Parental Influences on Adolescent Problem Behavior: Revisiting Stattin and Kerr

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High school students (approximately 14–18 years old; N = 2,568) completed questionnaires in which they reported on their involvement in substance use and delinquency, and their perceptions of parental warmth, control, monitoring, and knowledge. Three alternative models were compared describing the nature of relations among these variables. Problem behavior was best predicted by a model that included indirect effects of warmth, control, and monitoring (all by way of parental knowledge), as well as direct effects of control and monitoring. Analyses are framed and findings are discussed with reference to recent work by Stattin and Kerr (2000; Kerr & Stattin, 2000) on the measurement and meaning of parental monitoring.

For decades, parents and professionals who work with families have been told, on the basis of extant research, that adolescent misbehavior is deterred by parenting characterized by high levels of monitoring and controlling of children’s behavior. According to the studies from which this advice is derived, when parents are characterized as high in behavioral control and are effective monitors of their children’s behavior, adolescents are less likely to engage in problem behavior, including both substance use and delinquency (Barber, 1996; Chassin, Pillow, Curran, Molina, & Barrera, 1993; Mott, Crowe, Richardson, & Flay; 1999; Patterson & Stouthamer-Loeber, 1984; Pettit, Bates, Dodge, & Meece, 1999; Steinberg, Fletcher, & Darling, 1994). However, recent research by Stattin and Kerr (2000; Kerr & Stattin, 2000) has suggested that the associations between adolescent misconduct and parental monitoring and control may not be as clear-cut as has previously been asserted.

The purpose of the current paper is to identify a model linking a key set of parenting behaviors and characteristics to adolescent problem behavior measured both contemporaneously and 1 year after parenting assessment. Our model differs from that suggested by Stattin and Kerr (2000; Kerr & Stattin, 2000), and those tested in earlier analysis of our own data (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994), by (a) focusing explicitly on the role of parents as active socializers of adolescents; (b) considering this role using a measurement strategy that disentangles the previously confounded constructs of parental monitoring, parental control, and parental knowledge concerning adolescents’ behavior; and (c) considering whether influences of key parenting variables on adolescent problem behavior are best conceptualized as direct or indirect, by way of their associations with parental knowledge.

Background

In 2000, findings from an important pair of papers published in *Child Development* (Stattin & Kerr, 2000) and *Developmental Psychology* (Kerr & Stattin, 2000) called into question several widely held assumptions concerning the ways several key parenting behaviors are best operationalized, as well as the extent to which they may or may not be linked with adolescent involvement in problem behavior. Three findings from these papers are especially noteworthy.

First, Stattin and Kerr (2000; Kerr & Stattin, 2000) pointed out that research documenting links between parental monitoring and indicators of adolescent problem behavior has tended to confound the extent to which parents engage in activities designed to obtain information about their children’s activities, whereabouts, and associates (i.e., parental monitoring) and the extent to which they are actually
informed about such factors (i.e., parental knowledge). Although parental monitoring and parental knowledge are positively associated, they are not the same thing. The distinction between monitoring and knowledge is reflected in recent work that has clarified and more clearly labeled these constructs (Crouter & Head, 2002). Stattin and Kerr’s work indicated that adolescent involvement in problem behavior was indeed lower when parents were highly knowledgeable about their children’s activities, but not necessarily because parents made efforts to obtain such knowledge through monitoring.

Second, Stattin and Kerr (2000; Kerr & Stattin, 2000) suggested that there are three ways parents become knowledgeable about adolescents’ activities. Parents may become knowledgeable through the use of what these authors termed parental solicitation. Solicitation reflects the extent to which parents actively seek information concerning their children’s whereabouts, activities, and associates from children themselves or from key others, such as friends and friends’ parents. Solicitation is akin to what others would term parental monitoring (Crouter & Head, 2002). Parents may also increase knowledge about adolescents’ activities because they exert high levels of control over children. Stattin and Kerr conceptualized control as the extent to which parents require adolescents to obtain their permission before going out and insist on being informed about their children’s whereabouts, activities, and associates. The distinction between control and solicitation is that of setting and communicating limits on behavior versus seeking information about adolescents’ whereabouts, associates, and activities. Finally, parents may become knowledgeable as a result of adolescent disclosure. Stattin and Kerr defined disclosure as the extent to which children spontaneously disclose information about what they have done outside of the direct supervision of their parents.

Third, Stattin and Kerr (2000) reported that when adolescent disclosure, parental solicitation, and parental control were considered simultaneously as predictors of adolescent involvement in problem behavior, the strongest effect was for disclosure, with higher levels of disclosure associated with lower levels of problem behavior. Higher levels of parental control were also linked with lower levels of adolescent problem behavior, but parental solicitation was linked with greater, not less, involvement in problem behavior (suggesting that parents solicit information more often from adolescents who misbehave). Such effects remained after controlling for the quality of parent–child relationships and varied in some minor ways depending on whether parental or adolescent reports were considered. Kerr and Stattin (2000) attempted to separate adolescents’ feelings of being controlled from parents’ actual provision of control. They found that although adolescent reports of feeling controlled were linked with poor adjustment (as indexed by both involvement in problem behavior and school problems), parental control per se was linked with positive adjustment. Kerr and Stattin also considered whether disclosure, solicitation, and control might explain the association between their measure of parental knowledge and adolescent adjustment. They found that associations between knowledge and adjustment were reduced when considered in conjunction with disclosure but not when considered in conjunction with solicitation and control.

Stattin and Kerr (2000; Kerr & Stattin, 2000) concluded from their analyses that (a) the strongest predictor of adolescent problem behavior is the extent to which parents are knowledgeable concerning their children’s activities and (b) parental knowledge is gained as a result of the actions both of parents (who may actively seek such knowledge) and children (who may willingly provide it). Both conclusions seem reasonable to us. However, we are concerned that the findings reported by Stattin and Kerr may be taken to mean that parents’ attempts to monitor or control their children have comparatively little influence on whether children will engage in problem behavior. Such a conclusion would be inconsistent with a larger literature indicating that when parents monitor and control their children’s behavior, adolescents are less likely to engage in various types of problem behavior. Furthermore, it would ignore the possibility that the likelihood of adolescents’ spontaneously disclosing information to their parents is to some extent influenced by the behaviors of parents themselves. In theory, children who have positive relationships with their parents should be more likely to disclose information. In turn, such positive parent–child relationships are more likely to exist in families in which parents are warm and supportive in interactions with their children. Such a premise is supported by strong associations observed between parental warmth and child disclosure within Stattin and Kerr’s own data, associations reported to be \( r = .70 \) (Trost, 2000).

