

Psychometric Properties of a Comprehensive Parenting Practice Measure for Parents of Adolescents

Barry Ladis 1 · Elisa M. Trucco 2 · Hui Huang 1 · Barbara Thomlison 1 · Nicole M. Fava 3

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Abstract

Many measures exist that assess parenting skills and practices. Few comprehensive measures for parents of adolescents (13–17 years) exist. The aim of the current study was to develop a comprehensive assessment measure of parenting practices based on items from existing measures. Research and clinical settings can benefit from the advancement of a valid and more inclusive measure of parenting to assess youth behavior and functioning. This study utilized a sample that included 387 caregivers and youth (mean age of youth = 13.6, SD = .59) from a longitudinal study examining contextual influences on youths' substance use initiation. Exploratory factor analysis (EFA) was conducted on 12 parent-report measures of parenting. Confirmatory factor analysis (CFA) was conducted on a second sample, which included peers (N = 362, mean age of peers = 13.6, SD = 1.09) and peers' caregivers of the youth included in the original sample. The EFA results indicated a three-factor solution (i.e., parental knowledge and affective relationships, parental control, parental communication and involvement), which was supported in the CFA. The final measure demonstrated strong internal consistency and satisfactory convergent and discriminant validity. This study supported the sound psychometrical features of the Parenting Practice Measure (PPM), a comprehensive measure of parenting quality for adolescent samples. The PPM can serve as a tool for clinicians to design more targeted treatment plans and evaluate the effectiveness of treatments when working with parents with children in the early teenage years.

Keywords Parenting practice measure · Adolescents · Parental knowledge · Parental control · Parental involvement

The quality of parenting is critical for the development of adaptive functioning in youth (e.g., behavioral functioning, academic performance, mental health, psychological adjustment, social functioning; Luk, King, McCarty, Stoep, & McCauley, 2016). In particular, parenting is regarded as a strong predictor of life-course outcomes. Providing practitioners and researchers with a valid comprehensive measure of parenting could increase precision in determining areas of parenting that could be targeted in treatment and

provide a more nuanced understanding of parental risk and protective factors that may prevent the emergence of a wide range of mental health and substance use problems. Despite wide acceptance of the multifaceted makeup of parenting, few measures exist that capture multiple aspects of overall parenting with good reliability, particularly for adolescents (Lindhiem & Shaffer, 2017; Smith, 2011). This may be due in part to the inherent complexity of effectively quantifying all relevant aspects of this critical socialization context with one measure. The aim of the current study was to develop a comprehensive and psychometrically sound measure of overall parenting quality inclusive of a variety of critical parenting dimensions for adolescent outcomes.

Elisa M. Trucco etrucco@fiu.edu

- Robert Stempel College of Public Health and Social Work, Florida International University, Miami, FL, USA
- Department of Psychology & Center for Children and Families, Florida International University, 11200 SW 8th Street, AHC1 237, Miami, FL 33199, USA
- Robert Stempel College of Public Health and Social Work & Center for Children and Families, Florida International University, Miami, FL, USA

Parenting Dimensions

There is consensus on the existence of two multifaceted dimensions of parenting: parental warmth and parental control (e.g., Baumrind, 1978; Harkness & Super, 1992; Jacob,



Moser, Windle, Loeber, & Stouthamer-Loeber, 2000). Parental warmth reflects the affective nature of the parent-child relationship as indicated by involvement, praise, warmth, and emotional availability (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2006). In contrast, the parental control dimension reflects behaviors directed at the child to shape behavior viewed as acceptable by the parent as indicated by discipline, supervision, and setting rules regarding youth behavior (Barnes et al., 2006; Darling & Steinberg, 1993). Both parental warmth and control are viewed as positive parenting behaviors that increase adaptive functioning among youth. For example, high levels of parental warmth predicted high levels of children's empathy (Zhou et al., 2002) and social competence (Raver, Gershoff, & Aber, 2007), whereas low levels of parental warmth were associated with oppositional defiant disorder/conduct disorder (Kroneman, Hipwell, Loeber, Koot, & Pardini, 2011) and depression (Hipwell, Keenan, Kasza, Loeber, Stouthamer-Loeber, & Bean, 2008). Similarly, higher levels of parental control predicted lower rates of adolescent substance use (Alati et al., 2010) and conduct problems (Racz & McMahon, 2011).

A specific aspect of parental control, parental monitoring, has gained widespread attention given its strong association with adolescent problem behavior and substance use (Barnes et al., 2006; Trucco, Villafuerte, Heitzeg, Burmeister, & Zucker, 2016). Researchers have questioned interpretations of how the construct is operationalized (Kerr, Stattin, & Burk, 2010). Specifically, early research defined parental monitoring as active efforts by the parent to monitor and track their child's whereabouts, activities, and associations (Dishion & McMahon, 1998). Yet, items on empirical measures of parental monitoring tend to reflect actual knowledge of children's activities rather than active tracking efforts (Kerr & Stattin, 2000). This is a notable distinction, as parents can obtain this knowledge in multiple ways, including active monitoring, parental solicitation, as well as voluntary youth disclosure (Kerr et al., 2010). To capture the various aspects of parental monitoring, Kerr and Stattin (2000) developed a measure that assesses each of these approaches (i.e., active monitoring, parental solicitation, youth disclosure) separately and advocated for the use of the term parental knowledge in cases where active parental tracking efforts are not directly assessed. Despite strong support for parental monitoring/knowledge as a robust predictor of child and adolescent problem behavior (e.g., Abar, Jackson, & Wood, 2014; Trucco et al., 2016), this construct is often omitted from general measures of parenting.

Although parental warmth, control, and monitoring are conceptually distinct, they also have substantial overlap. Namely, parents who are high in parental warmth also tend to employ clear limit setting and expectations for their children (e.g., indicative of moderate parental control; Darling & Steinberg, 1993). Previous work demonstrates a strong

correlation between parental warmth and parental control domains, which supports the co-occurrence of both practices among mothers and fathers (Barber, Olsen, & Shagle, 1994; Kuppens et al., 2009). As noted previously, parental monitoring is typically considered a subcategory of parental control, as the overarching goal of monitoring is to manage and regulate child behavior (Crouter & Head, 2002). Parental knowledge, especially through voluntary child disclosure, also has a strong association with aspects of parental warmth. Parental knowledge is acquired primarily in the context of an open and trusting parent—child relationship through parents' interest in their child's activities as well as a child's comfort in disclosing this information to parents (Kerr et al., 2010). Thus, it is likely that these parental warmth and control domains are interrelated.

