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Mother-Child Dynamics: Examining Reciprocal Relations Between Parental Knowledge, Child Disclosure, Parental Legitimacy Beliefs, and Adolescent Alcohol Use

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Abstract

Early adolescent alcohol use is associated with adverse developmental and health outcomes. Parental knowledge can prevent or delay substance use, while youth behaviors may concurrently influence parenting. More research is needed to examine the role of youth's perceptions of legitimacy of parental authority. This multi-informant study examined prospective bidirectional effects between parental knowledge and child disclosure alongside youth-reported alcohol use and perceived legitimacy of parental authority. Data was analyzed across three waves in a community sample of 304 mother-child dyads. A cross-lagged panel model was estimated using repeated measures of adolescent alcohol use, perceived legitimacy of parental authority, parental knowledge, and child disclosure. Positive reciprocal associations were found in early adolescence between child disclosure and both parental knowledge and perceived legitimacy of parental authority. Legitimacy of parental authority negatively predicted alcohol use across adolescence. Child alcohol use also negatively predicted parental knowledge among mothers in later adolescence. Effects were not reciprocated nor sustained. Novel findings demonstrate that parental legitimacy beliefs predict reduced alcohol use and have a reciprocal association with child disclosure. Clinical implications to mitigate youth alcohol use initiation, by enhancing parental self-efficacy and positive parenting, are discussed.

Keywords: alcohol, parental monitoring, parenting, adolescence, legitimacy of parental authority

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Alcohol use in early adolescence has been linked to several adverse outcomes later in life, including higher rates of use, greater prevalence and severity of substance use disorders, and a greater likelihood of transitioning to illicit substances in young adulthood (Stone et al., 2012). Identifying factors impacting early initiation is critical to mitigate youth alcohol use and, in turn, substance use-related harms. Parents, and mothers in particular, play an important role in youth developmental outcomes (Yap et al., 2017), especially during early adolescence; thus, parenting practices may be a particularly effective target for substance use prevention efforts. The current study aims to examine reciprocal associations between child alcohol use, parental knowledge sources, and child perceptions of legitimacy of parental authority over three years from ages 11 and 15.

Parental Knowledge

Parents play an important role in youth developmental outcomes. Parental knowledge of youth's activities has been found to be a valuable protective factor in preventing or delaying youth substance use (Stone et al., 2012). It is important to note that studies on "parental monitoring" have typically measured parental *knowledge* of child activities and not active monitoring (Rusby et al., 2018; Stattin & Kerr, 2000). While parental monitoring includes specific behaviors to track and supervise their children, parental knowledge reflects the degree to which parents are aware of their children's performance in school, the friends they affiliate with, and how they spend their free time (Kerr et al., 2012). Knowledge sources include active parental solicitation and child voluntary disclosure, requiring active parent-child communication to be effective (Rusby et al., 2018). Prior work indicates that better-adjusted youth are likely to

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voluntarily disclose more information to their parents (Kerr et al., 2012). For example, higher levels of child disclosure have been predictive of lower levels of rule-breaking behaviors, including substance use (Stattin & Kerr, 2000). Thus, child disclosure, a marker for a trusting parent-child relationship with open communication (Stattin & Kerr, 2000), may represent a critical protective factor in reducing rates of adolescent substance use initiation.

Parental behaviors and knowledge of youth's activities can prevent or delay substance use (Stone et al., 2012), but youth behaviors may simultaneously influence parenting (Kerr et al., 2012). Theoretical work, such as Patterson's Coercion Theory (Patterson, 1982), posits that a maladaptive cycle may unfold between the parent and the child, whereby a child's engagement in problem behavior, such as substance use, may elicit maladaptive parenting practices, which unintentionally reinforces and escalates the undesired behavior (Patterson, 1982; Smith et al., 2014). Thus, the association between parent and child behaviors may be bidirectional, in that child problem behavior may decrease in response to parenting practices, but child behaviors may also influence parent behaviors and their effectiveness. Prior work examining parenting behaviors and youth substance use has found full reciprocal effects (Williams & Steinberg, 2011; Yu, 2010); yet this work is limited by several methodological issues. Namely, prior studies have relied primarily on data from a single reporter, likely excluding unique perspectives of the parent and the adolescent while contributing to shared method biases (Cox et al., 2018) that overestimate transactional effects between parents and children. Moreover, parenting measures have typically not distinguished between sources of parental knowledge (Kerr et al., 2012). Given that adolescents have been shown to disclose more to mothers than to fathers (Smetana et al., 2006), it is crucial to delineate the distinct dynamics within parent-child relationships of mothers versus fathers. Thus, more research is needed to evaluate the reciprocal relations

between these constructs over time to address these limitations. In this study, we include adolescents' reports of alcohol use and perceptions of parental legitimacy alongside parents' reports of parental knowledge and child disclosure.