In contrast to its high correlation with adolescent disclosure, parental warmth and behavioral control are only modestly correlated (Steinberg, Mounts, Lamborn, & Dornbusch, 1991), and each plays a unique role in relation to adolescent misconduct (Gray & Steinberg, 1999). Moreover, in many studies,
parental behavioral control generally accounts for a much larger proportion of the variance in adolescent problem behavior than does parental warmth, whereas warmth is more strongly linked with psychosocial development and lower levels of internalized distress among adolescents (e.g., Gray & Steinberg, 1999).

It is possible that discrepancies between this larger literature and conclusions drawn by Stattin and Kerr (2000; Kerr & Stattin, 2000) regarding the comparatively weak associations between adolescent involvement in problem behavior and both parental monitoring and control are accounted for by the cleaner measurement of key parenting constructs within Stattin and Kerr’s work. By disentangling the measurement of monitoring, control, and knowledge, these authors were in a particularly advantageous position to determine the unique roles each of these constructs may play in relation to adolescents’ involvement in problem behavior.

Purpose

In the current study we reanalyzed data that have previously yielded findings indicating that the strongest predictor of adolescent involvement in problem behavior is the extent to which parents provide high levels of control over their children’s behavior (Gray & Steinberg, 1999; Lamborn et al., 1991; Steinberg, Lamborn, et al., 1994). Of critical importance is the fact that prior analyses of these data have used a relatively undifferentiated measure of parental control—one that confounds the potential influences of pure control with those of monitoring and knowledge.

The present effort represents a more careful attempt to operationalize our constructs of interest in light of recent work (Crouter & Head, 2002; Kerr & Stattin, 2000; Stattin & Kerr, 2000) emphasizing the importance of distinguishing among parental control, parental monitoring, and parental knowledge. In addition, we have reconstructed our measures with consideration of the ways key constructs were operationalized by Stattin and Kerr (2000; Kerr & Stattin, 2000) to allow for comparisons of findings from these two data sets. Although these data sets differ in several important ways (Swedish vs. American samples, 8th graders vs. 9th–12th graders, adolescent and parental reports vs. adolescent reports only), we believe that the high degree of similarity in the ways constructs of interest were operationalized in these two efforts makes it appropriate to use the current data to extend and clarify findings reported by Stattin and Kerr. Although previous publications using our own data have taken into account the independent effects of parental warmth and control in relation to adolescent problem behavior (Gray & Steinberg, 1999), they have failed to consider possible confounds among measures of pure parental control, parental monitoring, and parental knowledge, or to consider the extent to which the effects of key parenting variables may be mediated through increases in parental knowledge.

We examine a model that considers the independent influences of parental control and monitoring on adolescent problem behavior. The model also takes into account parental warmth as a potential influence on problem behavior, as warmth may be the primary manner in which parents cultivate positive relationships with children—relationships that may ultimately be linked with a greater likelihood of adolescents’ spontaneously disclosing information to their parents.

Our model is presented in Figure 1. Influences of parental warmth, monitoring, and control on adolescent involvement in problem behavior during Year 1 and Year 2 are conceptualized as indirect, by

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Figure 1. Hypothesized model predicting adolescent problem behavior from parenting variables.
way of associations with levels of parental knowledge. Such a conceptualization of parental influences is consistent with the emphasis of Stattin and Kerr (2000; Kerr & Stattin, 2000) and is intuitively appealing. Parents who have warm relationships with their children are more likely to have children who feel comfortable disclosing information about their activities to parents. Such disclosure is then likely to be linked with higher levels of parental knowledge. Parental monitoring is explicitly designed to provide parents with information concerning their children's activities and would be expected to be positively associated with knowledge. Finally, parents who exert high levels of control over their children's activities are likely to be more knowledgeable concerning such activities, simply because their children have fewer opportunities to engage in activities not approved by their parents.

We believe that parental monitoring and control are also likely to be directly linked with adolescent involvement in problem behavior. When parents make efforts to know where their children are and what they are doing, children should be less inclined to engage in behaviors of which their parents disapprove, regardless of whether such efforts result in complete and accurate parental knowledge. Such an expectation is in contrast to findings reported by Stattin and Kerr (2000; Kerr & Stattin, 2000; who reported that higher levels of monitoring were linked with greater adolescent involvement in problem behavior) but is consistent with a larger body of work linking monitoring to lower levels of misconduct (Pettit et al., 1999; Steinberg, Fletcher, et al., 1994). When parents exhibit higher levels of control over their children's activities and associates, such control should directly deter behaviors such as substance use and delinquency, and these effects should operate independently of the extent to which parents are knowledgeable. With this in mind, the model in Figure 1 allows for indirect influences of parental warmth on problem behavior (mediated through parental knowledge) and both direct and indirect influences of parental monitoring and control.

We compare our model with two alternative models for the prediction of adolescent involvement in problem behavior. The first of these alternative models allows for only indirect effects of parental warmth, monitoring, and control, mediated through their associations with parental knowledge. Such a model would be consistent with work of Stattin and Kerr (2000; Kerr & Stattin, 2000) suggesting the importance of knowledge as a mechanism that explains associations between parenting behaviors and adolescent misconduct. The second alternative model allows for both direct and indirect (by way of parental knowledge) effects of parental warmth, monitoring, and control. Such a model recognizes the multitude of pathways through which parenting is associated with adolescent misconduct and argues against the view that the only way warm and involved parenting deters problem behavior is by enhancing parental knowledge about adolescents' whereabouts, activities, and associates.

We hypothesized that the proposed model depicted in Figure 1 would provide the best fit to the available data, confirming the importance of conceptualizing and operationalizing the constructs of monitoring, control, and knowledge as independent influences on adolescent problem behavior. A good fit for the proposed model may also shed some light on Stattin and Kerr’s (2000; Kerr & Stattin, 2000) findings that parental monitoring and control play smaller roles in relation to adolescent problem behavior than might be expected given previous work in this area. Specifically, we hypothesized that the direct effects of monitoring and control on problem behavior would be of greater magnitude than would the indirect effects of these variables.

