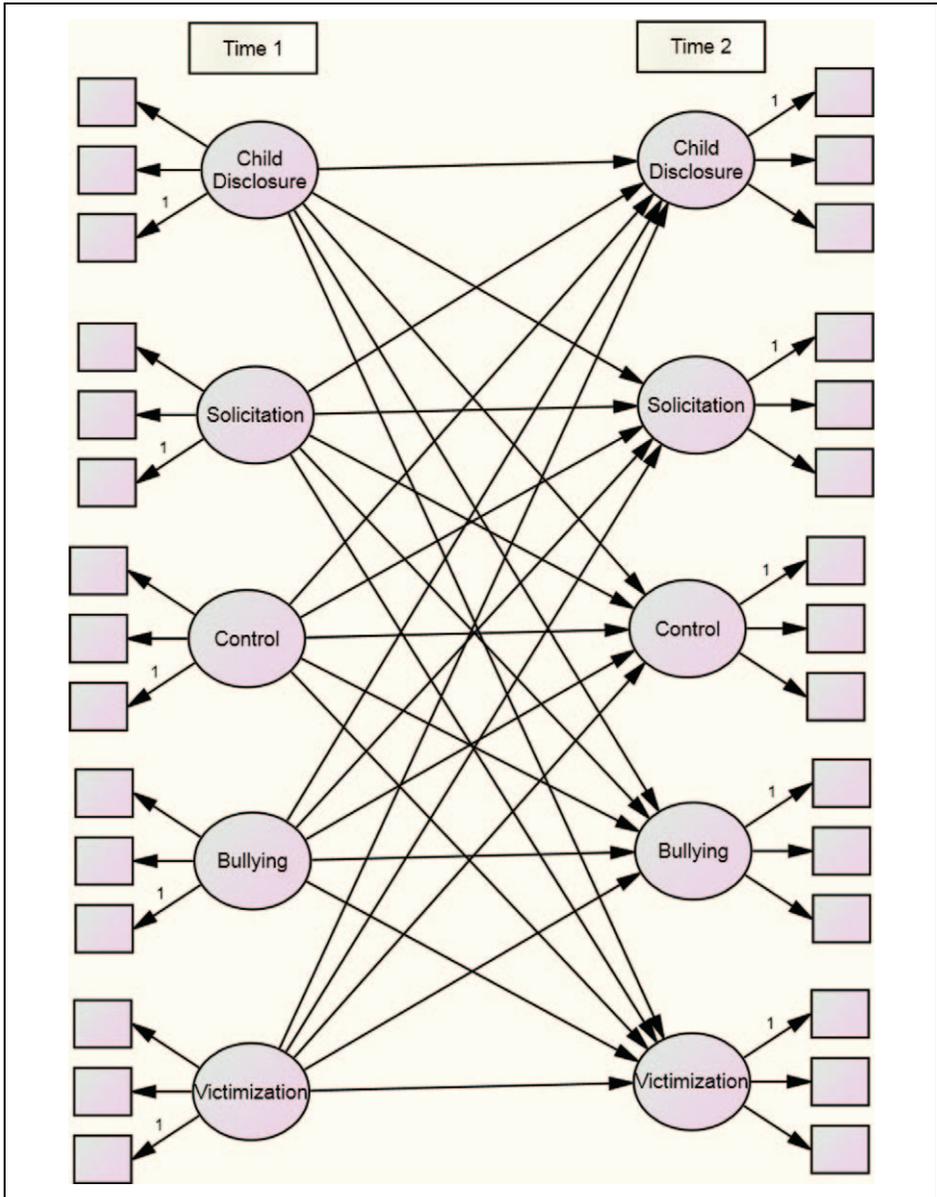


Figure 1. Representation of the full hypothesized model (Model 1).

interest: (a) a model with the three intercorrelated parental knowledge factors using items from the parental knowledge questionnaire as indicators: parental control with three indicators, parental solicitation with three indicators, and child disclosure with three indicators (b) one model with two interrelated bullying and victimization factors, each with three indicators from the BVQ-R.