Child-Perceived Legitimacy of Parental Authority

Adolescence is a period of rapid developmental change, during which youth negotiate greater autonomy from parents to govern their own thoughts, decisions, and behaviors (Darling et al., 2007). Concurrently, adolescence is also a time of change in youth's attitudes about their parents' right to govern over them, or beliefs in the legitimacy of parental authority (Darling et al., 2008). Behavioral autonomy may develop differently across various dimensions of behavior, such that adolescents may be highly autonomous in some areas (e.g., who they spend their time with), but rely on their parents more in others (e.g., making major life decisions; (Smetana, 1988)). Social-cognitive domain theory posits that beliefs about legitimacy of parental authority vary by the specific domain of control (Darling et al., 2005; Smetana, 1988). Domains of adolescent behavior subject to parental control include prudential (e.g., substance use, harmful behaviors), parent expectations (e.g., school performance), personal (e.g., peer affiliation, recreational time), multiple domain (e.g., unsupervised time), and romantic relations (Darling et al., 2005). Prior work found that youth endorse the prudential domain as a more legitimate area for parental authority above all others (Darling et al., 2005), while multiple domain issues, such as how and with whom youth spend unsupervised time (Darling et al., 2005), were viewed to be under the purview of the adolescent (Smetana, 1988). Yet, one study examining the role of alcohol-specific parenting (i.e., monitoring, permissive messaging, cautionary messaging), which falls within the prudential domain, demonstrated weak support for the role of substance use-specific parental monitoring on alcohol use (Cox et al., 2018). This suggests that youth

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perceptions of legitimacy of parents' alcohol-specific parenting and their internalization of parental messaging might be more influential than parenting efforts alone. Furthermore, adolescent endorsement of parental legitimacy beliefs is associated with increased family cohesion (Bi et al., 2018), improving communication and the parent-child relationship. We aim to inform this research gap by examining adolescent perceptions of the legitimacy of parental authority alongside parent reports of parental knowledge and child disclosure.

The Current Study

The goal of the current study is to model time-specific, reciprocal associations between child alcohol use, parental knowledge among mothers, child disclosure, and child-perceived legitimacy of parental authority using a cross-lagged panel design. By examining parental knowledge among mothers alongside child perceptions of their parental legitimacy, this study addresses shared method biases that limit the current literature. Furthermore, much of the prior work examining parenting practices and adolescent alcohol use tests adolescent alcohol use solely as the result of parenting practices, without considering parenting practices as susceptible to changes in adolescent behavior over time (Micalizzi et al., 2019; Rusby et al., 2018; Ryan et al., 2010). We hypothesize that:

1. Adolescents perceiving high legitimacy of parental authority will report lower alcohol use at subsequent time points. Moreover, high alcohol use will predict lower perceived legitimacy of parental authority at subsequent time points.
2. Mothers of adolescents reporting high perceived legitimacy of parental authority will report greater parental knowledge and greater child disclosure at subsequent time points. We expect that high parental knowledge and child disclosure will also predict greater perceived legitimacy of parental authority.

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3. Mothers reporting high parental knowledge and high child disclosure will have children who report lower alcohol use at subsequent points, while high alcohol use will predict lower parental knowledge and lower child disclosure at subsequent points.

Methods

Participants

The current study involves secondary data analysis of a publicly available dataset using a sample of 304 mother-child dyads who completed three waves of the Adolescent Family Development Project (AFDP), a longitudinal study investigating the impact of behavior problems and social contexts on substance use initiation in youth. Recruitment was conducted via a random-digit dial sample of phone numbers for households in Erie County, New York, between April 2007 and February 2009. Youth in the study were mostly of non-Hispanic White descent (84.5%), were 57.2% female, and an average of 12.10 years at the time of enrollment (*SD* = 0.58), while mothers were an average of 42.24 years old at time of enrollment (*SD* = 5.90). See *Table 1* for additional demographic characteristics. The study was conducted using secondary data analysis with deidentified data. The original study received approval from its university Institutional Review Board.

Procedure

At each timepoint, mother-child dyads completed 2.5-hour interviews at a university research laboratory. Time 2 and Time 3 assessments were conducted one year after the previous assessment. Interviews were conducted individually in separate rooms after dyads completed the informed consent and assent process together. Interviewers read questions aloud to participants and entered responses onto a computer. Questions assessing sensitive information (i.e., substance use) were inputted by participants directly.

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Measures

Child Alcohol Use

Youth self-reported days of alcohol use during each time point via a single question ("*How many times in the past year have you used alcohol?*") from the National Youth Survey (NYS; (Elliott & Huizinga, 1983)).