Assessing Parenting

To date, a valid, comprehensive, questionnaire-type measure of overall parenting quality that encompasses key domains within the broad areas of control and warmth does not exist (Hurley, Huscroft-D'Angelo, Trout, Griffith, & Epstein, 2014). In their comprehensive review of parenting measures, Hurley et al. (2014) identified 164 measures published from 1985 to 2009. Among them, the authors found 25 measures that supplied some degree of psychometric information. After thorough comparison, the authors reported that only five measures (i.e., the Child Abuse Potential Inventory, Alabama Parenting Questionnaire [APQ], Parenting Alliance Measure, Parenting Scale and Parent Child Relationship Inventory) provided comprehensive psychometric data. Except for the APQ, the other four measures focused on different domains of parenting. Assessments that focus on a specific domain of parenting fall short of assessing the wide range of attitudes and behaviors that have a significant impact on the developing child.

Two measures that attempted to capture the depth and breadth of parenting domains are The Loeber Youth Questionnaire (LYQ; Jacob et al., 2000) and the APQ (Frick 1991; Shelton, Frick, & Wootton, 1996). Both the LYQ and the APQ parenting measures do not meet acceptable psychometric properties for use in research or clinical settings consistent with prior reviews (Holden & Edwards, 1989; Locke & Prinz, 2002). The APQ includes six parenting domains: involvement, positive parenting, poor monitoring/supervision, inconsistent discipline, corporal punishment, other discipline practices. In their original psychometric paper, the authors tested four assessment formats: parent and child questionnaire and interview formats (Shelton et al., 1996). There were several issues identified with the APQ. First, both child formats failed to differentiate families of children with disruptive behavior disorder diagnoses and control



group families, which calls into question the validity of these assessments. Second, although the parent-report formats distinguished between families of children with disruptive behavior disorder diagnoses from control families, the poor monitoring/supervision scale demonstrated low internal consistency (Cronbach's α ranges from .21 to .67 across formats) and low temporal stability over a 3-day period. Third, the parent-report of the corporal punishment scale had low internal consistency across formats (Cronbach's α ranges from .09 to .49). Thus, developing a comprehensive assessment measure of parenting that is psychometrically sound is critical in advancing the field.

Current Study

One approach to address the current lack of parenting assessments is to create a comprehensive measure of parenting practices utilizing items from already established measures. By integrating both psychometrically strong measures that tap into a specific parenting domain, as well as less psychometrically strong measures that tap into broader parenting domains, we will leverage the strengths associated with both approaches towards assessing parenting. In the current study, data from 14 established parenting subscales were analyzed to identify key domains of parenting intended for a community sample of parents and their children in their early teens. These specific subscales were selected as they represent either broad dimensions of parenting that are relevant across a wide developmental period (e.g., involvement, discipline), or parenting practices that are critical during adolescence (e.g., parental knowledge, solicitation, and reactions to child substance use). First, an exploratory factor analysis (EFA) was conducted on data from adolescents within a community sample of families to identify the underlying structure of the 14 parent-report subscales. Psychometric properties (i.e., reliability, convergent validity, discriminant validity) were examined. Second, confirmatory factor analysis (CFA) using the structure identified in the EFA was conducted on data from a separate community sample. These approaches aided us in developing the Parenting Practice Measure (PPM), a comprehensive measure of parenting quality for adolescent samples.

Method

Sample

The current study was based on a community sample of 387 families (a caregiver and adolescent from each) from Erie County, New York, enrolled in the Adolescent Family and Development Project (AFDP) (Meisel, Colder, & Hawk,

2015). The AFDP is ideal for the development of a comprehensive measure of parenting given that it contains data from parents and adolescents on a large number of parenting measures. This longitudinal study investigates behavior problems and social contextual influences as risk factors for substance use initiation. The study used a randomdigit-dial sample of listed and unlisted telephone numbers generated for Erie County, New York. Calls were made by trained telephone recruiters utilizing scripts that explained the nature of the study, inclusion criteria, and compensation for participation. The participation rate was 52.4% which is well within the range of that found in population-based studies requiring extensive levels of participant involvement (Galea & Tracy, 2007). Eligibility criteria for recruitment included an English-speaking child between the ages of 10 and 12 years without any physical impairments or cognitive deficits that would preclude completion of the study procedures and a caregiver willing to participate. One caregiver and one child per household were recruited. The initial wave consisted of 387 target families. The sample was roughly evenly split on sex (N=213,55% female). The majority were White/non-Hispanic (83%), 9% were Black, 2% were Hispanic, 1% were Asian, and 5% were categorized by another racial category. Median family income was \$70,000 and 6% received public assistance income. The majority of parents had completed college or some graduate/professional school (58%). The sample compares well to the general population in Erie County, NY across a diverse set of characteristics including sex, race/ethnicity, income, and receipt of public assistance (US Census Bureau, 2012). Participating families were asked to provide the names and contact information of the youth's three closest friends. One of the youth's peers, as well as one of the peer's caregivers, were also asked to participate in the study. The initial wave consisted of 362 peer families.

Procedure

Target family interviews were conducted in a research laboratory on a university campus. Peer families were given a choice to complete the interview on campus or at their house. Prior to the interview, the caregiver and adolescent were asked to give consent and assent, respectively. Participants were taken to the same room and study procedures were explained to both the caregiver and the adolescent. The consent and the assent forms were read verbatim to both the caregiver and the adolescent. Parents were asked to give consent and adolescents were asked to give assent after study procedures were discussed and questions regarding the study were answered. After completing the consent/assent procedures, the caregiver and adolescent were taken to separate rooms to enhance privacy. Caregivers completed a variety of self-report measures reflecting their own behavior (e.g.,



parenting practices, substance use) as well as their perception of their child's behavior (e.g., aggression, temperament). All questionnaires were read aloud, and responses were entered directly into a computer to minimize the occurrence of random responding and missing data points. The Institutional Review Board at the university where this study took place approved this study.

Total attrition for the study was 7.5% (29/387). This study used only the Wave 3 data. The Wave 3 assessment occurred approximately 2 years after the baseline appointment. Families that did not complete the Wave 3 assessment (N = 20) did not differ on any demographic or study variables at baseline compared to those who completed the Wave 3 assessment. In total, 370 target families and 326 peer families participated in the Wave 3 data collection. The mean age for target youth at Wave 3 was 13.6 (SD = .59) years old and peer youth was 13.6 (SD = 1.09) years old. The mean age for target caregivers was 44.9 (SD = 6.18) years old and peer caregivers was 44.3 (SD = 6.54) years old at Wave 3.

Measures

is presented in Table 1.

