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Profiles of Caregiving Behaviors among Children and Adolescents with Perinatally Acquired HIV

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Abstract

Although parenting behaviors are widely considered an important factor in the adjustment of children and adolescents with chronic physical health needs, few studies have addressed this topic as it pertains to youth with perinatally-acquired human immunodeficiency virus (PHIV). We examined profiles of child-centeredness, control through guilt, consistent discipline, and detachment, and whether these profiles differed in terms of parent- and youth-reported psychiatric disorder symptoms in a cohort of HIV infected youth ($N=314$). Latent profile analyses of caregiving behaviors were conducted separately for children (6–12 years) and adolescents (13–18 years). Two profiles were identified among children: (a) moderate caregiving (87%, $n=130$) and (b) high detachment caregiving (13%, $n=19$), and three profiles were identified among adolescents: (a) moderate caregiving (55%, $n=88$), (b) high detachment caregiving (19%, $n=30$), and (c) high control through guilt caregiving (26%, $n=42$). The high detachment and high control through guilt caregiving profiles displayed higher levels of parent-and youth-reported symptoms than the moderate caregiving profile. These findings suggest that caregiver behaviors of PHIV youth vary as a function of children's developmental period and differ in terms of youth psychological symptoms.

Keywords

parenting; perinatally-acquired human immunodeficiency virus; psychiatric disorder symptoms; developmental periods

Caregivers of youth with perinatally-acquired human immunodeficiency virus (PHIV) must cope with fears about stigmatization, the responsibility of caring for other children, financial

burdens, limited access to social and health resources, and reduced time to attend to their own health and well-being (Kotchick & Forehand, 1997; Punpanich, Gorbach, & Detels, 2009). Consistent with family stress models, these challenges may negatively influence caregivers' interactions with their children (Raphael, Zhang, Liu, & Giardino, 2010). Research that has examined parenting behaviors among youth with PHIV has mostly investigated individual parenting behaviors, such as child-centeredness and consistent discipline. Among youth with PHIV, caregivers who are more child-centered are more likely to encourage their children to be engaged in school and/or participate in extracurricular activities without feeling stigmatized (Knafl, Breitmayer, Gallo, & Zoeller, 1996). In addition, caregivers of youth with PHIV who engage in consistent discipline are more likely to clearly indicate which behaviors are inappropriate (Frick, Christian, & Wootton, 1999; Halgunseth, Perkins, Lippold, & Nix, 2013; Laskey & Cartwright-Hatton, 2009; Mullins et al., 2015; Parent, McKee, & Forehand, 2016).

Other caregiver behaviors such as control through guilt and detachment have received much less attention among PHIV populations. Control through guilt refers to caregiver's attempts to manage children's behavior by instilling guilt over misbehavior, whereas detachment refers to a set of behaviors characterized by emotional distance, disengagement from the child, and a lack of responsiveness (Dibble & Cohen, 1974; Ingoglia, Lo Coco, Liga, & Lo Cricchio, 2011). Caregivers of youth with PHIV may employ these strategies in response to resentment or other negative reactions related to caring for a child with PHIV (Carnevale, Rehm, Kirk, & McKeever, 2008). For example, caring for a child with a chronic illness often requires a level of caregiver commitment that may limit their opportunities to pursue other activities (e.g., recreational interests, employment) (Coffey, 2006).

Although child-centeredness, consistent discipline, detachment, and control through guilt have each been associated with the adjustment of youth with PHIV (Elkington et al., 2011; Forehand et al., 2002; Mellins & Brackis-Cott, 2008; Murphy, Marelich, Armistead, Herbeck, and Payne, 2010), few studies have used person-centered methodologies to examine whether homogeneous subgroups (i.e., profiles) of caregiver behaviors exist. As opposed to variable-centered approaches that focus on the relations among variables, person-centered methods offer the possibility of identifying subgroups of parents that engage in similar behaviors. Most person-centered research has been conducted among young children in community-based samples. Results from these studies have yielded the following profiles: (a) a *sensitive, developmental, or child-oriented* profile characterized by responsiveness, engagement, and consistent discipline; (b) a *harsh* or *harsh-intrusive* profile characterized by negative regard and intrusiveness, with moderate supportiveness; and (c) a *detached, unsupportive, or withdrawn* profile characterized by high detachment and low responsiveness (Abell et al., 1996; Cook, Kim, & Roggman, 2012; Dyer, Owen, & Caughy, 2014; Paschall, Gonzalez, Mortensen, Barnett, & Mastergeorge, 2015).