Child-Perceived Legitimacy of Parental Authority

Youth reported on their perceptions of parental authority via a 21-item scale derived from the Adolescents and Parents Conceptions of Parental Authority scale (Smetana, 1988). Items were rated using a Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) in response to the prompt: "It's ok for my parents to make rules about…". Sample items included: "…what I do after school", "my drinking alcohol", and "how I dress". Responses were averaged, with higher scores indicating greater acceptance of parental rules (αs ranged from 0.89-0.92 across timepoints). A sensitivity analysis was also conducted to understand associations specific to perceived legitimacy of parental authority regarding setting rules about alcohol use.

Parental Knowledge and Child Disclosure

Mothers reported on parental knowledge and child disclosure by completing subscales from the *Parental Monitoring Instrument* (PMI), a self-report measure developed by Stattin and Kerr (2000). Items used a Likert scale ranging from 1 (*Never*) to 5 (*Always*) with responses averaged per subscale. Mothers responded to 9 items to assess parents' knowledge of their child's whereabouts, activities, and associations. Sample items included: "Do you know what your child does during his or her free time?" and "Do you know whom your child has as friends during his or her free time?" Higher scores indicated greater parental knowledge (αs ranged from 0.74-0.75 across timepoints). Mothers responded to 5 items assessing how much their children

provide information about their whereabouts, activities, and associations (e.g., "Does your child talk at home about how he or she are doing in the different subjects in school?"). High scores indicated greater child disclosure (αs ranged from 0.70-0.78 across timepoints).

Covariates

Child biological sex (female = 1, male = 2) and baseline age were included as exogenous variables in the estimated model and covaried with legitimacy of parental authority, parental knowledge among mothers, child disclosure, and child alcohol use at Wave 1.

Data Analytic Plan

We estimated a cross-lagged panel model using three waves of data. The multivariate cross-lagged model included repeated measures of child alcohol use, child-perceived legitimacy of parental authority, parental knowledge, and child disclosure.[1] Covariances were included within each time point across each of the assessed exogenous and endogenous variables. Robust maximum likelihood estimation (MLR) was used to obtain corrected standard errors that accounted for non-normal distributions of alcohol use. The percentage of missing data in all variables across the three data collection points ranged from 0.32% to 1.64%. Mplus uses full information maximum likelihood estimation under the assumption of data missing at random (Muthén & Muthén, 1998-2017).

To evaluate model fit, the following fit statistics were examined: comparative fit index (CFI; ≥ .90 = acceptable, > .95 = excellent), the Tucker Lewis index (TFI; ≥ .90 = acceptable, >

[1] A random-intercept cross-lag model (RI-CLPM) was also estimated in an effort to delineate between- and within-person effects. Several of the fit indices of the RI-CLPM were poor: χ^2 (22) = 154.11, CFI = .92, TLI = .77, RMSEA = .14, SRMR = .052, suggesting that the RI-CLPM may not be the most suitable model for our data. Thus, RI-CLPM was not considered further.

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.95 = excellent), and the standard root mean square residual (SRMR; < .08 acceptable, < .05 = excellent).

Prior research has found that adolescents generally disclose more to their mothers than their fathers (Smetana et al., 2006), and that girls may be more inclined to disclose information to their parents (Stattin & Kerr, 2000). At the same time, mothers tend to overestimate the extent of their daughters' disclosures (Smetana et al., 2006). In light of these considerations and drawing from literature suggesting that parent-child relationships can influence risky behavior differently across boys and girls (Nilsson, 2017), we conducted additional analyses to explore potential differences in the tested associations across child biological sex. We conducted a multigroup analysis using adolescent biological sex as the grouping variable to examine differences. We then examined whether there was a significant decrement in model fit between freely estimated and constrained models using the Satorra-Bentler scaled chi-square difference test (Satorra & Bentler, 2010) and change in Comparative Fit Index (CFI). Prior research suggests that a change in CFI (ΔCFI) of 0.01 or greater may indicate a meaningful difference in model fit (Cheung & Rensvold, 2002).

Results

Descriptive Statistics

Tables 1 and *2* provide demographic information for the participants and summary statistics for the study variables. Of note, 15.3% reported at least one drinking day in the last year at baseline (range: 1-45 days).

Cross-Lagged Model

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Fit indices suggested that the cross-lagged model had acceptable fit: the CFI was greater than 0.90 (CFI = 0.940), the TLI was greater than 0.80 (TLI = 0.839), and the SRMR was equal to .045. Significant results of the cross-lagged model are illustrated in *Figure 1*.