Parent-Report Measures Used as Indicators of Parenting

Additional sample demographic information from Wave 3

A total of 14 self-report parenting subscales were included in the EFA. The sum scores of each subscale were included in the EFA, and thus, item refers to subscale scores. The same measures were used for the CFA among peer families. The first three subscales—(1) parental monitoring, (2) child disclosure, and (3) parental solicitation—were extracted from a measure developed by Kerr and Stattin (2000). Six other subscales—(4) shared activities, (5) parental involvement with the child, (6) time spent with the child, (7) positive parenting, (8) parent—child relationships, and (9) curfew—were taken from the LYQ (Jacob et al., 2000). Three other subscales—(10) parental efficacy, (11) smoking norms, and (12) alcohol norms—were derived from the work of Kodl

Table 1 Youth caregiver and peer caregiver wave 3 demographic comparisons

Categorical variables	Youth caregiver (N = 370)	Peer caregiver (N = 326)		
	N (%)/mean (SD)	N (%)/mean (SD)	Chi Square/T test	p value
Sex				
Male caregivers	48 (13%)	29 (9%)	2.928	.087
Female caregivers	322 (87%)	297 (91%)		
Marital status				
Married	278 (75%)	249 (76%)	5.800	.215
Divorced/separated	56 (15%)	38 (12%)		
Single/never married	28 (8%)	23 (7%)		
Widowed	3 (1%)	4 (1%)		
Living with a romantic partner	5 (1%)	12 (4%)		
Education level				
Some high school	12 (3%)	7 (2%)	5.124	.528
High school graduate/some college	143 (37%)	125 (38%)		
College graduate	133 (40%)	127 (39%)		
Graduate	82 (20%)	67 (21%)		
Public assistance				
Yes	46 (12%)	35 (11%)	.485	.486
No	324 (88%)	291 (89%)		
Hispanic/ethnicity				
Yes	6 (2%)	11 (3%)	2.234	.135
No	364 (98%)	315 (97%)		
Race identity				
White	323 (87%)	287 (88%)	1.741	.783
African American	33 (9%)	29 (9%)	1.132	.258
Other	14 (4%)	10 (3%)	301	.763
Caregiver age	44.9 (6.185)	44.35 (6.540)	.903	.367
Youth Age	13.6 (.585)	13.6 (1.09)		
Annual family income	83,662 (62,643)	88,246 (67,301)		



and Mermelstein (2004). The remaining two subscales, (13) obligations to disclose (Smetana, Metzger, Gettman, and Campione-Barr, 2006) and (14) parental authority, were derived from the Adolescents and Parents Conceptions of Parental Authority scale developed by Smetana (1988). A brief description of these 14 subscales and their reliability follow.

- (1) Parental monitoring/knowledge This subscale consisted of nine items scored using a Likert scale ranging from 1 (Never) to 5 (Always) to assess parents' knowledge of their child's whereabouts, activities, and associations (α = .74). Participants were asked questions such as, "Do you know what your child does during his/her free time?" and "Do you know whom your child has as friends during his/her free time?"
- (2) Child disclosure This subscale consisted of five items scored using a Likert scale ranging from 1 (Never) to 5 (Always) to assess how much their children provide information about their whereabouts, activities, and associations (α =.76). Participants were asked questions such as, "Does your child talk at home about how he/she are doing in the different subjects in school?"
- (3) Parental solicitation This subscale consisted of five items scored using a Likert scale ranging from 1 (Never) to 5 (Always) to assess if parents actively solicit information about their child's whereabouts, activities, and friendships (α =.67). Participants were asked questions such as, "In the last month, have you talked with the parents of your child's friends?"
- (4) Shared activities This subscale consisted of four items scored using a Likert scale ranging from 1 (More than 1 month ago) to 4 (Yesterday/today) to assess topics that parents and their children may have talked about or shared activities in the past 6 months (α =.78). Participants were asked questions such as, "When was the last time that you discussed with your child his/her plans for the coming day?" and "When was the last time you talked with your child about what he/she had done during the day?"
- (5) Parental involvement with child This subscale consisted of five items scored using a Likert scale ranging from 1 (Almost never) to 3 (Often) to assess the level of parental involvement (α = .64). Participants were asked questions such as, "How often do you have a friendly chat with your child?" and "Do you talk with your child about how he/she is doing in school?"
- (6) Time spent with child This subscale consisted of four items scored using a Likert scale ranging from 1 (Almost never) to 3 (Often) to assess parental involvement (α = .80). Participants were asked questions such as, "On the average, how much time each day are you

- together with your child on weekdays, that is, when you and your child are both awake?" and "On weekdays, how much of that time are you doing something together, like making something, playing a game, talking, or going out together?"
- (7) Positive parenting This subscale consisted of eight items scored using a Likert scale ranging from 1 (Almost never) to 3 (Often) to assess the type and frequency of parental praise (α = .73). Participants were asked questions such as, "In the past 6 months, when your child did something that you liked or approved of, how often did you give him/her a wink or smile?"
- (8) Parent–child relationships This subscale consisted of 15 items scored using a Likert scale ranging from 1 (Almost never) to 3 (Often) to assess the nature and quality of the parent–child relationship (α = .80). Participants were asked questions such as, "In the past 6 months, how often did you think your child was a good kid?" and "Felt proud of him/her?"
- (9) Curfew This subscale consisted of three items scored using a Likert scale ranging from 1 (No set time) to 3 (Always set time) to assess curfew policies (α = .69). Participants were asked questions such as, "Does your child have a set time to be home on school nights?"
- (10) Parental efficacy This subscale consisted of 14 items scored using a Likert scale ranging from 1 (Not at all confident) to 10 (Extremely confident) to assess how confident parents feel about their influence on child behavior (α = .89). Participants were asked questions such as, "How confident are you that you can keep your child away from the wrong kinds of kids?"
- (11 and 12) Reactions to child cigarette/alcohol use

 These subscales consisted of 22 items each scored using a Likert scale ranging from 1 (Not at all likely) to 4 (Very likely) to assess parental beliefs, messages, and reactions to youth smoking/drinking (α=.75 and .76, respectively). Participants were asked questions such as "If you knew your child smoked/drank alcohol or tried smoking/alcohol, how likely is it that you would yell at him/her in disapproval?"
- (13) Obligations to disclose This scale consisted of 14 items on a Likert scale that ranged from 1 (Never) to 5 (Always) to assess caregiver perceptions of their child's duty to disclose their behavior (α =.88). Participants were asked questions such as "Without you asking, how often does your child tell you or is willing to tell you about the following things? Hanging out at a friend's house when no adult is home."
- (14) Parental authority This scale consisted of 20 items scored using a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) to assess parents' conceptions of the legitimacy of their parental authority across multiple domains (α =.90). Participants were



asked questions such as, "It is ok for me to make rules about what my child does after school."

Measures to Assess Convergent Validity

A child-report measure and a parent-report measure were used to assess convergent validity with factors derived from the EFA. That is, it was hypothesized that the following two constructs would be correlated with the factor scores.

Parental Demandingness

This child-report scale consisted of five items scored using a Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*) adopted from the Parenting Style Inventory (Darling & Toyokawa, 1997; α =.66). Participants were asked to rate their level of agreement on questions such as, "If I don't behave myself, my parent will punish me."

Parental Control

This subscale included five items scored using a Likert scale ranging from 1 (*Never*) to 5 (*Always*; Kerr & Stattin, 2000; α =.66). Participants were asked questions such as "If your child has been out late one night, do you require that he/she explains what he/she did and who he/she was with?"