It is unclear whether caregivers of youth with PHIV exhibit different patterns of behavior for children versus adolescents. During adolescence, a developmental period characterized by identity formation, self-expression, and the pursuit of autonomy, youth are more likely to oppose caregiver rules (Drabick & Steinberg, 2011). In an effort to attenuate adolescents' autonomy-seeking, caregivers are more apt to use control through guilt and intrusive tactics

(Barber, Stolz, Olsen, & Collins, 2005). Given the stressors and challenges associated with rearing a child with PHIV, it may be more difficult for caregivers to engage in supportive behaviors as youth navigate the changing landscape from childhood to adolescence.

In the present study, we sought to identify profiles of caregiver behaviors among children and adolescents with PHIV, and whether these profiles differed in terms of youth psychiatric symptoms. The identification of caregiver behavior profiles during different developmental periods may inform intervention work aimed at targeting caregiving practices that co-occur, and have the potential to reduce risk for psychiatric disorder symptoms among youth.

Methods

Study population and design

Participants were recruited from 29 clinics in the United States and Puerto Rico involved in the International Maternal Pediatrics Adolescent AIDS Clinical Trials Group's (IMPAACT) P1055 study. Inclusion criteria required youth to have lived with the same caregiver over the previous year, have an IQ of at least 70, and be between the ages of 6–18 years old. Eligible youth and their caregivers were recruited by each site in blocks of eight, which were balanced by age and sex, until enrollment was closed. Institutional Review Board approval was obtained for each participating site. Caregivers provided written informed consent, and youth provided assent prior to participating in the study.

Measures

The Parent's Report (PR) was used to index caregiving behaviors (Dibble & Cohen, 1974). Four subscales (4 items each) that assessed different dimensions of caregiver-youth interactions were considered in the present study: child centeredness (e.g., parent's expression of concern and warmth); detachment (e.g., emotional distance or withdrawal from the child); consistent discipline (e.g., parent's commitment to established rules and procedures) and control through guilt (e.g., parent's efforts to shape behavior through instilling guilt or anxiety). Items were rated on a scale from 0 (*never*) to 6 (*always*) and summed to create composite scores. The PR has demonstrated good test-retest reliability and external validity, good predictive and concurrent validity, and good internal consistency in numerous studies of youth with behavioral and emotional difficulties (Atzaba-Poria, Pike, & Deater-Deckard, 2004; Dibble & Cohen, 1974; Drabick, Gadow, & Loney, 2007; Gadow & Sprafkin 2004).

We included multiple reporters (e.g., youth, caregivers) of children's symptoms, given that parent- and youth-reported symptoms often differ (De Los Reyes et al., 2015). Caregivers reported on youth depression, generalized anxiety disorder (GAD), attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and conduct disorder (CD) symptoms using the Child and Adolescent Symptom Inventory-4R (CASI-4R) (Gadow & Sprafkin, 2005), a *DSM-IV-TR*-referenced rating scale for youth aged 5–18 years old. Youth aged 12 to 17 years old reported on their depression, GAD, ADHD, ODD, and CD symptoms using the Youth Self-Report Inventory-4R (YI-4R) (Gadow & Sprafkin, 1999), also a *DSM-IV-TR*-referenced rating scale and the youth equivalent of the CASI-4R. Youth

8 to 11 years of age completed the Child Self-Report Inventory-4, a measure that includes internalizing symptoms (i.e., GAD, depression) subscales (Gadow & Sprafkin 2004). Self-reported symptoms of ADHD, ODD, and CD were not collected among youth aged 11 or younger. For all measures, frequency of symptoms was rated on a scale from 0 (*never*) to 3 (*very often*), and items were summed to create symptom severity scores. Higher scores reflect higher levels of symptoms.

Statistical analyses

Descriptive statistics and bivariate correlations were conducted to examine the relations among study variables using SPSS Version 25 (IBM 2016). The primary analyses were conducted using Mplus Version 8.0 (Muthén & Muthén, 1998–2017). Some PHIV youth were drawn from the same family; consequently, observations are not independent. In conjunction with the TYPE=COMPLEX MIXTURE command, we used the cluster option in Mplus to account for nesting within families and non-independence of the observations (Muthén & Muthén, 1998–2017). Parent-child interaction variables included in the LPA were z-scored ($M=0$, $SD=1$).