As expected, all auto-regressive effects for child disclosure, legitimacy of parental authority, and parental knowledge among mothers were significant from Time 1 to Time 2 and from Time 2 to Time 3 ($ps < .001$). However, auto-regressive effects for alcohol use were not significant from Time 1 to Time 2 ($\beta = 0.08$, $p = .077$) or from Time 2 to Time 3 ($\beta = 0.10$, $p = .093$). In support of our first hypothesis, reports of legitimacy of parental authority, parental knowledge among mothers, and child disclosure decreased over time, whereas rates of alcohol use increased (see *Table 2*).

Hypothesis 1 was partially supported. Legitimacy of parental authority consistently predicted alcohol use across time, demonstrating a significant negative association from Time 1 to Time 2 ($\beta = -0.13$, $p = .001$) and from Time 2 to Time 3 ($\beta = -0.11$, $p = .04$), indicating that higher legitimacy of parental authority predicted reduced alcohol use over time. Yet, in contrast to expectations, alcohol use did not predict legitimacy of parental authority.

Hypothesis 2 was supported for child disclosure. Results from Time 1 to Time 2 demonstrated a significant reciprocal association between Time 1 legitimacy of parental authority and Time 2 child disclosure. Specifically, adolescents perceiving high legitimacy of parental authority exhibited greater child disclosure ($\beta = 0.13$, $p = .001$) and high levels of child disclosure at Time 1 also predicted increased legitimacy of parental authority ($\beta = 0.12$, $p = .034$). Yet, effects were not sustained from Time 2 to Time 3. Contrary to our hypothesis, parental knowledge among mothers was not associated with legitimacy of parental authority in either direction or at either timepoint.

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Hypothesis 3 was partially supported. A significant association between alcohol use and parental knowledge among mothers was found from Time 2 to Time 3, whereby high alcohol use predicted decreased parental knowledge among mothers ($\beta = -0.09$, $p = .031$). Yet, in contrast to expectations, parental knowledge among mothers did not predict child alcohol use. Moreover, significant associations did not emerge between child disclosure and alcohol use across timepoints.

From Time 1 to 2, high parental knowledge among mothers predicted greater child disclosure ($\beta = 0.20$, $p < .001$) and high child disclosure predicted greater parental knowledge among mothers ($\beta = 0.15$, $p = .003$), which is supportive of a reciprocal association. Yet, these associations did not persist from Time 2 to Time 3.

Exploratory Analysis

In our exploratory multigroup analysis across biological sex, we did not observe a significant decrement in model fit when constraining paths to be equivalent for boys and girls. Specifically, the Satorra-Bentler scaled chi-square difference test (Satorra & Bentler, 2010) indicated that the constrained model did not differ significantly from the unconstrained model, $\Delta\chi^2$ (32) = 41.11, $p = .130$. Furthermore, in line with prior research (Cheung & Rensvold, 2002), the change in CFI between the unconstrained (CFI = 0.937) and constrained (CFI = 0.936) models was minimal (ΔCFI = 0.001). Accordingly, differences in specific effects across biological sex were not explored further.

Discussion

Using data collected from a community sample of youth and their mothers during early adolescence across three years, this study estimated a cross-lagged panel design investigating

possible bidirectional associations between child alcohol use, mother's parental knowledge, child disclosure, and child perceptions of legitimacy of parental authority.

Developmental Changes in Early Adolescence

Overall, we observed a decrease over time in adolescent reports of legitimacy of parental authority, parental knowledge among mothers, and adolescent reports of child disclosure. Concurrently, in line with national epidemiological data demonstrating normative increases in alcohol use throughout adolescence (Miech et al., 2023), a greater proportion of adolescents reported alcohol use at each annual assessment. From a developmental perspective, findings reflect adolescents' negotiations of greater autonomy from childhood to adulthood, whereby adolescents may become less comfortable confiding in and sharing information with their parents and wanting to gain more independence in their decision making (Bi et al., 2018).

Tests of Bidirectional Associations

Legitimacy of Parental Authority and Child Alcohol Use

Consistent with our hypothesis and with prior work, legitimacy of parental authority negatively predicted alcohol use across timepoints. This finding is congruent with prior work suggesting that low endorsement of parental legitimacy is associated with greater alcohol use or intentions to use alcohol by adolescents (Jackson, 2002). However, we did not find support for our hypothesis that child alcohol use would predict legitimacy of parental authority. A substantial proportion of adolescents who reported alcohol use did so with parental consent (89% at Time 1, 67% at Time 2, and 48% at Time 3); thus, this sanctioned use may not have had an influence on their perceptions of parental authority legitimacy across broader domains. Given our sample's low rates of use during an earlier period of adolescence, future work would do well to examine

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whether changes in perceptions of legitimacy of parental authority may manifest over a longer duration of consistent alcohol use.