Confirmatory factor and SEM analyses were conducted with AMOS 19. Model fit was evaluated with the χ^2 test, as well as the following approximate fit indices: Bentler's comparative fit index (CFI), the root mean square error of approximation (RMSEA), a parsimony adjusted index that quantifies badness of fit, the standardized root mean square residual (SRMR), which represents a measure of the difference between observed and predicted correlation, which should be close to zero for an adequate model fit, and the χ^2 to its degrees of freedom (*df*) ratio (*CMIN/df*). A tested model is confirmed when the CFI is close to 1.0, the RMSEA and the SRMR values close to 0, and the *CMIN/df* < 3.0 (Marcoulides & Schumacker, 1996).

Results

Using the raw data, we computed a composite variable for each construct, which represents the mean score for each case on the items that compose each factor. The means and standard deviations for each construct are presented in Table 1.

Bivariate correlations between all scores were computed in order to identify associations among parental sources of knowledge and children's bullying behavior (Table 2).

We proceeded to test the bidirectional model of the relation between the two constructs (bullying/victimization experiences and parental sources of knowledge) through SEM. This statistical technique allows for theory testing upon latent constructs. The modeling procedure followed the currently accepted statistical practice along with paradigms from other related studies (e.g., Georgiou et al., 2013). We employed only a few modifications on the initial tested model. The modifications were employed for the covariance coefficients between bullying/victimization and parental sources of knowledge at T1 and T2 in order to avoid autocorrelated errors (Kline, 1998). Therefore, adjustments were made for the correlation of errors between the same indicators and latent constructs at the two time points.

The final tested model (Model 1; Figure 2) showed the longitudinal associations between bullying/victimization experiences and parental sources of knowledge. The fit indices of the tested model satisfy adequately the commonly accepted criteria (Marcoulides & Schumacker, 1996). That is, the ratio of χ^2 to its *df* was $\chi^2/df = 2.20$, RMSEA = .05, and SRMR = .06, which remain below the .08 criterion, while CFI was to .90, which is exactly on the threshold (Table 3). All factor loadings for the latent variables were statistically significant at the .001 level ranging from .41 to 1.37 (standardized coefficients from .49 to .91). Most of the coefficients for the effects of interest were in the predicted direction: The negative direct effect of parental solicitation at T1 was significant on bullying at T2, that is, $-.07$ (standardized effect = $-.23$, $SE = .02$, $p < .05$), whereas parental control at T1 was significantly positively associated with bullying at T2, that is, $.07$ (standardized effect = $.22$, $SE = .02$, $p < .05$). Also, victimization at T1 was significantly negatively associated with child disclosure at T2, that is, $-.30$ (standardized effect = $-.29$, $SE = .10$, $p < .05$) and positively associated with parental solicitation at T2, that is, $.27$ (standardized effect = $.25$, $SE = .12$, $p < .05$). Finally, bullying at T1 was positively associated with parental control at T2, that is, $.31$ (standardized effect = $.18$, $SE = .15$, $p < .05$). Finally, bullying at T1 was significantly

Table 1. Means and standard deviations for the composite scores on the factors of parental knowledge and the revised bullying and victimization questionnaire.

Construct	Time 1		Time 2	
	Mean	SD	Mean	SD
Parents' source of knowledge				
Parental control	13.71	3.63	14.12	3.52
Parental solicitation	11.43	3.99	11.09	3.74
Child disclosure	8.36	3.01	7.86	3.03
Revised bullying and victimization questionnaire				
Bullying	13.04	4.50	12.04	3.74
Victimization	14.04	5.85	12.40	4.09

Table 2. Correlation coefficients between parental knowledge and adolescents' bullying experiences at Time 1 and Time 2.

	1	2	3	4	5	6	7	8	9	10
Time 1										
1. Parental control	–	.45**	.20**	.06	.05	.49**	.32**	.09	.07	.09
2. Parental solicitation	–		.24**	–.11*	–.01	–.11	.26**	.39**	–.06	–.05
3. Child disclosure	–			.16**	.50**	.11*	.10*	.56**	.10	.28**
4. Bullying	–				.50**	.15**	–.00	.13*	.55**	.34**
5. Victimization	–					.05	.08	.18**	.16**	.42**
Time 2										
6. Parental control						–	.50**	.22**	.07	.07
7. Parental solicitation								.26**	–.07	.06
8. Child disclosure									.13*	.22**
9. Bullying										.49**
10. Victimization										

* $p < .05$, ** $p < .01$.