For the primary analyses, we divided the sample into children (ages 6–12) and adolescents (ages 13–18). Two latent profile analyses (LPA) were conducted to identify profiles of caregiving behaviors among these subsamples. LPA categorizes individuals into homogeneous profiles, as opposed to variable-centered approaches such as regression, structural equation modeling, or factor analysis (Muthén & Muthén, 2000). Mplus employs Full Information Maximum Likelihood estimation to address missing data, which includes all available data to estimate model parameters (Enders, 2001; Graham, 2009).

We considered Akaike Information Criterion (AIC; Akaike, 1987), Bayesian Information Criterion (BIC; Schwartz, 1978), sample-size adjusted BIC (ABIC; Sclove, 1987), Vuong-Lo-Mendell-Rubin (VLMR) Likelihood Ratio Test, class size, entropy, and whether profiles were conceptually meaningful when selecting the best-fitting model. Tests of equality of means across profiles were conducted on youth symptoms and whether being raised by a biological parent influenced membership in the profiles. Pairwise comparisons were examined only if the omnibus χ^2 tests were significant ($p .05$) (Muthén & Muthén, 2000).

Results

Demographics

Youth with PHIV ($N=314$) were 51% male; 55% African American, 30% Latinx, 15% White; and had a M age of 12.88 $\pm$ 3.08 years. Forty-two percent of the participants lived with a biological caregiver, and 52% of the caregivers completed high school and some college. Twenty-six PHIV youth were drawn from thirteen families (2 children per family). The majority (81%) of youth were taking antiretroviral drugs at the time of the initial assessment. Most (74%) youth had entry CD4% ≥ 25 and 59% had HIV RNA viral load ≤ 400 copies/mL.

The child subsample included 152 youth (M age=10.20 years, $SD=1.88$ years, range = 6–12 years; 52% male; 59% African American, 30% Latinx, 11% White) and the adolescent

subsample included 161 youth ($M_{age}=15.40$ years, $SD=1.38$ years, range=13–18 years; 50% male; 52% African American, 30% Latinx, 18% White).

Correlations among the variables

Bivariate correlations, means, standard deviations, and n 's for study variables involving the whole sample (Table 1) and among children and adolescents (Table 2) are presented. Results from the primary analyses are below.

Latent profile analysis among children

A 2-class model best fit the data among children. Profile 1 was named *Moderate Caregiving* as caregivers in this profile displayed average child-centeredness (around the sample mean), average detachment (≈ 0.25 SD below the mean), average consistent discipline (around the sample mean), and average control through guilt (≈ 0.25 SD above the mean) (Figure 1A). Profile 2, *High Detachment Caregiving*, exhibited average child-centeredness (around the mean), very high detachment (≈ 2.0 SD above the mean), low consistent discipline (≈ 0.50 SD below the mean), and very high control through guilt (≈ 1.25 SD above the mean).

Auxiliary analyses

Youth with caregivers in the High Detachment Caregiving profile reported higher levels of depressive symptoms than children whose caregivers fit the Moderate Caregiving profile ($\chi^2=4.48$, $p=.034$, $\phi=.17$) (Table 4). In addition, caregivers in the High Detachment Caregiving profile reported higher levels of youth ODD symptoms than caregivers in the Moderate Caregiving profile ($\chi^2=4.08$, $p=.043$, $\phi=.17$) (Table 4). In terms of whether being raised by a biological parent compared to a non-biological caregiver influenced profile membership, no profile differences were found between the High Detachment Caregiving and Moderate Caregiving profiles ($OR=0.95$, 95% $CI=.08-10.91$, $p=.970$).

Latent profile analysis among adolescents

A 3-profile model best fit the data among adolescents (Table 3). The first profile was named *High Detachment Caregiving* as this profile displayed low child-centeredness (≈ 0.50 SD below the mean), very high detachment (≈ 1.5 SD above the mean), low consistent discipline ($\approx .75$ SD below the mean), and average control through guilt (≈ 0.25 SD above the mean) (Figure 1B). Profile 2, *Moderate Caregiving*, was characterized by low child-centeredness (≈ 0.50 SD below the mean), average detachment (≈ 0.25 SD below the mean), average consistent discipline (around the sample mean), and low control through guilt (≈ 0.50 SD below the mean). Profile 3, *High Control through Guilt Caregiving*, exhibited high child-centeredness (≈ 0.50 SD above the mean), average detachment (around the sample mean), high consistent discipline (≈ 0.50 SD above the mean), and very high control through guilt (≈ 1.0 SD above the mean).