Method

Participants and Procedures

The primary sample for the current project included 2,568 adolescents attending nine high schools in Wisconsin and northern California during the 1987–1988 and 1988–1989 academic years. The schools were selected to yield a sample of students from a variety of ethnic backgrounds, different socioeconomic brackets, different types of communities (urban, suburban, and rural), and different family structures. To consider whether this group of adolescents was comparable to those who participated in data collection during only the first year of the project, we relied on a larger sample (N = 3,998) of adolescents who participated in data collection as freshmen, sophomores, or juniors during the 1987–1988 school year. The longitudinal sample represented a subset of this larger group and excluded students who withdrew from the target schools after Year 1, were absent on either day of data collection during Year 2, or failed to complete Year 2 questionnaires in full. Students completed self-report questionnaires during 2 school days each year. Because of its length, the survey was divided into two parts, one administered in the fall and the other in the spring.
Recent reports suggest that the use of procedures requiring active parental consent for adolescents to participate in research may result in sampling biases that overrepresent well-functioning teenagers and families (Weinberger, Tublin, Ford, & Feldman, 1990). For this project, active informed consent was obtained from adolescents, and passive informed consent was required from parents. (This procedure was permitted at the time the study was conducted.) Parents were notified by mail of the dates and purpose of the proposed research and asked to call or write to their child’s school or to the research office if they did not want their child to participate in the study. These procedures were approved by the Institutional Review Boards of the investigators’ universities and by the research committees of the participating school districts. Approximately 5% of students had their participation withheld by parents (or chose themselves not to participate). An additional 15% of students were absent from school on each day of testing (a figure comparable with national attendance averages).

The longitudinal sample of students completing questionnaires was composed of adolescents who were (in Year 1) 36% freshmen, 35% sophomores, and 29% juniors. The sample was diverse with respect to ethnicity (66% non-Hispanic White, 16% Asian, 11% Hispanic, 7% Black) but primarily middle class or professional as indexed by parental education (3% lower class, 7% working class, 46% middle class, and 45% professional). Students were 46% male and 54% female.

T tests were performed comparing students who were freshmen, sophomores, and juniors during Year 1 and were retained for the longitudinal sample versus those for whom data were not available during Year 2. Longitudinal participants were better adjusted and experienced more positive parenting as compared with students who were assessed only in Year 1. Specifically, longitudinal participants reported higher levels of parental warmth, \( t(2825.20) = -4.12, p < .01 \); parental control, \( t(2806.56) = -2.21, p < .05 \); parental monitoring, \( t(2874.85) = -2.41, p < .05 \); and parental knowledge, \( t(2813.40) = -5.74, p < .01 \). Longitudinal participants also reported lower levels of Year 1 substance use, \( t(2660.53) = 8.71, p < .01 \), and delinquency, \( t(2330.71) = 7.39, p < .01 \).

**Measures**

**Demographics.** During Year 1, students reported their sex, ethnicity, year in school, and the highest level of education completed by parents. These demographic variables were used to impute missing values within the data set before conducting structural equation modeling (SEM) analyses. Before imputation, we eliminated cases missing more than 30% of proposed items for any given scale. We then imputed missing values for remaining cases. For the vast majority of items used to construct measures of all constructs except parental warmth, less than 1% of data was missing and required imputation. Two items from the Parental Control scale and one item from the Year 1 Substance Use scale were missing between 1% and 2% of responses and required a correspondingly greater amount of imputation. More imputation was required for items composing the Parental Warmth scale. For all items except one, imputation was required for between 1% and 2% of participants. The final item on this scale required imputation of 5.8% of participants, primarily because of its being included on a different wave of surveys from other Parental Warmth items. Drawbacks to imputation include underestimation of standard errors and potential bias in imputed values. However, this was not likely to be a major concern within the current project because of the small percentage of values imputed. In addition, imputation of data before conducting SEM analyses allows researchers to avoid loss of otherwise valid data (Allison, 2002).

**Parental warmth.** Our measure of parental warmth consisted of a subset of items drawn from the Acceptance–Involvement Scale (Lamborn et al., 1991), used to measure parental responsiveness in previous analyses of this data set. The Acceptance–Involvement Scale consists of 15 items measured on different scales and assesses the extent to which adolescents perceive their parents to be loving, responsive, and involved. In an effort to be as consistent as possible with the operationalization of parental warmth used by Trost (2000), we first eliminated items that focused on family experiences rather than parental behaviors (e.g., “My family does something fun together” was dropped) and averaged parallel items for mothers and fathers so that all items assessed parental behavior. We also eliminated items describing behaviors that were inconsistent with warmth as defined by Trost (e.g., “He/She keeps pushing me to do my best in whatever I do” and “He/She keeps pushing me to think independently” were both dropped). The final scale consisted of six items, all of which asked adolescents to indicate the frequency with which parents engaged in specific behaviors indicative of warmth and engagement: “When you get a good grade, do your parents praise you?” “When you get a poor grade, do your parents encourage you?” “I can count on my father/mother to help me out, if I have some kind of problem.” “My
father/mother helps me with my school work if there is something I don’t understand.” “When my father/mother wants me to do something, he/she explains why.” “My parents spend time just talking with me.” The alpha for the final scale was .59. The low value for this alpha is likely due to the dichotomous coding of most scale items, which tends to result in lower reliability coefficients (Nunnally, 1967).

Parental monitoring. Parental monitoring was operationalized in terms of the extent to which adolescents reported that their parents tried to obtain information concerning their whereabouts, activities, and friendships (regardless of whether their parents actually had knowledge concerning these areas). The five items on the monitoring subscale (Steinberg, Fletcher, et al., 1994) all assessed efforts to obtain the types of information referenced in Stattin and Kerr’s (2000; Kerr & Stattin, 2000) solicitation subscale and were indicative of parental monitoring efforts. Items on the monitoring scale were “How much do your parents TRY to know . . .” “Who your friends are?” “Where you go at night?” “How much do your parents REALLY know.” “How much do your parents TRY to know?” “How much do your parents REALLY know” “How much do your parents REALLY know,” the knowledge items were introduced with, “How much do your parents REALLY know . . . “ The five items were averaged to yield a single scale with an alpha of .79.