Measures to Assess Discriminant Validity

Two parent-report measures, and a child-report measure were used to assess discriminant validity with factors derived from the EFA. That is, it was hypothesized that the following three constructs would not be correlated with the factor scores.

Parental Depression

This scale was comprised of 20 items scored using a Likert scale ranging from 0 (*Never*) to 3 (*Often*). It was adopted as the Center for Epidemiologic Studies Depression Scale (Radloff, 1977; [α =.91]). Participants were asked how they have been feeling in the past month such as, "Were you bothered by things?" and "Did you feel depressed?"

Caregiver Injury and Conflict

This scale was comprised of six items scored using a Likert scale ranging from 1 (*Once in the past year*) to 8 (*This has never happened*) from the Revised Conflict Tactics Scales (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Participants were asked questions about their relationship with their significant other/romantic partner/spouse who lives in the home and who is involved with caring for their child

(α =.75). For example, participants were asked how many times they "accused their partner of being a lousy lover" and "threatened to hit or throw something at their partner."

Current Nicotine Dependence

This scale was comprised of six items adopted from the Fagerstrom Test for Nicotine Dependence (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991; (α = .70) to measure child's nicotine dependence. Participants were asked questions such as "at present, do you find it difficult to refrain from smoking in places where it is forbidden?"

Data Analyses

First, an EFA was conducted using IBM Statistical Package for Social Science (SPSS) version 22.0 (IBM SPSS Corp, 2013) to identify the underlying structure of the 14 subscales using the target family data. Prior to the EFA, the data were tested for assumptions of normality and multivariate outliers. One variable, shared activities, showed a departure from normality with skewness of -2.69 (SE=.13) and kurtosis of 8.39 (SE=.25). Accordingly, a reciprocal transformation was conducted, which resulted in reduced skewness of -1.67 (SE=.13) and kurtosis of 1.55 (SE=.25). Seven multivariate outliers were identified, and therefore, eliminated. No missing data existed across the variables.

After assumption testing, variables were standardized so that they were on the same metric prior to performing analyses and data were further screened to determine adequacy for factor analysis. A viable factor analysis requires each item to be correlated with at least one other item at the level of .30 or greater (Tabachnick & Fidell, 2007). A review of the factor correlation matrix showed that 12 of the 14 items had correlations greater than .30. Two items (i.e., positive parenting and curfew) with correlation values below .30 were removed from further analyses.

Following a review of the data, EFA models using principal axis factoring extraction were conducted. This approach was preferred over principal components analysis, because it does not inflate variance estimates since it only analyzes shared variance, which, in turn, has the advantage of producing more generalizable and reproducible results (Costello & Osborne, 2005). To help improve interpretability and scientific utility of the solution, oblique rotation with direct oblimin was used to maximize high correlations between the factors. Decisions on how many factors to retain were evaluated using Kaiser's eigenvalue greater than 1 criterion (Kaiser, 1960), Cattell's Scree Test (Cattell & Vogelmann, 1977), and cumulative variance tests. Bartlett factor scores were extracted for further analyses. Bartlett factor scores



maximize validity (DiStefano, Zhu, & Mindrila, 2009) provide unbiased estimates of true factor scores (Hershberger, 2005).

Next, psychometric properties of the retained factors were examined. This included examining internal consistency as well as convergent and discriminant validity. To assess convergent validity, bivariate correlation tests were conducted between factor scores and child-report of parental demandingness and parent-report of parental control. We hypothesized that higher scores on parenting factors would be positively associated with child-report of parental demandingness and parent-report of parental control. To assess discriminant validity, bivariate correlation tests were conducted between factor scores and child-report of nicotine dependence and parent-report of parental depression and caregiver injury. We hypothesized that parenting factors would not be associated with these variables.

A CFA was used to test whether the factor structure identified in the EFA fits a separate sample. Since the current study used two different groups of caregivers in the EFA and CFA respectively, it was important to measure demographic differences between target and peer caregivers. As presented in Table 1, results show that caregivers from target families did not significantly differ from caregivers from peer families. Before running the analyses, tests were conducted for possible violations of normality, outliers, and multicollinearity. The shared activities subscale had a kurtosis value above 7 (kurtosis = 17.35) and a skewness with the absolute value above 2 (skewness = -3.80), indicating nonnormality (Fabrigar et al., 1999). Consistent with the target family data, a reciprocal transformation was conducted on shared activities. Nevertheless, multivariate non-normality was still not within acceptable normality limits based on the skewness of -2.04 (SE = .135) and kurtosis of 3.36 (SE = .269). Thus, the CFA was conducted using Mplus version 7 (Muthén & Muthén, 1998-2015) as it offers a choice of Robust Maximum Likelihood (MLR) estimation, which allows for parameter estimates with standard errors that are robust to multivariate non-normality and multivariate outliers (Byrne, 2016).

Results

The results of the EFA demonstrate that three factors had eigenvalues over Kaiser's (1960) criterion of 1 (Table 2). Analysis of the inflection of the scree plot also confirmed retaining three factors. The pattern matrix derived using oblique rotation (with oblimin) indicated that all variables had standardized factor scores above .32, which is the minimum utilized in most social science research (Tabachnick & Fidell, 2007). There was no evidence of double-loading. In addition, the overall measure (α =.78) and all individual

Table 2 Eigenvalues and total variance explained across possible extracted factors

Component number	Initial Eigen- values	% of variance	Cumulative %
1	3.781	31.509	31.509
2	2.288	19.067	50.576
3	1.080	8.997	59.573
4	.843	7.023	66.595
5	.768	6.399	72.995
6	.738	6.152	79.147
7	.660	5.498	84.643
8	.524	4.367	89.010
9	.488	4.069	93.078
10	.423	3.526	96.604
11	.289	2.408	99.011
12	.119	.989	100.000

factors demonstrated good internal consistency ($\alpha = .75$ for Factor one, $\alpha = .72$ for Factor two, and $\alpha = .71$ for Factor three). The factor loadings and the Cronbach's alphas for each factor are shown in Table 3.

The three-factor solution accounted for 59.6% of the total variance explained (Table 2). Factor one, *parental knowledge and affective relationships*, accounted for 31.5% of the total variance explained based on the following four items: parental monitoring, child disclosure, obligations to disclose, and parent—child relationships. Factor two, *Parental Control*, accounted for 19.1% of the total variance explained based on the following four items: legitimacy of parental authority, parental efficacy, and reactions to child cigarette and alcohol use. Factor three, *parental communication and involvement*, accounted for 9% of the total variance explained based on the following four items: shared activities, parental solicitation, time spent with the child, and parental involvement with child.