Auxiliary analyses

Compared to adolescents with caregivers in the Moderate Caregiving profile, adolescents in the High Detachment Caregiving ($\chi^2=6.53$, $p=.011$, $\phi=.20$) and High Control through Guilt Caregiving ($\chi^2=4.06$, $p=.044$, $\phi=.16$) profiles reported higher levels of depressive symptoms

(Table 5). In addition, youth with caregivers in the High Control through Guilt Caregiving profile reported higher levels of CD symptoms compared to youth in the Moderate Caregiving profile ($\chi^2=4.11$, $p=.043$, $\phi=.16$).

As shown in Table 5, caregivers in the High Detachment Caregiving profile reported higher levels of (a) ODD symptoms than the Moderate Caregiving ($\chi^2=17.44$, $p<.005$, $\phi=.33$) and High Control through Guilt Caregiving ($\chi^2=4.25$, $p=.039$, $\phi=.16$) profiles; (b) ADHD symptoms than the Moderate Caregiving ($\chi^2=9.86$, $p=.002$, $\phi=.25$) and High Control through Guilt Caregiving ($\chi^2=4.21$, $p=.040$, $\phi=.16$) profiles; and (c) CD symptoms than the Moderate Caregiving ($\chi^2=15.18$, $p<.005$, $\phi=.31$) and High Control through Guilt Caregiving ($\chi^2=5.81$, $p=.016$, $\phi=.19$) profiles.

In terms of whether being reared by a biological parent compared to a non-biological caregiver influenced profile membership, no between profile differences were found with regard to (a) the High Detachment Caregiving and Moderate Caregiving profiles (OR=.43, 95% CI=.08–2.21, $p=.310$); (b) the High Detachment Caregiving and High Control through Guilt Caregiving profiles (OR=.21, 95% CI=.01–3.07, $p=.254$); and (c) the High Control through Guilt Caregiving and Moderate Caregiving profiles (OR=2.04, 95% CI=.53–30.98, $p=.595$).

Discussion

The present study is the first to examine profiles of caregiving behaviors among children and adolescents with PHIV and consider their associations with multiple informant reports of psychiatric disorder symptoms. Among both children and adolescents, a Moderate Caregiving profile characterized by greater caregiver emotional responsiveness, consistent application of consequences for misbehavior, and lower levels of instilling guilt within their youth was identified. A High Detachment Caregiving profile was identified among caregivers of both children and adolescents. In this profile, caregivers of children reported higher detachment, inconsistent discipline, and control through guilt, whereas caregivers of adolescents reported higher detachment and lower levels of control through guilt. Caregivers of children who emotionally distance themselves from their children are more likely to experience challenges enforcing rules, possibly secondary to their detachment, or because they do not have the social or cognitive resources to apply discipline consistently (Carnevale et al., 2008). Caregivers in the High Detachment Caregiving profile may have more contentious relationships with their adolescents and may employ more permissive parenting practices to avoid conflict with their youth (Drabick & Steinberg, 2011).

A third profile emerged among caregivers of adolescents, specifically a High Control through Guilt Caregiving subgroup, which was characterized by high child-centeredness, average detachment, high consistent discipline, and high control through guilt. This profile was similar to the High Detachment profile that emerged among children as both these profiles exhibited high control through guilt levels. Although caregivers in the High Control through Guilt profile may be more emotionally responsive to their adolescents' needs and establish expectations for behavior, it is possible their adolescents are disobeying these rules given normative increases in rule-breaking that occur during this developmental stage

(Drabick & Steinberg, 2011). Caregivers may subsequently engage in control through guilt in an effort to encourage adolescents to modify their behavior (Barber et al., 2005).