Table 3. Testing the longitudinal associations between parental knowledge, bullying, and victimization.

Model	χ^2 (CMIN)	df	Fit indices		
			CFI	RMSEA	SRMR
Full model: sources of parental knowledge, bullying/victimization at T1 and T2	789.087**	358	.90	.05	.06

Note. CMIN = minimum discrepancy function; df = degree of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; T1 = Time 1; T2 = Time 2.

** $p < .001$.

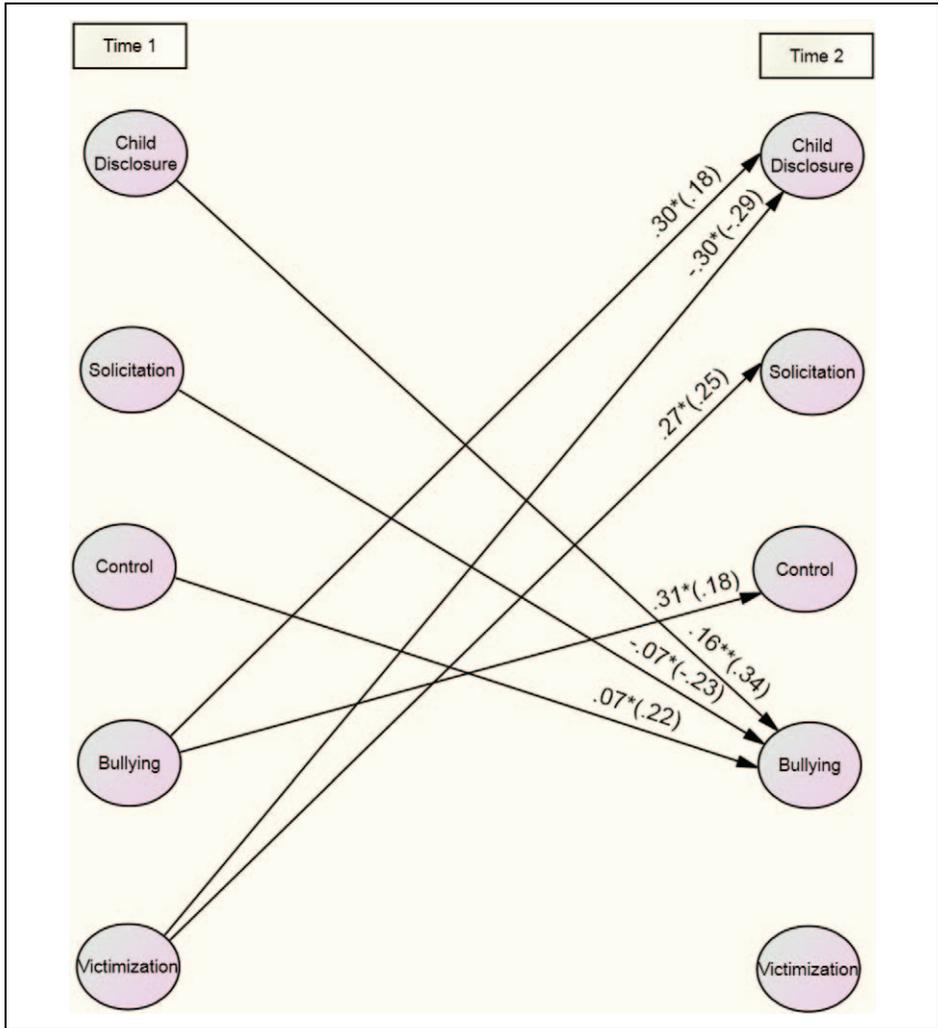


Figure 2. Full tested model with all nonsignificant paths removed. Numbers represent unstandardized coefficients; standardized coefficients appear in parentheses. $**p < .001$; $*p < .05$.

positively associated with child disclosure at T2, that is $.30$ (standardized effect = $.18$, $SE = .12$, $p < .05$) and also, child disclosure at T1 was positively associated with bullying at T2, that is, $.16$ (standardized effect = $.34$, $SE = .04$, $p < .001$).