Results of correlations between factors, convergent and discriminant validity tests, demonstrated satisfactory construct validity. Factor one and factor three were highly correlated (r = .63). As expected, parental control and parental demandingness were correlated with each of the three factors. The highest correlations were found between relevant measures of parental control and the parental communication and involvement factor (r = .32). One exception to these findings involved the correlation between parental control and the child-report of parental demandingness. Although significant (p < .001), this correlation (r = .16) was lower than anticipated. Also, as expected, child nicotine dependence, parental depression, and caregiver injury and conflict were not significantly correlated with any of the three factors with one exception. Parental depression was negatively correlated with parental communication and involvement (see Table 4).



Table 3 Factor loadings for the three-factor solution and Cronbach's alpha

Item	Factor 1—parental knowledge and affective relationships	Factor 2— parental control	Factor 3—parental communication and involvement
Child disclosure	.954	017	097
Obligations to disclose	.667	.108	.043
Parental monitoring	.627	.102	.133
Parent-child relationships	.350	174	.053
Smoking norms	093	.940	136
Alcohol norms	104	.907	024
Parental authority	.127	.370	.210
Parental efficacy	.227	.360	.097
Shared activities	071	098	.668
Parental solicitation	.123	.096	.611
Time spent with child	023	.100	.540
Parental involvement with child	.220	121	.512
Cronbach's alpha (α)	.75	.72	.71

Bold values indicate target loadings

Table 4 Correlations between factors and measures selected for convergent and discriminant validity

Validity type/item	Factor one—parental knowledge and affective relationships	Factor two—parental control	Factor three—parental communication and involvement
Convergent			
Parental control	.278***	.264***	.317***
Parental demandingness	.190***	.165***	.217***
Discriminant			
Parental depression	068	017	110*
Caregiver injury	036	072	.105
Current nicotine dependence	051	.019	034

p < .05, **p < .01, ***p < .001

Next, a CFA was used to test whether the factor structure identified for the 12 retained parenting scales in the EFA fit a similar sample. That is, parental monitoring, child disclosure, obligations to disclose, and parent-child relationships were added as indicators to the first latent variable (parental knowledge and affective relationships); legitimacy of parental authority, parental efficacy, and reactions to child cigarette and alcohol use were added as indicators to the second latent variable (parental control); and shared activities, parental solicitation, time spent with child, and parental involvement with child were added as indicators to the third latent variable (parental communication and involvement). The loading for the first item of each factor was fixed to one. Given the correlation between parental knowledge and affective relationships and parental communication and involvement from the EFA (r = .63), these factors were set to covary.

Overall, the CFA model using a similar sample demonstrated acceptable fit (Fig. 1). Although the Chi square was significant (χ^2 (53)=170, p<.01) as expected given the large sample size, the relative normed Chi square

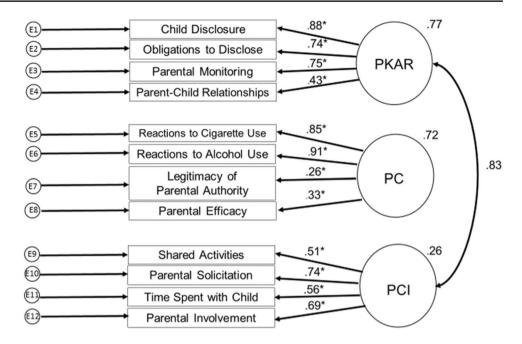
(170/53=3.2) indicated good model fit. The CFI (.89) and TLI (.87) both indicated acceptable fit. Lastly, the RMSEA (.08) also indicated acceptable model fit. All parameter estimates loaded in the expected direction with adequate size (p < .05). The only factor loading value below the recommended cutoff of .30 was parental authority (.26) within the parental control factor. However, this is consistent with the estimates derived from the EFA results. The loadings for all other variables were between .33 and .91. Consistent with the EFA results, parental knowledge and affective relationships and parental communication and involvement were strongly correlated (r = .83).

Discussion

The primary objective of this study was to develop a comprehensive and psychometrically sound assessment measure of parenting quality for adolescents. The results from the EFA and an independent sample CFA were consistent and



Fig. 1 CFA model path diagram. PKAR parental knowledge and affective relationships (Factor one), PC parental control (Factor two), and PCI parental communication and involvement (Factor three). Goodness of Fit Indices: Chi Square = χ^2 (53) = 170, p < .01; Relative/normed Chi square $(\chi^2/DF) = 3.2$; Standardized root mean square residual (SRMR)=.11; Comparative fit index (CFI) = .89; Tucker-Lewis Index (TLI) = .87; Root mean square error of approximation (RMSEA) = .08. *p < .



provided evidence for a three-dimensional structure for the PPM. The resulting three factors identified were: (1) parental control, (2) parental knowledge and affective relationships, and (3) parental communication and involvement. Parental knowledge and affective relationships reflected parents' attempts to gain knowledge of their youth's activities through monitoring and youth disclosure, as well as the quality of the parent-youth relationship. Parental control reflected parental reactions to their youth's substance use as well as parents' beliefs about their abilities and authority to set rules. Parental communication and involvement reflected parents' attempts to solicit information from their youth, as well as the frequency and type of their involvement with their youth. By and large, the literature has utilized a binary (i.e., warmth/responsiveness, control/demandingness) and non-overlapping framework for conceptualizing parenting practices based on the seminal work of Baumrind (1978). The current study indicates that the quality of parenting is best conceptualized as an integration of these domains. This is consistent with more recent work indicating that the effectiveness of control-oriented parenting practices, such as monitoring and setting limits for youth, are largely contingent on relationship quality between the parent and the adolescent. For example, in their reinterpretation of parental monitoring, Kerr et al. (2010) concluded that parental knowledge of adolescent behavior is acquired primarily in the context of an open and trusting relationship with their child, the parent's ability to actively monitor, as well as the child's willingness to disclose information to the parent. The PPM is a comprehensive measure of parenting that accounts for the overlapping nature of these domains.

Psychometrics

Results offer support for strong psychometric properties of the PPM. In terms of reliability, the overall measure ($\alpha = .78$) and all individual factors demonstrated acceptable internal consistency ($\alpha s = .71 - .76$). Assessment of convergent validity through correlations with theoretically sound measures were in the expected direction. The highest level of correlation between relevant measures of parental control and the parental communication and involvement factor, which prior work has framed as a dimension of warmth (Cablova, Csemy, Belacek, & Miovsky, 2016), might indicate that involved parents who communicate effectively may also provide more discipline and rules in the home. The low level of correlation between parental control and the child-report of parental demandingness may have been due to cross-reporter discrepancies (Abar et al., 2014). Some studies suggest that parents' reports may be biased as they are likely to overestimate levels of certain parenting practices due to social desirability (Smetana et al., 2006).