Alcohol Use, Parental Knowledge, and Child Disclosure

While prior work has supported parental knowledge and child disclosure as antecedents of alcohol use (Kerr et al., 2012) our findings are novel in that parental knowledge among mothers was found to be reduced in *response* to alcohol use from Time 2 to Time 3, supporting the maladaptive cycle proposed by the Coercive Theory (Patterson, 1982). Child disclosure and parental knowledge among mothers were not meaningful predictors of alcohol use, contrary to prior research (Kerr et al., 2012). Prior work, which has relied on adolescent reports of disclosure, suggests that adolescent reports may be better predictors of outcomes than parent reports (Abar et al., 2015). It is possible that parent perceptions of child disclosure and knowledge are misaligned with actual child disclosure and behavior (Abar et al., 2015).

Legitimacy of Parental Authority, Parental Knowledge, and Child Disclosure

Consistent with our hypothesis, findings support a bidirectional association between legitimacy of parental authority and child disclosure in early adolescence. That is, legitimacy of parental authority predicted greater child disclosure and child disclosure predicted greater legitimacy of parental authority. Yet, counter to expectations, these effects did not persist from Time 2 to Time 3. Nevertheless, these findings offer a valuable contribution to the field, as a strong association emerged across multiple reporters, which addresses biases in shared method variance.

As adolescents negotiate greater autonomy with age, they may become less likely to voluntarily disclose information regarding their behaviors, whereabouts, or peer affiliations to parents. Furthermore, prior work has found that youth are most likely to exert autonomy in the

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multidimensional domain of how and with whom they spend their free time compared to other domains of parental control (Darling et al., 2005). Our measures of legitimacy of parental authority, parental knowledge and child disclosure generally captured this multidimensional domain. This domain is also where parents often seek to exert control in order to regulate risky behaviors, like substance use (Darling et al., 2005). Monitoring over areas perceived by youth as beyond parents' jurisdiction may be a source of parent-child relationship conflict (Bi et al., 2018; Darling et al., 2005). Thus, taken together, this potential for conflict, the generalized nature of our measures, and a discrepancy in legitimacy beliefs between reporters, which prior work has associated with greater likelihood of substance use behaviors (Abar et al., 2015), may explain the observed diminished effect in later adolescence.

Limitations

While findings offer a novel contribution to the field by examining prospective dyadic data, which is often difficult to collect, it is important to note the following limitations. First, the overall prevalence of alcohol use within our sample was low, which is likely a reflection of the young age of the sample. This likely contributed to the non-significant auto-regressive effects of alcohol use across timepoints. Null auto-regressive effects for alcohol use have been noted in prior work highlighting inconsistencies over time in early adolescent self-reported alcohol use (Shillington et al., 2010). Another previous study estimating a cross-lagged panel model to explore reciprocal relations among adolescent and peer alcohol use and alcohol expectancies similarly noted inconsistent stability for adolescent alcohol use (Boyd et al., 2018). The researchers only included alcohol use for participants aged 15 and above, given the low rates of use (less than 10%) below age 15, and found a significant autoregressive effect for alcohol use only between the ages of 15 to 16. Boyd et al. (2018) emphasized the influence of alcohol use

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prior to age 15 on future use, further reinforcing our observations and the importance of focusing on younger adolescence to understand how early alcohol use patterns evolve over time. As such, despite the non-significant autoregressive effects in our study, we believe that exploring the associations between early adolescent alcohol use and familial factors remains essential to inform prevention programming. Nonetheless, caution is warranted when interpreting study findings. Future research should continue to examine these associations into late adolescence, as adolescents continue to negotiate greater autonomy, youth substance use becomes more normative, and rates of alcohol use increase (Trucco, 2020).

Second, alcohol use was self-reported, which is limited by accurate recall and honest responding. However, to minimize this concern, youth were asked whether they felt confident in their ability to honestly respond to sensitive questions. Across the three time points, nearly all youth reported that they were able to respond honestly (99.0% to 100.0%).

This study is strengthened by its use of multiple reporters, mitigating single reporter biases. However, mothers' perceptions of parental knowledge and child disclosure may not necessarily reflect accurate knowledge of their children's activities. Future studies will benefit from examining the degree to which parental perceptions of knowledge differ from adolescent reports of disclosure and examine how discrepancies across reporters might impact alcohol use. Another limitation is that our largely non-Hispanic White sample of above average socioeconomic advantage may not generalize to other populations. Parenting practices have been found to operate differently across racial and ethnic groups (Kim et al., 2018; Mrug & Windle, 2009). Cross-cultural differences may likewise emerge in children's perceptions of parental authority over their behaviors. For example, prior work has found that children born in the US were more likely to believe their parents had authority over issues than children in Chile and the

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Philippines, and their parents were also more likely to grant autonomy earlier in development (Darling et al., 2005). Thus, continued research is needed to examine the association between these constructs over time across different racial and ethnic groups. Our study sample was generally of above average socioeconomic status (SES). Prior work has found that parental knowledge may be stronger in families of low SES as a buffer to risk associated with greater neighborhood disadvantage (Bendezu et al., 2018). On the other hand, findings may be mixed, in that low SES families exhibit lower parental monitoring efforts overall (Mrug & Windle, 2009; Trucco, 2020). Such risk factors should be considered in future examinations of these reciprocal associations in more diverse, representative samples.