Discussion

The findings of the present study show that the sources of parental knowledge at T1(i.e., parental control, solicitation, and child disclosure) predict bullying and

victimization at T2 in different ways. Also, the presence of these adolescent experiences at T1 predicted parental knowledge differently at T2.

Hypotheses 1 and 2 were only partially supported. As expected, parental solicitation negatively predicted bullying, while parental control and child disclosure predicted bullying in the opposite direction than the one expected. Interestingly, none of the parental knowledge sources at T1 predicted victimization at T2. Hypotheses 3 and 4 were also partially supported. Bullying at T1 predicted positively parental control and child disclosure at T2. Victimization at T1 predicted positively parental solicitation and negatively child disclosure at T2.

These results may reveal interesting familial processes related to adolescents' experiences with bullying and victimization. Contrary to earlier findings regarding the beneficial effects of child disclosure (Stavrinides et al., 2010; Stavrinides, 2011), the present study shows that when adolescents have a high tendency to disclose information about their socialization to their parents, this is not associated with lower degree but with higher degree of bullying later on. Similarly, when parents try to exercise more behavioral control over their children, this again predicts more bullying in the future. In line with this finding, other researchers have earlier argued against the intuitive expectation of the protective nature of parental control, showing that it may lead to exact opposite effects. For example, Webb, Bray, Getz, and Admas (2002) showed that maternal monitoring is associated with an increase in adolescent problem behavior, while Stattin and Kerr (2000) and Kerr and Stattin (2000) consistently found that parental control is not effective in reducing adolescent problem behavior. Contrary to Stattin and Kerr (2000), however, our study showed that parental solicitation predicted less bullying at T2. The fact that the only source of knowledge that is related negatively with bullying is solicitation may show that the practices surrounding parental solicitation may lead to some beneficial effects. Asking their child's friends about their activities, talking to the parents of their child's friends, and explicating asking their children for information about their whereabouts may create an environment in which children who engaged in bullying might no longer find it easy to do so without their parents finding out.

A word of caution is due here. The present study assumes no cause-and-effect relation between parental knowledge and bullying or victimization. That is, no claim is made that bullying activity decreases because of increasing parental monitoring, for example. We are dealing only with predictions of one variable if the other one is known. When seen under this lens, the findings reported above make more sense. In the case of the relationship between parental monitoring and bullying, we can say that if a mother applies tight controlling methods to monitor her adolescent's behavior, we can assume that, more often than not, this is done for a good reason (there is no smoke without a fire). Maybe she has information or prior experience that justifies her methods. Consequently, we can predict that in this case the bullying activity of the said adolescent will indeed be high regardless of the parental reaction. This, in turn, will be associated with even higher parental monitoring, as previous studies have shown (Steinberg & Silverberg, 1986; Webb et al., 2002). For example, some authors have shown that an increase in parental monitoring is associated with a later increase in adolescent problem behavior (e.g., Webb et al., 2002). Therefore, the two variables are trapped in a positive feedback loop where an increase in one predicts an increase in the other, as the results of the present study suggest.

As far as the relationship between child disclosure and bullying, we expected the exact opposite effect. While we hypothesized that child disclosure will lead to less bullying, our results showed that an increase of bullying follows. This might show that even though child disclosure is effective for other forms of problematic behavior (e.g., Kerr & Stattin, 2000; Stattin & Kerr, 2000), this may not be true in the case of children involved in bullying. Moreover, there is also the question of what information children are actually disclosing to their parents. Certainly, the instrument we used focuses on more general socialization choices of the children and not on issues of being involved in specific activities such as bullying and victimization. In the same line, Buller and Burgoon (1994) argued that among delinquent children there is a link between disclosure and deception. Thus, our positive reciprocal link between disclosure and bullying may partially reflect children's effort to deceive their parents. Alternatively, this found relationship may be explained using the argument that the best predictor of future behavior is past behavior. Adolescents who disclose bullying others will most probably continue doing this regardless of their parents' monitoring, unless something really dramatic happens to stop them. Thus, the prediction reported here seems to be correct: more disclosure predicts more bullying.