Parental control. Parental control was conceptualized as the extent to which decisions regarding a key set of areas of adolescents’ lives were made by parents instead of by adolescents themselves. Items were drawn from a scale on which adolescents rated each of 13 types of decisions on a 5-point scale: (1) I decide this without discussing it with my parents, (2) I make the final decision after discussing it with my parents, (3) my parents and I make the decision together, (4) my parents decide this without discussing it with me, and (5) my parents decide this without discussing it with me. (Dornbusch et al., 1985; Steinberg, 1987). From this larger set of items, we selected a subset of six that assessed parental control of adolescent behaviors similar to those referenced in Stattin and Kerr’s (2000; Kerr & Stattin, 2000) measure of parental control. The six items were averaged to yield a single scale with an alpha of .67. Items on the final scale assessed levels of parental control over the following adolescent activities and behaviors: “How late at night I can stay out” “Which friends I spend time with” “How I spend my money” “Whether or not I can drink alcohol” “How much time I spend with friends” “When I can start dating.”

Behavior problems. During both Year 1 and Year 2, adolescents reported on how frequently since the beginning of the academic year they had engaged in various types of problem behavior, including use of cigarettes, alcohol, marijuana, and other drugs (Greenberger, Steinberg, & Vaux, 1981); involvement in delinquent activities such as carrying a weapon, vandalism, theft, and using a phony ID (Gold, 1970); and school misconduct (cheating, copying homework; Ruggiero, 1984). All items were measured on a scale ranging from 1 (never) to 4 (often). To be consistent with Stattin and Kerr (2000; Kerr & Stattin, 2000), we removed items indicative of school misconduct, as such behaviors were not included in their measure of problem behavior. Remaining items were grouped into two subscales, one indicative of the extent to which adolescents engaged in use of alcohol, drugs, and tobacco, and the other indicative of the extent to which adolescents engaged in minor delinquency.

The substance use scale was further modified based on results of SEM analyses (see the following) to eliminate a single item indicative of use of drugs other than marijuana and consisted of the same set of four items for Year 1 and Year 2: “Since the beginning
of the school year in September, how often have you done each of these things?” “Smoked cigarettes (other than marijuana) or used chewing tobacco.” “Bought beer or liquor yourself, or given someone money to buy it for you.” “Used alcohol excessively or been drunk.” “Smoked marijuana.” The alphas for these scales were .87 for Year 1 substance use and .87 for Year 2 substance use.

The delinquency scale for Years 1 and 2 included seven items: “Since the beginning of the school year in September, how often have you done each of these things?” “Used a phony ID.” “Taken something of value from another person.” “Run away from home.” “Got in trouble with the police.” “Carried a weapon to school.” “Purposely damaged school property.” The alphas for these scales were .79 for Year 1 delinquency and .86 for Year 2 delinquency.

Means and standard deviations for all variables are presented in Table 1.

### Plan of Analysis

SEM was used to test whether the model depicted in Figure 1 was an acceptable fit to the available data. As the figure indicates, this model allows for both direct and indirect effects on problem behavior of parental monitoring and control (through their effects on parental knowledge), but only indirect effects of parental warmth. We examined this model using Amos (Arbuckle & Wothke, 1999) conducted with maximum likelihood estimation to test the fit of a path diagram depicting this set of relations. Based on our earlier work, which has considered associations among parenting variables (Steinberg et al., 1991), we also allowed for associations between warmth and monitoring, and between monitoring and control, but not between warmth and control. Because previous research has indicated that social class is linked with both parental warmth (see Hoff, Laursen, & Tardif, 2002) and problem behavior (Farrington, 2004), we included social class as an additional predictor of problem behavior and a correlate of warmth.

We then compared our proposed model with two alternative models. The first allowed for both direct and indirect (by way of parental knowledge) effects of parental warmth, as well as monitoring and control. The second allowed for only indirect effects of warmth, monitoring, and control, mediated through parental knowledge. Each model was analyzed twice, once using each half of the randomly split longitudinal sample, and all models first considered contemporaneous associations between parenting variables and adolescent problem behavior before then examining longitudinal effects of parenting. By taking into account Year 1 problem behavior in the prediction of Year 2 problem behavior, longitudinal analyses reduced problems related to the common method and source variance in our measures of both parenting and problem behavior (Steinberg, Lynam, et al., 1994).

Our use of SEM to test the fit of the models described earlier was constrained by the availability of only a single indicator of each construct of interest. Accordingly, it was impossible to use SEM in a traditional manner, using multiple observed indicators of latent constructs to remove measurement error. Instead, we used SEM first to test the fit of our measurement models and independently to test the fit of three path diagrams. The advantage of using SEM (as opposed to regression) to conduct path

### Table 1

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Note. N = 2,568.  
*p < .05. **p < .01.
analysis is that it provides overall fit statistics that can provide support for one model over another. In fact, SEM is considered to be the preferred method of conducting path analyses (Klem, 2000). However, it is important to note that the estimates of relations among variables depicted in the three path diagrams are likely to be conservative because they are not adjusted for measurement error.

Results

Bivariate Associations Among Model Variables

Table 1 presents intercorrelations among all model variables for the longitudinal sample. There was great stability in levels of both substance use and delinquency from Year 1 to Year 2. Substance use and delinquency were positively associated. Positive associations were also observed among warmth, control, and monitoring. However, associations between warmth and control were of a smaller magnitude than associations between warmth and monitoring and between control and monitoring. This is consistent with previous work (Steinberg et al., 1991) and provides support for our decisions regarding the nature of associations among exogenous variables. Parents who were described as relatively higher in warmth, control, or monitoring also were more likely to be described as knowledgeable about their adolescents’ whereabouts and activities. Higher levels of all parenting variables were associated with less substance use and delinquency during Year 1 and Year 2, with the strongest associations observed for knowledge, followed by control, and then warmth and monitoring.