While acknowledging the small effect sizes and limited number of statistically significant effects observed in our study, it is crucial to highlight the incremental and nuanced contribution of our findings to the literature. The subtle patterns observed, despite their modest statistical impact, shed light on the evolving dynamics of adolescent behavior and parental roles over time (Trucco et al., 2021). For example, our finding that child disclosure is predictive of child-perceived legitimacy of parental authority, which subsequently predicts lower youth alcohol use, points to possible clinical implications of targeting parent-child relationship quality and communication early during adolescence. Furthermore, while much of the literature has focused on how parental behavior influences child outcomes, our findings also hint at the reverse: that child behavior can shape parental responses and strategies. Specifically, the positive reciprocal relationship between child disclosure and perceived legitimacy of parental authority underscores the bidirectional nature of parent-child interactions. Additionally, the observation that parental knowledge decreases in response to child alcohol use suggests that as children engage in riskier

behaviors, parents may feel less informed or even choose to distance themselves. More research is needed to further understand the mechanisms underlying these parent-child dynamics.

Clinical Implications

Increasing youth's perceptions of legitimacy of parental authority in early adolescence may help mitigate alcohol use. Clinical parenting interventions targeting how to maintain and communicate effective substance use-specific parenting via consistent expectations and boundaries may serve to bolster both parental self-efficacy and their perceived legitimacy in the eyes of their children. Moreover, child disclosure, a marker of open communication and a trusting relationship, was associated with greater parental knowledge and legitimacy of parental authority during early adolescence. From a prevention standpoint, this study informs the need to foster the parent-child relationship and increase youth's perceptions of parental support in order to encourage open, honest communication (Micalizzi et al., 2019). The finding of a positive reciprocal relationship between child disclosure and perceptions of parental legitimacy suggests that parenting interventions should not only address strategies to enhance open communication and trust but also foster an environment where children perceive parental rules and decisions as fair, thus encouraging greater voluntary disclosure and more effective parent-child dynamics, reducing the likelihood of risky behaviors in adolescents. Understanding parenting self-efficacy, or a parent's confidence in influencing their child's behavior and ensuring their well-being, may provide greater insight on parent-child interactions and children's perceptions of their parents' competence and authority. Future research should examine whether enhancing parenting self-efficacy has utility in promoting greater child disclosure.

The diminishing effects between child disclosure, parental knowledge, and legitimacy of parental authority over time underscore the role of increasing adolescent autonomy. Interventions

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to help parents balance effective monitoring with growing adolescent autonomy may have utility to help families provide appropriate guidance without infringing or creating areas of conflict. Additionally, interventions can harness this burgeoning sense of autonomy among adolescents by guiding them towards adaptive behaviors (e.g., extracurricular activities, sports, or hobbies) that are independent of parental influence, instead of risky behaviors. Through a multidimensional, comprehensive, and tailored approach, clinicians can work collaboratively with families to foster supportive environments that support youth resilience against alcohol use during early adolescence.

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Table 1. *Descriptive statistics*

		Time 1		Time 2		Time 3	
Reporter	Measure	M	SD	M	SD	M	SD
Child	Legitimacy of parental authority (1-5)	3.89	0.53	3.82	0.54	3.70	0.57
	Alcohol use (days)	0.60	3.27	1.15	6.20	1.52	4.84
Mother	Parental knowledge (1-5)	4.54	0.32	4.47	0.34	4.36	0.37
	Child disclosure (1-5)	4.27	0.53	4.13	0.57	4.06	0.62
Child	Age	12.10	0.58	13.13	0.58	14.11	0.58
	Sex (% female)	57.20		-		-	
	Race and ethnicity (%)						
	Non-Hispanic White	84.50		-		-	
	Black/African American	7.60		-		-	
	Hispanic	2.00		-		-	
	Other Race	5.90		-		-	
	Past year alcohol use (1+ drinking day; %)	15.33		22.70		33.00	
	Lifetime alcohol use (cumulative; %)	27.63		43.42		51.97	
Mother	Age	42.24	5.90	43.33	5.91	44.32	5.87
	Education level (%)			-		-	
	Some high school	2.60		-		-	
	High school graduate	12.50		-		-	
	Technical school or some college	26.40		-		-	
	College graduate	37.20		-		-	
	Graduate or professional school	21.40		-		-	
	Family characteristics			-		-	
	Receiving public assistance (%)	5.90		-		-	
	Marital status (%)						
	Married	77.60		-		-	
	Divorced or separated	11.80		-		-	
	Single, never married	9.20		-		-	
	Living with partner	1.30		-		-	