Importantly, there were between-profile differences in psychiatric symptoms. Children of caregivers in the Moderate Caregiving profile reported lower levels of depression and caregivers reported lower levels of child ODD symptoms. Caregivers with this profile may not be recognizing signs of child depression because they are generally less observable than disruptive behaviors, and/or because they are less engaged with their children. Adolescents whose caregivers were in the High Detachment Caregiving and High Control through Guilt Caregiving profiles reported elevated depressive symptoms. Additionally, adolescents whose caregivers were in the High Control through Guilt Caregiving profile reported higher levels of CD symptoms than their peers with caregivers in the Moderate Caregiving profile. Caregivers in the High Detachment Caregiving profile also reported elevated adolescent ODD, CD, and ADHD symptoms relative to the other profiles. Caregivers that engaged in more negative parenting behaviors (e.g., high detachment, high control through guilt) reported higher levels of disruptive behaviors among adolescents with PHIV, possibly because of transactional relations between parents and youth. For example, in the context of higher parental detachment or higher control through guilt, adolescents may engage in oppositional or impulsive behaviors as a means to obtain parental attention, which may exacerbate these parental behaviors (Kim et al., 2003; Wiggins, Mitchell, Hyde, & Monk, 2015).

Although this study has many strengths (e.g., large sample size, multiple informants), there are limitations as well. It is cross-sectional, and inferences about the direction of effects can be better addressed using a longitudinal design. Findings may not generalize to children and adolescents living outside of the US. Participants were started at various different ages with ARVs, with older participants being sequentially treated with suboptimal ARVs when they were younger. The present study relied on self-report questionnaires, and replication with other methods of assessment (e.g., observations, interviews) is necessary before drawing firm conclusions about interrelations among parenting and youth behaviors.

Our results suggest that during childhood, some caregivers engage in high levels of detachment, control through guilt, and inconsistent discipline and that these behaviors are related to child-reported depressive symptoms and caregiver-reported ODD symptoms. Interventions should focus on increasing caregivers' emotional responsiveness to and engagement with their PHIV children, providing caregivers with appropriate strategies to alter children's behavior other than control through guilt, and supporting caregivers in developing and maintaining consistent rules and procedures. Among adolescents, interventions should also target caregiver detachment and inconsistent discipline. Clinicians working with caregivers of adolescents that display the constellation of behaviors that reflect the High Detachment Caregiving profile should consider increasing caregiver emotional investment and applying rules consistently, with less of an emphasis on targeting intrusive parenting tactics. Such an approach may attenuate youth's symptoms (Kendler, Gardner, & Dick, 2011; Shaffer, Kotchick, Dorsey, & Forehand, 2001).

Intervention efforts should also consider targeting control through guilt among caregivers of adolescents. Although these caregivers may engage in a number of positive parenting practices (i.e., higher child-centeredness, consistent discipline), control through guilt has been extensively linked to maladjustment (Barber et al., 2005; Pinquart, 2017). Mental health practitioners should attempt to provide these caregivers with alternative techniques to shape their adolescents' behavior and communicate the potential negative sequelae commonly associated with this caregiving behavior. With the United Nation's adoption of the 90–90–90 targets for diagnosis, treatment, and viral suppression of HIV (Baggaley et al., 2016); with youth with PHIV living well into adulthood; and the importance of caregiver behavior in the prevention and management of youth psychological symptoms, the consideration of caregiving behavior profiles in routine clinical management is an important aspect of mental health programs that may have life-long implications.

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Figure 1.
Standardized caregiving behaviors for each profile among A. children and B. adolescents.

Table 1:

Bivariate Correlations, Means, Standard Deviations, and n's of Study Variables among the Whole Sample

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Child-centeredness	--													
2. Detachment	-.13*	--												
3. Discipline	.29***	-.31***	--											
4. Control through guilt	.18**	.37***	-.02	--										
5. YR GAD	.25***	.02	.04	.18**	--									
6. PR GAD	-.03	.22***	-.09	.19**	.16**	--								
7. YR DEP	.05	.09	.004	.14*	.58***	.17**	--							
8. PR DEP	-.02	.14*	-.03	.06	.16**	.30***	.13*	--						
9. YR ADHD	.03	.11	-.12	.09	.51***	.21**	.48***	.07	--					
10. PR ADHD	-.03	.21***	-.15*	.16**	.11	.67***	.09	.17**	.33***	--				
11. YR ODD	-.002	.09	-.15*	.16*	.60***	.19*	.56***	.21**	.58***	.21**	--			
12. PR ODD	-.16**	.26***	-.28***	.24***	.11	.69***	.14*	.25***	.21**	.65***	.33***	--		
13. YR CD	.12	.06	-.08	.15*	.31***	.24**	.32***	.09	.44***	.31***	.53***	.37***	--	
14. PR CD	-.18**	.27***	-.21***	.26***	.07	.43***	.14*	.10	.11	.54***	.12	.64***	.20**	--
<i>M</i>	17.95	4.33	19.33	8.57	5.53	3.22	8.46	14.03	15.88	13.41	6.28	4.14	1.57	1.38
<i>SD</i>	4.33	3.97	3.37	6.14	4.03	2.92	4.90	2.26	8.27	10.39	3.56	4.01	1.83	2.29
<i>n</i>	307	307	309	305	308	312	272	309	191	311	193	313	192	310