Validation of Measurement Model

A traditional approach to testing of measurement models would require conducting separate confirmatory factor analyses (CFAs) for exogenous and endogenous latent constructs (Byrne, 2001). However, given our interest in establishing the distinct nature of our measures of parental monitoring and parental knowledge (indeed, this is a major point of the paper), we elected to test a model in which the pattern of associations among indicators of parental warmth, monitoring, control, and knowledge were represented by a four-factor solution corresponding to the four constructs of interest. We allowed error terms for parallel items serving as indicators of parental monitoring and parental knowledge to correlate. For the first half of the sample, this procedure yielded $\chi^2(198) = 867.24$, $p < .01$. Fit indexes indicated goodness-of-fit index (GFI) = .94, adjusted goodness-of-fit index (AGFI) = .93, comparative fit index (CFI) = .90, and root mean square error of approximation (RMSEA) = .05. An acceptable model fit is indicated by GFI and AGFI statistics that approach 1.0, a CFI above .95, and an RMSEA between .05 and .08 (Byrne, 2001). Modification indexes suggested that the fit of the model could be improved by allowing the error terms for one item on the control scale (“How I spend my money”) to correlate with items on the monitoring and knowledge scales (“How you spend your money”). Given the clear relatedness of these items, we performed the analyses again allowing these error terms to covary. Analyses conducted on the first half of the sample with this modification indicated $\chi^2(196) = 737.52$, $p < .01$; GFI = .95, AGFI = .94, CFI = .92, RMSEA = .05. For the second half of the sample, this model yielded $\chi^2(196) = 636.33$, $p < .01$; GFI = .96, AGFI = .95, CFI = .93, RMSEA = .04. Across both samples, the proposed model provided an adequate fit to the data and indicated that items loaded on four distinct components of parenting: monitoring, warmth, control, and knowledge.

To test whether parental monitoring and parental knowledge represented distinct factors, we then set the covariance between these two factors to 1 (after first setting the variances of these constructs to 1, in essence making the covariance a correlation), testing whether a three-factor model fit the data better than our proposed four-factor model. For the first half of the sample, this procedure yielded $\chi^2(199) = 2548.01$, $p < .01$. Fit indexes indicated a relatively poor fit of the three-factor model, with GFI = .85, AGFI = .81, CFI = .65, RMSEA = .09. For the second sample, the three-factor model yielded $\chi^2(199) = 2276.84$, $p < .01$; GFI = .87, AGFI = .83, CFI = .68, RMSEA = .09. A direct comparison of the three- and four-factor models indicated that the three-factor model provided a significantly worse fit for both the first and second halves of the sample, $\chi^2(3) = 1810.49$, $p < .01$, and $\chi^2(3) = 1640.51$, $p < .01$, respectively.

Next, we conducted CFAs to test a model in which associations among indicators of problem behavior were represented by a four-factor solution corresponding to the constructs of substance use and delinquency measured in Year 1 and Year 2. We allowed error terms for identical items across different years to correlate. For the first half of the sample, this procedure yielded $\chi^2(234) = 1922.06$, $p < .01$, for Year 1 indicators of problem behavior. Fit indexes indicated GFI = .89, AGFI = .86, CFI = .89, RMSEA = .07. Modification indexes suggested that a single item (“Used a drug other than marijuana”) loaded
more strongly on the construct of delinquency than that of substance use for both Year 1 and Year 2. In an effort to maintain the conceptual distinctness of these constructs, yet deal with the marginal fit of a model including this item in a measure of substance use, we decided to eliminate the item entirely. A new CFI was conducted on the first half of the sample, eliminating this item, and it yielded χ²(192) = 857.55, p < .01; GFI = .94, AGFI = .93, CFI = .95, RMSEA = .05. Analyses conducted on the second half of the sample indicated χ²(192) = 864.88, p < .01; GFI = .94, AGFI = .93, CFI = .96, RMSEA = .05. The four-factor model (separate indexes of delinquency and substance use for Year 1 and Year 2) provided an acceptable fit to the data, with items uniquely loading on the constructs of substance use and delinquency.

To consider whether substance use and delinquency represented distinct factors, we then set the covariances between these two factors to 1 (after first setting the variances of these constructs to 1) for both Year 1 and Year 2, essentially testing whether a two-factor model fit the data better than our proposed four-factor model. For the first half of the sample, the two-factor solution indicated χ²(198) = 5151.42, p < .01; GFI = .72, AGFI = .64, CFI = .64, RMSEA = .14. Analyses conducted on the second half of the sample indicated χ²(198) = 5112.66, p < .01; GFI = .73, AGFI = .66, CFI = .68, RMSEA = .14. The two-factor model provided a significantly worse fit for both the first and second halves of the sample, χ²(6) = 4293.87, p < .01, and χ²(6) = 4247.78, p < .01, respectively.

Path Analysis Predicting Adolescent Substance Use

Having determined that our measures of parental monitoring and parental knowledge, and of substance use and delinquency, constituted empirically distinct constructs, we next conducted SEM analyses to test the fits of the three alternative models (our own proposed model with indirect effects of warmth and both direct and indirect effects of monitoring and control—the all indirect effects model and the full direct and indirect effects model) for the prediction of substance use. In all cases, models were first fit for the contemporaneous prediction of Year 1 substance use from parenting variables and parental knowledge. Subsequently, longitudinal models were fit in which we also predicted the effects of parenting variables and parental knowledge on Year 2 sub-

Table 2
Chi-Square Statistics and Fit Indexes for Alternative Models Predicting Substance Use From Parental Warmth, Monitoring, Control, and Knowledge