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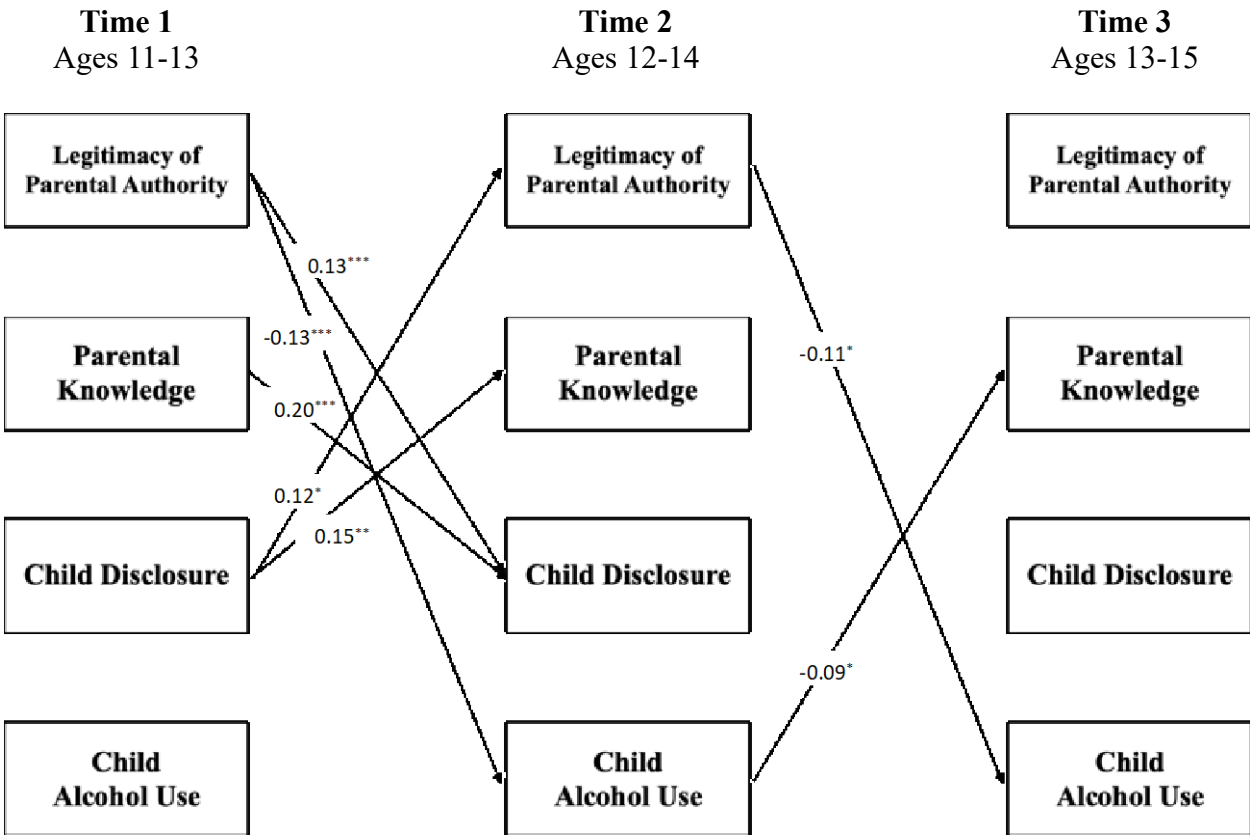
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Table 2. *Correlations for model variables*

Model Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1) T1 Legitimacy of Parental Authority (LPA)	--													
(2) T1 Alcohol Use	-.12*	--												
(3) T1 Parental Knowledge	.19**	-.01	--											
(4) T1 Child Disclosure	.17**	.01	.56***	--										
(5) T2 LPA	.60***	-.04	.25***	.25***	--									
(6) T2 Alcohol Use	-.13*	.09	-.03	.03	-.17**	--								
(7) T2 Parental Knowledge	.20***	-.01	.69***	.49***	.29***	-.03	--							
(8) T2 Child Disclosure	.25***	.01	.50***	.63***	.38***	-.01	.62***	--						
(9) T3 LPA	.54***	-.07	.13*	.21***	.70***	-.11	.19***	.25***	--					
(10) T3 Alcohol Use	-.11	.02	-.06	-.02	-.14*	.13*	-.12*	-.06	-.17**	--				
(11) T3 Parental Knowledge	.14*	.01	.58***	.40***	.25***	-.11	.72***	.50***	.22***	-.16**	--			
(12) T3 Child Disclosure	.10	.03	.41***	.54***	.231***	-.04	.46***	.70***	.24***	-.10	.60***	--		
(13) T1 Child Sex[a]	.20***	-.09	-.04	.08	.20***	-.06	-.03	.14*	.22***	.03	.02	.11*	--	
(14) T1 Child Age	-.11*	-.04	-.11	-.06	-.17**	.08	-.23***	-.17**	-.21***	.18**	-.27***	-.12*	-.03	--