Findings related to discriminant validity tests were generally in the expected direction. However, one exception was a significant negative association (p < .05) between parental communication and involvement and parental depression. Of the different factors, parental communication and involvement is most likely to be impacted by parents' depression. For example, prior research demonstrates that mothers with depression tend to be less involved, exhibit higher levels of negative and critical communication, and have difficulty setting limits with their children (Middleton, Scott, & Renk, 2009). In fact, much of the prior work on parental depression focuses on how depressive symptomatology negatively



impacts parental involvement, also a warmth dimension, compared to parental solicitation, a control dimension (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). Perhaps anhedonia experienced by depressed parents is expressed as limited time spent with their child doing shared activities, more so than reduced limit setting or monitoring.

Assessing Parenting

Overall, the parenting literature has utilized a binary framework for assessment, suggesting that there are two main components of parenting: parental warmth/responsiveness and parental control/demandingness. Moreover, prior work has tended to view these parenting domains as separate and non-overlapping. For example, some researchers only assess the parental warmth domain, such as adolescent perceptions of interactions that are nurturing and supportive (Russell, & Gordon, 2017); whereas others focus solely on the parental control domain, such as how parents use disciplinary practices to gain knowledge of their child's activities (Wang, Stanton, Li, Cottrell, Deveaux, & Kaljee, 2013) and shape acceptable behavior (Barnes et al., 2006). Although some researchers have offered a typology to delineate how different patterns of parenting practices reflecting warmth and control can be combined to reflect overall parenting styles (e.g., Baumrind, 1991), few examine the potential overlap across these two domains outside of a binary framework. Results from this study indicate that both warmth and control items load on two of the three parenting quality factors (parental knowledge and affective relationships and parental communication and involvement), providing support for a more integrative framework for assessing parenting.

Parental Control

Items that loaded onto this factor were limited to aspects of control such as parents' reactions to youth's use of substances and parents' beliefs about their efficacy and authority to discipline youth. Moreover, items that loaded on this factor were categorized as both general control items and substance-specific control parenting practices. Yet, the overall parenting literature has tended to focus only on general control practices, such as the use of disciplinary practices to gain knowledge of youth activities (Wang et al., 2013) and shape acceptable youth behavior (Barnes et al., 2006). There are several reasons why these general and substanceuse specific control items loaded onto the same parental control factor. First, both types of parenting practices shared a similar focus on controlling and shaping youth behavior. Second, parents with higher levels of efficacy and belief in their legitimate authority may be more likely to set and enforce rules. Prior studies have shown that parental efficacy influences parental competence and can play an essential role in enhancing parenting disciplinary practices (Dumka, Gonzales, Wheeler, & Millsap, 2010). Additionally, youths' belief in their parents' authority over behaviors such as substance use may also be indicative of parents' confidence in their efficacy, making them more likely to make rules and follow through on them. In a study by Jackson (2002), adolescents were more likely to legitimize parental authority regarding substance use issues than contemporary and conventional issues. Our findings support the importance of including both components of parental control (i.e., general and substance use-specific) in a comprehensive measure of parental quality.

Parental Knowledge and Affective Relationships

Unlike the parental control factor loadings, which reflected only aspects of control, parental knowledge and affective relationships' factor loadings represented aspects of control and warmth. parental knowledge and affective relationships included items about how parents gain knowledge about youths' activities and whereabouts, as well as items regarding the nature of the parent-youth relationship. Results indicate the quality of the parent-child relationship may have a stronger link with parental knowledge than other traditional control dimensions. Parental knowledge likely results from creating a warm and supportive environment where youth are more willing to disclose information to their parents voluntarily. This association between active parental tracking efforts and the quality of parent-youth relationships may explain why the parental monitoring/ knowledge items loaded on parental knowledge and affective relationships instead of other disciplinary constructs under parental control. These findings are consistent with prior literature indicating that voluntary youth disclosure and parental knowledge may be facilitated in part by an open and trusting parent-youth relationship and strong emotional bonds (Fletcher, Steinberg, & Williams-Wheeler, 2004; Kerr et al., 2010).

Parental Communication and Involvement

Similar to parental knowledge and affective relationships, parental communication and involvement reflected control and warmth aspects of parenting. The loadings related to the control domain included items about how often parents solicit information about youths' activities, their friends, and their friend's parents. Loadings related to the warmth domain included items about the frequency of communication and type of activities parents are involved in with youth. Results of this study indicate that active parental solicitation may be more related to parental warmth than control, which could explain why parental solicitation did not load on the parental control factor. Research indicates that parents who



effectively communicate and are involved in shared activities improve the quality of parent–youth relationships (Ackard, Neumark-Sztainer, Story, & Perry, 2006), making it more comfortable for parents to solicit information about their youth (Lippold, Greenberg, Graham, & Feinberg, 2014). Additionally, parental solicitation may reflect an interest in bonding with youth that is characterized by mutual communication, rather than a one-sided interrogation to gain information about youth behaviors and whereabouts.

Factor Correlations

Findings demonstrated a high correlation between parental knowledge and affective relationships and parental communication and involvement (r=.63, p<.001). The high correlation between these parenting factors is consistent with prior work indicating that an increase in shared activities provides opportunities for bonding and fostering mutual communication (Crosnoe & Trinitapoli, 2008). In fact, individual items on parental knowledge and affective relationships, focused on the results of parent–youth interactions, while items on parental communication and involvement, focused on the process of parent–youth interactions.

Several limitations and future directions should be drawn. First, our findings cannot be generalized to samples with different demographic characteristics, as the caregivers in this sample were primarily White (87%), with high levels of education and income. Prior work indicates that parenting practices may operate differently across racial and ethnic groups (Smith & Krohn, 1995). In addition, previous work suggests that populations characterized by a high prevalence of single-parent households, high concentrations of economic disadvantage, and low educational attainment, may be characterized by lower positive parenting practices (e.g., Mrug & Windle, 2009). Thus, the reliability and validity of the PPM may differ when used with samples of different racial and ethnic backgrounds and lower socioeconomic status. Future studies including more diverse families are necessary. Second, only parent-report measures were examined, most of which (87%) were given by mothers. Research indicates that adolescents' reports tend to be more strongly predictive of youth behaviors than parents' reports and perhaps less biased (Kerr & Stattin, 2000). Future studies should utilize measures from multiple reporters. Third, this study did not examine the predictive validity of the measure. Future studies should examine the correlation between parenting factors and youth's behavioral outcomes. Lastly, the proposed measure of parenting quality consists of 12 subscales, comprising 139 individual items, which may be difficult to administer. Thus, future work that includes an individual item analysis to determine if items could be dropped, thus shortening the measure, could ease administration.