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
<th>GFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemporaneous models</td>
<td></td>
<td></td>
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<tr>
<td>Sample 1</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Direct and indirect effects of parenting</td>
<td>91.07</td>
<td>3</td>
<td>.00</td>
<td>.98</td>
<td>.85</td>
<td>.91</td>
<td>.15</td>
</tr>
<tr>
<td>Indirect effects of parenting</td>
<td>71.76</td>
<td>6</td>
<td>.00</td>
<td>.98</td>
<td>.94</td>
<td>.93</td>
<td>.09</td>
</tr>
<tr>
<td>Indirect effects of warmth; direct and indirect effects of monitoring</td>
<td>24.38</td>
<td>4</td>
<td>.00</td>
<td>.99</td>
<td>.97</td>
<td>.98</td>
<td>.06</td>
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<tr>
<td>and control</td>
<td></td>
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<tr>
<td>Sample 2</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct and indirect effects of parenting</td>
<td>73.94</td>
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<td>.00</td>
<td>.98</td>
<td>.88</td>
<td>.93</td>
<td>.13</td>
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<tr>
<td>Indirect effects of parenting</td>
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<td>.98</td>
<td>.92</td>
<td>.90</td>
<td>.11</td>
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<td>Indirect effects of warmth; direct and indirect effects of monitoring</td>
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<td>4</td>
<td>.00</td>
<td>.99</td>
<td>.97</td>
<td>.98</td>
<td>.06</td>
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<td>and control</td>
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<tr>
<td>Longitudinal models</td>
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<tr>
<td>Sample 1</td>
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</tr>
<tr>
<td>Direct and indirect effects of parenting</td>
<td>104.28</td>
<td>4</td>
<td>.00</td>
<td>.98</td>
<td>.86</td>
<td>.95</td>
<td>.14</td>
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<tr>
<td>Indirect effects of parenting</td>
<td>83.69</td>
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<td>.95</td>
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<td>.08</td>
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<tr>
<td>Indirect effects of warmth; direct and indirect effects of monitoring</td>
<td>24.38</td>
<td>5</td>
<td>.00</td>
<td>.99</td>
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<td>Sample 2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Direct and indirect effects of parenting</td>
<td>76.18</td>
<td>4</td>
<td>.00</td>
<td>.99</td>
<td>.89</td>
<td>.97</td>
<td>.12</td>
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<tr>
<td>Indirect effects of parenting</td>
<td>114.28</td>
<td>9</td>
<td>.00</td>
<td>.98</td>
<td>.93</td>
<td>.95</td>
<td>.09</td>
</tr>
<tr>
<td>Indirect effects of warmth; direct and indirect effects of monitoring</td>
<td>21.62</td>
<td>5</td>
<td>.00</td>
<td>.99</td>
<td>.98</td>
<td>.99</td>
<td>.05</td>
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<td>and control</td>
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Note. GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.
stance use, controlling for the effects of Year 1 substance use. Table 2 presents chi-square statistics and fit indexes for each of these models tested separately for each half of the sample.

For contemporaneous analyses, our proposed model provided a significantly better fit to the data than did either the all indirect effects model, Sample 1, $\chi^2(2) = 47.38, p < .01$; Sample 2, $\chi^2(2) = 79.79, p < .01$, or the full direct and indirect effects model, in which a decrease of 1 df resulted in an increase in the chi-square statistic. Within our proposed model and across both samples, greater parental knowledge was predicted by higher levels of parental warmth, monitoring, and control. Greater knowledge, higher levels of control, and lower levels of monitoring were all linked with lower levels of contemporaneous substance use.

For longitudinal analyses, our proposed model provided a significantly better fit to the data than did either the all indirect effects model, Sample 1, $\chi^2(4) = 59.11, p < .01$; Sample 2, $\chi^2(4) = 92.66, p < .01$, or the full direct and indirect effects model, in which a decrease of 1 df resulted in an increase in the chi-square statistic. Our proposed model yielded a better fit than did models that were both more and less parsimonious. The path diagram for the longitudinal model is presented in Figure 2. Only paths that were significant at $p < .01$ for either sample are indicated. Standardized regression weights for both samples are provided for these paths. As shown in the figure, greater parental knowledge was predicted by higher levels of warmth, monitoring, and control. In turn, greater parental knowledge predicted lower levels of substance use. Direct effects of parental control on contemporaneous and longitudinal substance use were observed, with the direction of effects indicating that when parents exerted more control over their children’s behavior, adolescents engaged in lower levels of substance use. A direct effect of monitoring on substance use was evident contemporaneously and indicated that greater parental control was associated with, but not predictive of, higher levels of adolescent substance use.

As indicated earlier, social class and specific parenting variables were allowed to covary within models. Within our model, social class was positively associated with parental warmth (Sample 1, $\beta = .22, p < .01$; Sample 2, $\beta = .19, p < .01$). Higher levels of parental monitoring were associated with higher levels of parental warmth (Sample 1, $\beta = .23, p < .01$; Sample 2, $\beta = .20, p < .01$) and parental control (Sample 1, $\beta = .29, p < .01$; Sample 2, $\beta = .32, p < .01$).

**Path Analysis Predicting Adolescent Delinquency**

We next conducted SEM analyses to test the fit of the three alternative models for the prediction of delinquency, following the same logic used to examine the prediction of substance use. Again, models were first fit for the contemporaneous associations between parenting variables and Year 1 delinquency, and then for the longitudinal prediction of Year 2 delinquency with social class and specific parenting variables allowed to covary within models. Table 3 presents chi-square statistics and fit indexes for each of these models tested on the first and second samples.

In the contemporaneous analyses, our proposed model provided a significantly better fit to the data than did the model in which the effects of all three parenting variables were mediated through parental knowledge, as was the case in the prediction of substance use, Sample 1, $\chi^2(2) = 10.00, p < .01$; Sample 2, $\chi^2(2) = 8.50, p < .01$. Comparison of our model

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**Figure 2.** Model predicting adolescent substance use from parenting variables. Standardized regression coefficients are provided for Sample 1 (outside of brackets) and Sample 2 (within brackets). **$p < .01$.**
with the full direct and indirect effects model yielded a small decrease in the chi-square statistic with a decrease on 1 df. This decrease was not statistically significant for Sample 1, $\chi^2(1) = -.17$, ns, and indicated a better fit for the full direct and indirect effects model for Sample 2, $\chi^2(1) = -9.93$, $p<.01$. However, there were no differences between the two models with respect to significance levels for specific paths. Within both models and across both samples, greater parental knowledge was predicted by higher levels of warmth, monitoring, and control. Greater involvement in delinquency during Year 1 was predicted by lower levels of parental knowledge and control, but not by either parental monitoring or (within the full effects model) parental warmth. In longitudinal analyses, our proposed model provided a significantly better fit to the data than did the all indirect effects model, Sample 1, $\chi^2(4) = 14.23$, $p<.01$; Sample 2, $\chi^2(4) = 16.45$, $p<.01$. Comparison of our proposed model and the full direct and indirect effects model indicated a better fit for our model for Sample 1 (based on an observed increase in the chi-square statistic accompanying a decrease in degrees of freedom) when comparing the indirect effects model with our proposed model. However, for Sample 2, a 1 df decrease resulted in a chi-square increase. Statistical comparison of these models indicated a better fit for the full model, $\chi^2(4) = -11.37$, $p<.01$. Given the conflicting patterns of model fit across samples, the principle of Occam’s razor suggests that the most parsimonious model should be accepted as the best fit to the data. Accordingly, we concluded that our proposed model was the best fit for the longitudinal prediction of delinquency.