Note. YR = youth-reported; PR = parent-reported; GAD = generalized anxiety disorder symptoms; DEP = depressive symptoms; ODD = oppositional defiant disorder symptoms; ADHD = attention-deficit/hyperactivity disorder symptoms; CD = conduct disorder symptoms.

* $p < .05$

** $p < .01$

*** $p < .001$.

Table 2:

Bivariate Correlations, Means, Standard Deviations, and n's of Study Variables among Children and Adolescents^a

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Child-centeredness	--	-.11	.23**	.22**	.16*	.04	-.01	.02	.03	-.01	-.002	-.13	.12	-.20**
2. Detachment	-.07	--	-.29***	.32***	.07	.15*	.05	.12	.11	.21**	.09	.20**	.06	.22**
3. Discipline	.39***	-.32**	--	.04	-.05	-.07	-.09	-.06	-.12	-.17*	-.15*	-.26***	-.08	-.21**
4. Control through guilt	.19*	.45***	-.11	--	.16*	.11	.12	-.02	.09	.07	.16*	.19*	.15*	.25**
5. YR GAD	.12	.14	.09	-.28**	--	.20**	.75***	.29***	.61***	.10	.60***	.11	.36***	.05
6. PR GAD	-.13	.32**	-.13	.31**	.19*	--	.21**	.24**	.21**	.69***	.19*	.63***	.24**	.36***
7. YR DEP	.20*	.12	.14	.17	.66***	.11	--	.19*	.48***	.12	.56***	.22**	.32***	.15
8. PR DEP	.03	.12	.06	.17	.07	.39***	.04	--	.07	.08	.21**	.21**	.09	.06
9. YR ADHD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	.33***	.58***	.21**	.44***	.11
10. PR ADHD	-.10	.25**	-.13	.31**	.19*	.65***	.09	.06	N/A	--	.21**	.64***	.31***	.50***
11. YR ODD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	.33***	.53***	.12
12. PR ODD	-.21*	.34***	-.30**	.32**	.17	.79***	.05	.02	N/A	.68***	N/A	--	.37***	.56***
13. YR CD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	.20**
14. PR CD	-.11	.35***	-.20*	.26**	.21*	.54***	.15	.17	N/A	.62***	NA	.76***	N/A	--
<hr/> Children <hr/>														
<i>M</i>	19.63	3.67	19.72	7.95	7.37	3.08	8.13	13.68	N/A	14.02	N/A	3.91	N/A	1.19
<i>SD</i>	3.72	3.84	3.30	5.76	4.11	3.04	5.21	2.18	N/A	11.79	N/A	4.28	N/A	2.29
<i>n</i>	113	114	114	113	112	116	110	114	N/A	115	N/A	116	N/A	113
<hr/> Adolescents <hr/>														
<i>M</i>	16.96	4.74	19.09	8.98	5.64	3.30	8.71	14.24	15.88	13.07	6.28	4.30	1.57	1.49
<i>SD</i>	4.38	4.00	3.41	6.34	3.86	2.85	4.70	2.29	8.27	9.50	3.56	3.84	1.83	2.30
<i>n</i>	193	192	194	191	193	195	160	194	191	195	193	196	192	196

^aCorrelations among children are presented below the dashed line and correlations among adolescents are presented above the dashed line.

Abbreviations: YR = youth-reported; PR = parent-reported; GAD = generalized anxiety disorder symptoms; DEP = depressive symptoms; ODD = oppositional defiant disorder symptoms; ADHD = attention-deficit/hyperactivity disorder symptoms; CD = conduct disorder symptoms; N/A = Not applicable, not administered among children.

*
 $p < .05$

**
 $p < .01$

 $p < .001$.