Note. $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$; [a] 0 = male, 1 = female

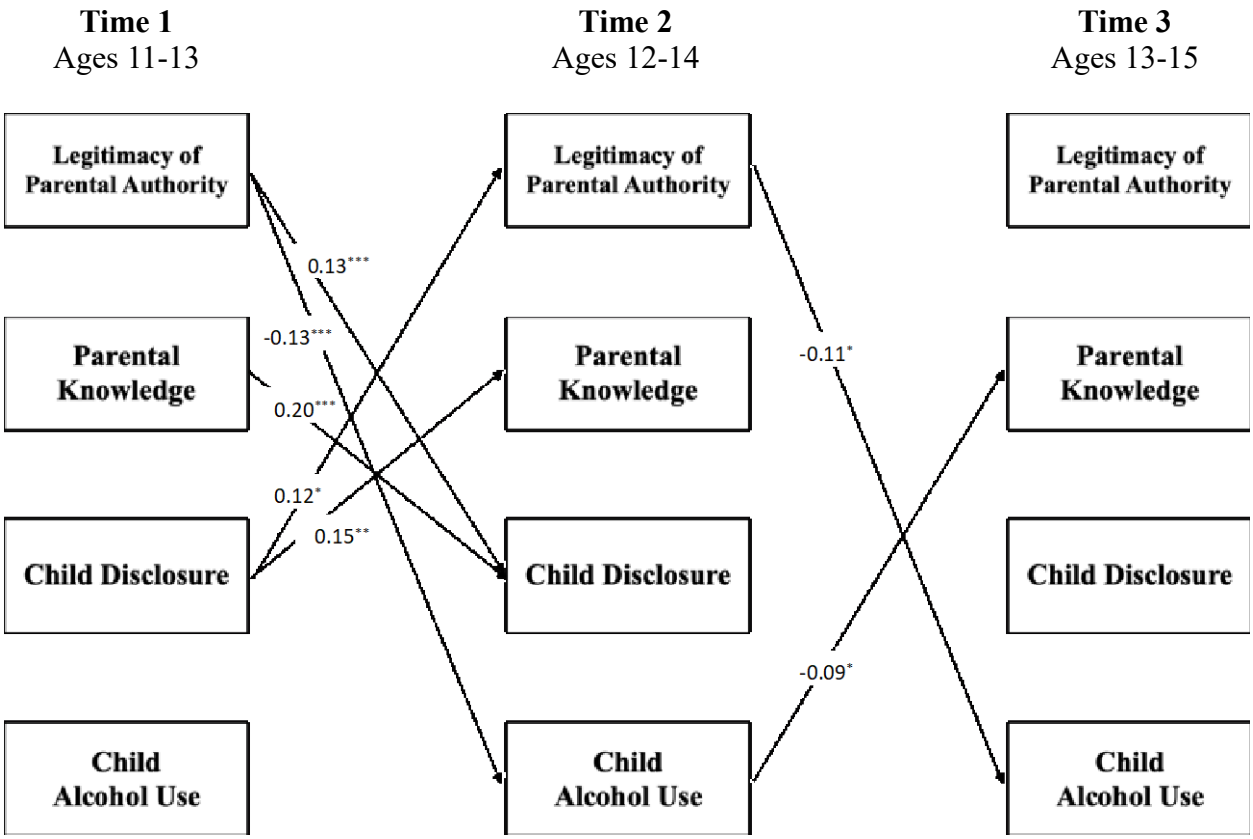
Figure 1. *Significant standardized parameter estimates relating parent reports of parental knowledge and child disclosure and child reports of perceived legitimacy of parental authority to child alcohol use.*



Note. For simplicity of presentation, auto-regressive effects and covariances within timepoints are not presented. All auto-regressive effects were significant and positive for legitimacy of parental authority, parental knowledge, and child disclosure. Auto-regressive effects for child alcohol use were not significant (Time 1 to Time 2: $\beta = 0.08$, $p = .077$; Time 2 to Time 3: $\beta = 0.10$, $p = .093$). See *Supplemental Tables* for covariances and additional pathways not depicted. *$p < .05$; **$p < .01$; ***$p < .001$.

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