Although the results of the analyses predicting delinquency were not as consistent as were those predicting substance use, the overall pattern indicates that our proposed model, in which the effects of parental warmth are mediated entirely through parental knowledge but in which control and monitoring have both direct and indirect effects, provides a better fit to the data than does the model in which the effects of parental warmth, monitoring, and control are mediated entirely through parental knowledge, and it provides a comparable and more parsimonious fit to the data than the model that included all of the direct and indirect paths between parenting and problem behavior.

The path diagram for this best-fitting model is presented in Figure 3. Paths that were significant at $p<.01$ for either sample are indicated in the figure. Standardized regression weights for both samples.
are provided for these paths. For both samples, greater knowledge was predicted by higher levels of warmth, monitoring, and control. Greater knowledge predicted lower levels of delinquency contemporaneously but not longitudinally. Instead, higher levels of parental control were longitudinally predictive of lower levels of involvement in delinquent behavior during Year 2 for Sample 2 only.

**Discussion**

The purpose of the current study was to test a proposed model predicting adolescent involvement in problem behavior from a set of key parenting variables. To do this, we reanalyzed data that had previously yielded findings (Gray & Steinberg, 1999; Lamborn et al., 1991; Steinberg, Lamborn, et al., 1994) indicating that the strongest predictor of adolescent involvement in problem behavior was the extent to which parents provided high levels of control over children’s behavior. However, these earlier efforts used a composite measure of behavioral control that confounded the extent to which parents monitored versus controlled their children’s behavior, as well as the extent to which they were knowledgeable about this behavior. The results of the present analyses indicate that although the impact of parental warmth on problem behavior is indeed explained by the fact that warm parents are also more knowledgeable, the deterrent effects of both control and, to a lesser extent, monitoring, cannot be entirely explained by higher levels of parental knowledge. The replication of this finding in two randomly selected subsamples of the adolescents studied here gives us greater confidence in asserting that parental control does, in fact, matter.

The present analyses provided support for our proposed model of parental influences on adolescent substance use, in which the effects of warmth are mediated entirely through parental knowledge but in which monitoring and control have both direct and indirect effects. Adolescents were less likely to engage in substance use when their parents were warm and involved in their lives, sought to obtain information concerning their children’s activities, and provided higher levels of control over these activities. Higher levels of parental knowledge served as a mechanism, explaining associations between warmth, monitoring, and control, and adolescent problem behavior. Parental control was also directly linked with lower levels of adolescent involvement in problem behavior; that is, not all of the effects of parental control on problem behavior were due to the increased knowledge that parents gained when they were more controlling. Higher levels of parental monitoring were directly and contemporaneously associated with more substance use among adolescents. However, this effect was not observed longitudinally, suggesting that although parents are more likely to monitor adolescents who are using illicit substances, such monitoring does not increase or decrease the likelihood that they will do so in the future.

The model positing indirect effects of warmth but both direct and indirect effects of monitoring and control was also the best-fitting model for the prediction of adolescent involvement in delinquent behavior, although statistical evidence in support of this was not as unambiguous as it was for the prediction of substance use. As hypothesized, cross-sectional analyses indicated that adolescent involvement in delinquency was associated with lower levels of both parental knowledge and parental
control. Yet parental knowledge was not longitudinally predictive of delinquency, and lower levels of parental control were predictive of delinquency only within one of the two subsamples. Generally speaking, the parenting variables studied here do not seem to play as important a role in the prediction of delinquency as they do in the prediction of substance use. One possible explanation for this is that, unlike substance use, which increases throughout adolescence, involvement in delinquent behavior increases most dramatically during early adolescence and remains relatively stable across the high school years (Farrington, 2004). Accordingly, it may be more difficult to predict short-term changes in delinquency during high school once levels of concurrent delinquency are taken into account.

Although our findings are largely consistent with those of Stattin and Kerr (2000; Kerr & Stattin, 2000), there were a few differences in the strength and nature of the associations among the key variables in the two studies that are likely due to differences in the manner in which these variables were operationalized. For example, we did not find that our measure of parental warmth was as strong a predictor of parental knowledge as was adolescent disclosure for Stattin and Kerr. This is most likely because of the distinction between a proximal (disclosure) versus a distal (parental warmth) predictor of knowledge. Although parental warmth and adolescent disclosure are strongly correlated (Trost, 2000), this association is by no means perfect, and a weaker association would be expected between parental warmth and knowledge than between adolescent disclosure and knowledge because effects of parental warmth on knowledge presumably flow through adolescent disclosure.

Our findings indicate that parental warmth and monitoring deter adolescent involvement in problem behavior by enhancing parental knowledge of adolescents’ activities, whereabouts, and associates. Associations between warmth and responsiveness are likely due to mechanisms outlined in the work of Stattin and Kerr (2000). High levels of parental warmth and responsiveness are likely to be linked with positive parent–child relationships, in which adolescents are more likely to disclose spontaneously information about their lives to their parents. Such an explanation takes into account the active roles of both partners within the parent–child relationship. In contrast, associations between parental monitoring and knowledge are better understood in terms of parents’ roles in seeking out information about their children’s whereabouts, activities, and associates. Parents who actively seek out such information, whether by questioning adolescents directly or by employing more subtle methods, are likely to be informed about their children’s lives. Parents who seek to establish guidelines and controls over their children’s behavior are also likely to be knowledgeable about their adolescents’ lives by virtue of the fact that offspring are less likely to spend time in places and engaged in activities that they know are not permitted by their parents. Such an effect should hold even when adolescents do not respond to parental control efforts with perfect compliance.

Although the findings presented here provide a more finely detailed account of the processes through which effective parenting deters adolescent misbehavior than described in previous studies, they do not tell us what it is about parental knowledge that decreases substance use. It may be that any measure of parental knowledge, once the direct effects of warmth, monitoring, and control have been taken into account, says more about the adolescent than it does about the parent. Indeed, as Stattin and Kerr (2000; Kerr & Stattin, 2000) pointed out, the extent to which parents become knowledgeable about adolescents’ activities is a function not only of their own parenting but of characteristics of adolescents themselves (such as their willingness to disclose information to their parents). In addition, when parents are more knowledgeable about their children’s whereabouts and behavior, they are in a better position to intervene in their children’s lives and lower the likelihood of adolescent involvement in substance use.