Table 3:

Fit Indices for LPA Models for Children and Adolescents

Number of profiles	Number of free parameters	Log likelihood	AIC	BIC	ABIC	VLMR LRT ^a	Entropy	Smallest class size <i>n</i> (%)
Children								
1	8	−836.59	1689.17	1713.20	1687.89	N/A	N/A	149
2	13	−791.08	1608.16	1647.21	1606.07	.002	.93	19 (13%)
3	18	−778.81	1593.63	1647.70	1590.73	.29	.70	19 (13%)
Adolescents								
1	8	−901.86	1819.72	1844.32	1818.99	N/A	N/A	160
2	13	−883.17	1792.35	1832.32	1791.17	.08	.64	53 (33%)
3	18	−866.59	1769.18	1824.54	1767.56	.08	.70	30 (19%)
4	23	−857.61	1761.22	1831.95	1759.14	.27	.82	16 (30%)

Abbreviations: AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion, ABIC = Sample-size Adjusted BIC, VLMR LRT= Vuong Lo-Mendell Rubin Likelihood Ratio Test, N/A = Not applicable, not calculated for the 1-profile model.

^aVLMR and entropy are not calculated for the 1-profile model.

Table 4:

Results of Auxiliary Analyses for Child- and Parent-Reported Symptoms among Children

Symptoms	High detachment (Profile 1; <i>n</i> = 19, 13%)		Moderate caregiving (Profile 2; <i>n</i> = 130, 87%)		Omnibus χ^2 test			Pairwise Comparisons ^a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	χ^2	<i>p</i>	ϕ	
Child Report								
GAD	9.36	5.45	7.20	4.64	2.63	.105	.13	--
Depression	11.26	5.37	7.75	5.99	4.48	.034	.17	1>2
Parent Report								
GAD	4.87	4.21	2.93	2.70	3.72	.054	.16	--
Depression	14.66	3.52	13.56	2.08	1.71	.191	.11	--
ODD	6.83	6.80	3.56	3.68	4.08	.043	.17	1>2
ADHD	17.09	11.80	13.86	12.10	1.20	.274	.09	--
CD	2.54	4.31	0.98	1.64	2.37	.124	.13	--

Note. GAD = generalized anxiety disorder symptoms, ODD = oppositional defiant disorder symptoms, ADHD = attention-deficit/hyperactivity disorder symptoms, CD = conduct disorder symptoms.

^aFor significant omnibus tests, all pairwise comparisons are significant at the *p* .05 level.

Table 5:

Results of Auxiliary Analyses for Adolescent- and Parent-Reported Symptoms among Adolescents

Symptoms	High detachment (Profile 1; <i>n</i> = 30, 19%)		Moderate caregiving (Profile 2; <i>n</i> = 88, 55%)		High control through guilt (Profile 3; <i>n</i> = 42, 26%)		Omnibus χ^2 test			Pairwise Comparisons ^a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	χ^2	<i>p</i>	ϕ	
Adolescent Report										
GAD	5.53	4.25	4.78	3.59	6.44	4.70	3.68	.159	.15	--
Depression	10.24	5.03	7.43	4.61	10.18	7.65	8.89	.012	.24	1, 3>2
ODD	7.36	4.01	5.56	3.42	6.94	5.50	5.29	.071	.18	--
ADHD	18.54	8.57	14.62	8.49	15.94	11.19	4.22	.121	.16	--
CD	2.04	2.06	1.22	1.87	2.20	2.66	6.00	.050	.19	3>2
Parent Report										
GAD	3.95	3.38	2.76	3.04	3.84	4.47	3.62	.164	.15	--
Depression	14.94	2.69	14.12	2.80	14.34	2.51	1.81	.405	.11	--
ODD	7.22	4.54	3.15	3.85	4.66	5.50	17.79	<.005	.33	1>2, 3
ADHD	18.79	12.39	10.58	9.54	12.60	11.68	9.89	.007	.25	1>2, 3
CD	3.84	4.01	0.75	1.79	1.63	3.15	16.56	<.005	.32	1>2, 3

Note. GAD = generalized anxiety disorder symptoms, ODD = oppositional defiant disorder symptoms, ADHD = attention-deficit/hyperactivity disorder symptoms, CD = conduct disorder symptoms.

^aFor significant omnibus tests, all pairwise comparisons are significant at the *p* .05 level