An important distinction that this study makes refers to the fact that bullying and victimization are two completely different constructs, at least as far as their relationship to parental knowledge and behavior. We have seen earlier that bullying is in a bidirectional, transactional relationship with both parental control and child disclosure. Victimization, however, cannot be predicted by any parental knowledge factor. It can only predict, unidirectionally the changes that happen in two sources of parental knowledge: In the first (solicitation), the prediction was of a positive nature and in the second (disclosure) of a negative nature. Victimization at T1 predicted positively parental solicitation at T2. This shows that when parents become aware of their child victimization, they are more likely to try to protect their child by becoming more involved. It is a reaction on behalf of parents who feel that by soliciting more information, they will prevent future victimization of their children. Finally, victimization at T1 predicted negatively child disclosure at T2. In the relevant literature, it is frequently argued that when children become victimized at school, they are more likely to hide their experience from their parents (Mishna & Alaggia, 2005). Feelings of shame and sometimes self-blame, along with a fear that their parents' reaction might lead to more and worse victimization, lead many children into not talking to their parents about what's happening to them (Mishna & Alaggia, 2005; Schwartz, Proctor, & Chien, 2001). Thus, as our study confirms, child disclosure is more likely to reduce after a child has been victimized.

It is perhaps noteworthy that in contrast to bullying, which seems to be in close connection with all three sources of parental knowledge, victimization is not predicted by parental knowledge, as Figure 2 visually depicts. A possible explanation for the absence of an association between parental knowledge and child victimization might be that parents are simply unaware of their children's plight at school. Research shows that only a minority of children reveal they being bullied ordeal to their parents (e.g., Borg, 1998; Hunter, Boyle, & Warden, 2004), and only a minority of parents even believe their children when such reports are offered (Glover, Gough, Johnson, & Cartwright, 2000). Thus, to answer the question posted in the title of this article, (i.e., do mothers know?), it

seems that generally they do when the issue their children are faced with is bullying others, but they don't when the issue is their own children's victimization. In sum, children who are bullied are less likely to tell their parents while parents, in turn, try to solicit more information from their children because they might suspect that something is wrong.

Limitations and contribution of the present study

The main limitation of the present study has to do with the instruments used for quantifying the constructs examined. Like many of the earlier studies in the relevant literature, the present one utilized self-reports to measure bullying, victimization, and parental knowledge. While this is the predominant methodology, it is debatable whether such measures grasp the true essence of constructs related to parenting, child aggression, and victimization. Further, the results may be culture specific. That is, certain relations between factors may not necessarily describe behavior in children who do not belong to a culture similar to the one of our study. More research is needed to test whether the same results can be found among students from different cultural backgrounds. Moreover, in the present study parental behavior was measured only from mothers' perspective. In future studies, a sample from both parents could further enrich the data and provide useful information about what parents know in relation to their children's socialization. Finally, internal consistency of the parental control subscale was relatively low, even though marginally acceptable.

Nonetheless, the present study contributes to the literature by providing new insight about the relationship between parental knowledge, bullying, and victimization. The utilization of a two-time point longitudinal design allows drawing conclusions on the reciprocal nature of the relationship of these constructs.

Moreover, the link between sources of knowledge and children's involvement in bullying and victimization has not been thoroughly investigated and it appears that not much empirical data exist. While many researchers in the parenting and children's adjustment literature argue in favor of a parent to child effect, our study shows that a more dynamic and reciprocal interpretation is needed (Fanti et al., 2008; Georgiou & Fanti, 2010; Kerr & Stattin, 2000). That is, while certain parenting practices may reduce bullying and victimization, at the same time, children's involvement in such experiences may send the message to their parents for more actions such as control and solicitation. On the basis of this finding, we suggest that a more in-depth investigation of the relationship between parental knowledge, bullying, and victimization is needed, focusing on more dynamic models of explanation rather than explaining parenting and bullying in a unidirectional way.

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