Yet it is not simply increased parental knowledge that does the trick, as our findings indicate that some of the deterrent effects of parental control are not explained by increases in parental knowledge. When parents establish firm rules for children’s behavior, adolescents have fewer opportunities to engage in problem behavior. Both our measure of parental control and that used by Stattin and Kerr (2000; Kerr & Stattin, 2000) focused on parental control of behaviors that are likely to serve as gateways to adolescent involvement in problem behavior—staying out late at night, spending time with certain friends, and being allowed to drink alcohol, to name a few. Our finding that parental control is directly and negatively linked with adolescent substance use is consistent with a literature indicating that parental behavioral control is both associated with and predictive of lower levels of adolescent involvement in problem behavior (e.g., Gray & Steinberg, 1999). The implication of such a finding is that parents can deter adolescent involvement in problem behavior not only by engaging in behaviors that help them to
become more knowledgeable about their children's lives but also by exercising control over adolescents' activities and associates.

The analyses reported here reflect a deliberate decision on our part to focus on the potential role of parental knowledge as a mechanism linking parenting variables and adolescent involvement in problem behavior, prompted by recent critiques of past research on the putative effects of parental control and monitoring. Naturally, there likely are a multitude of pathways not included in the present study that link parenting strategies with indicators of problem behavior. We caution readers that the findings reported here might have varied considerably had additional mediator variables been included within the model and that a full explanation of the manner in which parenting is linked with adolescent well-being must consider processes related to social learning, changes in social cognition, and emotional regulation and understanding, to name a few. Our model does not deny the multitude of pathways that may link parenting strategies with adolescent involvement in problem behavior, but rather it seeks to consider the extent to which one specific pathway, parental knowledge, is sufficient for explaining links between several widely studied aspects of parenting and adolescent misconduct.

The strengths of the current study include its longitudinal design and availability of adolescent reports on a wide range of parenting variables that were highly similar to those used in work conducted by Stattin and Kerr (2000; Kerr & Stattin, 2000). This similarity has provided us with a unique opportunity to extend and clarify our own earlier work in light of the ideas put forth by Stattin and Kerr. Yet the current effort is not without its limitations. Of particular concern are the those involving the self-report nature of available data, restrictions associated with use of extant data to address new research questions, and the testing of a model that does not sufficiently acknowledge the bidirectional nature of parent–child relationships.

All data analyzed within this effort were collected through adolescent self-reports, introducing potential difficulties of interpretation due to common source and method variance, as well as questions concerning the accuracy of adolescents' perceptions of their parents' parenting. As previously discussed, our data analytic approach with regard to longitudinal analyses was structured to alleviate concerns regarding common source and method variance. Specifically, we introduced levels of Year 1 problem behavior as controls in all analyses predicting levels of Year 2 problem behavior. Because both Year 1 and Year 2 levels of problem behavior are based on self-report data, prediction of Year 2 problem behavior once Year 1 behavior is controlled cannot be attributed merely to common source and method variance because this common variance is presumably partialed out when Year 1 behavior is covaried. Regarding concerns over adolescents' abilities to perceive accurately their parents' behaviors, we subscribe to the view that parental behaviors are largely meaningful in that they are filtered through the perceptions of the individuals being parented. According to this view (which has been proposed by various others; see Boyce et al., 1998; Thomas & Thomas, 1928), if an adolescent perceives his or her parent as high in warmth (or any other parenting characteristic), it is of little matter whether parental behaviors would be characterized as warm by objective observers or parents themselves. Still, we recognize that future research would benefit from the availability of parenting measures collected using diverse methods and sources.

A second limitation of the current effort involves the use of data not originally collected with the intention of addressing the issues raised herein. Although in most cases we were able to construct highly reliable measures of constructs that were very similar to those used by Stattin and Kerr (2000; Kerr & Stattin, 2000), we did not have available a measure of adolescent disclosure to parents, which constituted a key component of analyses reported in these authors' publications. Given our interest in the role of parents in preventing their children from engaging in problem behavior, we have dealt with this limitation by substituting a measure of parental warmth for adolescent disclosure. Accordingly, the current effort should not be seen as an attempt to replicate findings reported by Stattin and Kerr but rather as an attempt to extend and clarify earlier findings related to the manner in which parenting variables are predictive of adolescent misconduct.

Finally, we deliberately chose to develop and evaluate the fit of a model that focused on parental influences on adolescent involvement in problem behavior. Yet it is widely recognized that parent–child relationships are bidirectional (Bell & Chapman, 1986). In all likelihood, parenting behaviors are influenced by the extent to which adolescents engage in problem behavior. For example, parents whose children are highly involved in substance use may respond to such use by becoming less restrictive with adolescents whom they perceive as already beyond their control or by distancing themselves emotionally from their children. Indeed, such effects have been demonstrated with respect to associations be-
between parental control and indicators of adolescent problem behavior included within the current effort (Stice & Barrera, 1995). Nevertheless, the fact that adolescents influence their parents does not preclude the possibility that the reverse is true as well. Indeed, the design of the current analyses, with their focus on longitudinal prediction of problem behavior after taking into account earlier levels of such behavior, is useful for examining parental influences on adolescent behavior (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000).

The results of the analyses reported here are not inconsistent with the findings of Stattin and Kerr (2000; Kerr & Stattin, 2000). They have chosen to focus on the role of parental knowledge as a mechanism explaining associations between a variety of parental and adolescent behaviors and adolescent misconduct. Our own analyses confirm many of their findings. Yet we have chosen to focus on a slightly different set of questions regarding prediction of adolescent misconduct. We set out to ask whether three distinct components of parental behavior were linked with adolescent involvement in problem behavior in different ways. We found that there are a variety of strategies parents may use in an effort to reduce the likelihood that their adolescent offspring will engage in substance use and delinquency. To be sure, parents may deter their teenagers from misbehavior in part by establishing close and caring relationships with them. Such relationships increase the likelihood that adolescents will spontaneously disclose information about their lives to their parents. As the saying goes, however, there is more than one way to skin a cat, and parental control and monitoring are also effective deterrents against adolescent misbehavior beyond the importance of parental warmth. The field will no doubt benefit from heeding Stattin and Kerr’s suggestion to distinguish between parental monitoring and parental knowledge, and to consider parental knowledge as a critical mechanism explaining associations between parenting behaviors and adolescent misconduct. However, parents, researchers, and practitioners alike would do well to note that parental monitoring and control are also strong predictors of whether adolescents will have the opportunity and inclination to involve themselves in behaviors deemed inappropriate by their parents. Sometimes, warmth is not enough.

References