The primary aim of the current study was to assess the psychometric properties of the PPM, a comprehensive measure of parenting practices. Findings support the utility of having a broad measure of parenting that integrates multiple aspects of parenting that are critical for understanding this complex socialization context, especially during adolescence. Broad measures of parenting practices that are currently available tend to not assess parental knowledge, child disclosure, parental solicitation, and substance specific parenting practices. Prior work indicates that these parenting factors have a notable impact on adolescent problem behavior and substance use (e.g., Kerr et al., 2010; Kodl & Mermelstein, 2004; Trucco et al., 2016). Thus, a contribution of this study is the incorporation of parenting practices that are critical for adaptive functioning among adolescents with broader dimensions of parenting that are relevant across a wider age span. Findings highlight the inherent overlap between parental control and demandingness constructs and underscore the importance for practitioners to consider this when working with families. The PPM can be used as an effective tool to operationalize these integrative domains (parental knowledge and affective relationships, parental control, and parental communication and involvement) that may be most relevant to parenting.

In addition, the PPM has significant utility in providing clinicians a psychometrically valid measure of parenting quality that can aid in identifying specific problem areas as well as parenting strengths. Clinicians can use results from the PPM to develop targeted treatment plans to improve problem areas and strengthen positive areas. In the treatment process, clinicians can use the PPM to track their clients' change on each area, which serves as a tool for clinicians to evaluate the effectiveness of their treatment and make adjustments as needed. Important future directions are translation and validation across cultures. Translating the PPM to different languages is needed in order to reach families with different ethnic and cultural backgrounds, but validating whether these constructs and this measure are reliable across more diverse cultural groups is equally important. For example, prior research indicates that dimensions of parental control are culturally variable in terms of norms and feelings towards these parenting practices (Deater-Deckard et al., 2011). Researchers and practitioners should not assume equivalence in the meaning of these parenting practices across cultures.

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Compliance with Ethical Standards

Conflict of interest The authors declare no conflicts of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Appendix

Parenting Practice Measure (PPM)

Parental Monitoring/Knowledge

Answer the following questions about your child:

1 = Never, 2 = Hardly Never, 3 = Sometimes, 4 = Usually, 5 = Always

1.	Do you know what your child does during his/her free time?	1	2	3	4	5
2.	Do you know who your child has as friends during his/her free time?	1	2	3	4	5
3.	Do you usually know what type of homework your child has?	1	2	3	4	5
4.	Do you know what your child spends his/her money on?	1	2	3	4	5
5.	Do you usually know when your child has an exam or paper due at school?	1	2	3	4	5
6.	Do you know how your child does in different subjects at school?	1	2	3	4	5
7.	Do you know where your child goes when he/she is out with friends?	1	2	3	4	5
8.	Normally, do you know where your child goes and what he/she does after school?	1	2	3	4	5
9.	In the last month, have you ever had no idea of where your child was at night?	1	2	3	4	5

Child Disclosure

Answer the following questions about your child:

1 = Never, 2 = Hardly Never, 3 = Sometimes, 4 = Usually, 5 = Always

1. Does your child talk at home about how he/she are doing in the	1	2	3	4	5
different subjects in school?					



2.	Does your child usually tell how school was when he/she gets home (how they did on different exams, their relationships with teachers, etc.)?	1	2	3	4	5
3.	Does your child keep secrets from you about what he/she does during his/her free time?	1	2	3	4	5
4.	Does your child hide a lot from you about what he/she does during nights and weekends?	1	2	3	4	5
5.	If your child is out at night, when he/she gets home, do they tell you what he/she did that evening?	1	2	3	4	5

Parental Solicitation

Answer the following questions about your child:

1 = Never, 2 = Hardly Never, 3 = Sometimes, 4 = Usually, 5 = Always

1.	In the last month, have you talked with the parents of your child's friends?	1	2	3	4	5
2.	How often do you talk with your child's friends when they come to your home (ask what they do or what they think and feel about different things)?	1	2	3	4	5
3.	During the past month, how often have you started a conversation with your child about his/her free time?	1	2	3	4	5
4.	How often do you initiate a conversation about things that happened during a normal day at school?	1	2	3	4	5
5.	Do you usually ask your child to talk about things that happened during his/her free time (whom he/she met when you were out in the city, free time activities, etc.)?	1	2	3	4	5

Shared Activities

The following questions have to do with the kinds of things that you and your child may have talked about, or done together in the past six months.

1 = More than 1 month ago, 2 = Within the last month, 3 = Within the last week,



4 = Yesterday/today

1.	When was the last time that you discussed with your child his/her	1	2	3	4
	plans for the coming day?				

1 = Less than one month ago, 2 = At least once a month, 3 = At least once a week,

4 = Almost every day

2	2.	In the past six months about how often have you discussed with your	1	2	3	4	
		child his/her plans for the coming day?					

1 = More than 1 month ago, 2 = Within the last month, 3 = Within the last week,

4 = Yesterday/today

3.	When was the last time you talked with your child about what he/she	1	2	3	4	
	had actually done during the day?					

1 = Less than one month ago, 2 = At least once a month, 3 = At least once a week,

4 = Almost every day

4.	In the past six months, about how often have you talked with your	1	2	3	4	
	child about what he/she had actually done during the day?					

Parental Involvement with Child

The following questions ask about where your child is when he/she is not in school



1 = Hardly ever, 2 = Sometimes, 3 = Often

1.	Do you find time to listen to your child when he/she wants to talk to you?	1	2	3
2.	Do you and your child do things together at home?	1	2	3
3.	How often do you have a friendly chat with your child?	1	2	3
4.	Does your child help you?	1	2	3
5.	Do you talk with your child about how he/she is doing in school?	1	2	3

Time Spent with Child

The following questions ask about where your child is when he/she is not in school 1 = Less than 30 minutes, 2 = 30 minutes to 1 hour, 3 = More than 1 hour but less than 3 hours,

4 = 3-6 hours, 5 = More than 6 hours

1.	On the average, how much time each day are you together with your child on weekdays, that is, when you and your child are both awake?	1	2	3	4	5
2.	And on weekend days?	1	2	3	4	5
3.	On weekdays, how much of that time are you doing something together, like making something, playing a game, talking, or going out together?	1	2	3	4	5
4.	And on weekend days?	1	2	3	4	5



Parent-Child Relationships

The following questions ask about where your child is when he/she is not in school

1 = Almost never, 2 = Sometimes, 3 = Often

1.	Thought your child was a good kid?	1	2	3
2.	Felt proud of him/her?	1	2	3
3.	Felt like you needed a vacation from him/her?	1	2	3
4.	Wished you had never had him/her?	1	2	3
5.	Got along with him/her?	1	2	3
6.	Thought he/she was a difficult child?	1	2	3
7.	Thought he/she was good company?	1	2	3
8.	Felt he/she was an easy child?	1	2	3
9.	Felt he/she was an affectionate child?	1	2	3
10.	Felt he/she was a troublemaker?	1	2	3
11.	Enjoyed spending time with him/her?	1	2	3
12.	Wished he/she would just leave you alone?	1	2	3
13.	Lost patience with him/her?	1	2	3
14.	Enjoyed being his/her parent?	1	2	3
15.	Felt he/she needed too much attention?	1	2	3
16.	Felt he/she was a happy child?	1	2	3



Parental Efficacy

How confident are you that:

1 = Not at all, 2 = A little, 3 = Somewhat, 4 = Extremely likely

1.	You can keep your child away from the wrong kinds of kids?	1	2	3	4
2.	You can prevent your child from using drugs	1	2	3	4
3.	You can prevent your child from trying cigarettes	1	2	3	4
4.	You can prevent your child from regularly smoking cigarettes	1	2	3	4
5.	You can prevent your child from trying alcohol	1	2	3	4
6.	You can prevent your child from regularly drinking alcohol	1	2	3	4
7.	You can keep your child away from peers who smoke	1	2	3	4
8.	You can keep your child away from peers who drink alcohol	1	2	3	4
9.	You can enforce rules about smoking for your child	1	2	3	4
10.	You can enforce rules about drinking alcohol for your child	1	2	3	4
11.	You can talk to your child about smoking	1	2	3	4
12.	You can talk to your child about drinking alcohol	1	2	3	4
13.	You can talk to your child about the health risks and consequences of smoking	1	2	3	4
14.	You can talk to your child about the health risks and consequences of drinking alcohol	1	2	3	4



Reactions to Child Cigarette Use

If you knew your child smoked or tried smoking, how likely is it that you would:

1 = Not at all likely, 2 = A little likely, 3 = Somewhat likely, 4 = Very likely

1.	Feel proud	1	2	_	4
2.	Feel OK about it	1	2	3	4
3.	Be disappointed with him/her	1	2	3	4
4.	Be angry with him/her	1	2	3	4
5.	Feel offended or disrespected	1	2	3	4
6.	Be worried	1	2	3	4
7.	Say nothing to him/her	1	2	3	4
8.	Tell him/her that it is his/her life or choice	1	2	3	4
9.	Mildly tell him/her that you disapprove	1	2	3	4



10.	Strongly tell him/her that you disapprove	1	2	3	4
11.	Yell at him/her in disapproval	1	2	3	4
12.	Talk with him/her about the reasons why he/she shouldn't smoke	1	2	3	4
13.	Talk with him/her about why he/she did smoke	1	2	3	4
14.	Talk with him/her about how his/her smoking makes you feel	1	2	3	4
15.	Make smoking sound silly or stupid	1	2	3	4
16.	Offer him/her a reward NOT to smoke again	1	2	3	4
17.	Take away privileges, like watching TV, driving, etc.	1	2	3	4
18.	Take away something from him/her (like an allowance, treats)	1	2	3	4
19.	Ground him/her	1	2	3	4
20.	Spank or hit him/her	1	2	3	4
21.	Withdraw affection	1	2	3	4
22.	Kick him/her out of the house	1	2	3	4

Reactions to Child Alcohol Use

If you knew your child drank alcohol or tried alcohol, how likely is it that you would:

1 = Not at all likely, 2 = A little likely, 3 = Somewhat likely, 4 = Very likely

1.	Feel proud	1	2	3	4
2.	Feel OK about it	1	2	3	4
3.	Be disappointed with him/her	1	2	3	4



4.	Be angry with him/her	1	2	3	4
5.	Feel offended or disrespected	1	2	3	4
6.	Be worried	1	2	3	4
7.	Say nothing to him/her	1	2	3	4
8.	Tell him/her that it is his/her life or choice	1	2	3	4
9.	Mildly tell him/her that you disapprove	1	2	3	4
10.	Strongly tell him/her that you disapprove	1	2	3	4
11.	Yell at him/her in disapproval	1	2	3	4
12.	Talk with him/her about the reasons why he/she shouldn't drink alcohol	1	2	3	4
13.	Talk with him/her about why he/she did drink alcohol	1	2	3	4
14.	Talk with him/her about how his/her drinking alcohol makes you feel	1	2	3	4
15.	Make drinking sound silly or stupid	1	2	3	4
16.	Offer him/her a reward NOT to drink alcohol again	1	2	3	4
17.	Take away privileges, like watching TV, driving, etc.	1	2	3	4
18.	Take away something from him/her (like an allowance, treats)	1	2	3	4
19.	Ground him/her	1	2	3	4
20.	Spank or hit him/her	1	2	3	4
21.	Withdraw affection	1	2	3	4
22.	Kick him/her out of the house	1	2	3	4

Obligations to Disclose



Without you asking, how often does your child tell you or is willing to tell you about the following things?

1 = Never tell, 2 = Hardly ever tell, 3 = Sometimes tell, 4 = Often tell, 5 = Always tell

1.	Hanging out at a friend's when no adult is home	1	2	3	4	5
2.	Smokes a cigarette	1	2	3	4	5
3.	Gets a bad grade or is not doing well on work/tests	1	2	3	4	5
4.	Who teens like/crush on	1	2	3	4	5
5.	Doing particularly well on assignment/tests	1	2	3	4	5
6.	Teens write in emails/letter/journals	1	2	3	4	5
7.	Finishing homework	1	2	3	4	5
8.	How teens spend their freetime	1	2	3	4	5
9.	How teens are doing in different school subjects	1	2	3	4	5
10.	Spending time with someone you don't like	1	2	3	4	5
11.	Drinks alcohol	1	2	3	4	5
12.	How teens spend their own money	1	2	3	4	5
13.	If/who teens are dating	1	2	3	4	5
14.	Teens talk about on phone w/friends	1	2	3	4	5

Parental Authority

Please tell us how much you agree or disagree with each item. It is ok for me to make rules about...



1 = Strongly disagree, 2 = Disagree, 3 = I'm in between, 4 = Agree, 5 = Strongly agree

1.	What my child does after school	1	2	3	4	5
		_			•	-
2.	Who my child's friends are	1	2	3	4	5
3.	How my child spends his/her money	1	2	3	4	5
4.	My child drinking alcohol	1	2	3	4	5
5.	My child smoking cigarettes	1	2	3	4	5
6.	My child stealing pocket money from me and/or significant other/spouse	1	2	3	4	5
7.	My child not sharing with his/her brothers and sisters	1	2	3	4	5
8.	My child hitting his/her brothers and sisters	1	2	3	4	5
9.	My child lying to me and/or significant other/spouse	1	2	3	4	5
10.	My child not doing assigned chores	1	2	3	4	5
11.	My child not keeping me and/or significant other/spouse informed about his/her activities	1	2	3	4	5
12.	My child sleeping late on the weekends	1	2	3	4	5
13.	My child talking on the phone	1	2	3	4	5
14.	What TV shows and movies my child watches	1	2	3	4	5
15.	What time my child should be home	1	2	3	4	5
16.	How my child dresses	1	2	3	4	5
17.	What time my child needs to come home after being out	1	2	3	4	5
18.	My child's hairstyle	1	2	3	4	5
19.	My child's school grades	1	2	3	4	5
20.	My child not cleaning his/her room	1	2	3	4	5
21.	My child going out with friends instead of our family	1	2	3	4	5



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