Examining How Perceptions of Family Cohesion and Organization Effect Children's Psychological Functioning

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Objectives: This study aimed to look at (1) Are parent-child reports of organization and cohesion in family environment associated with parent-child reports of psychological functioning of child? (2) Are lower levels of parent-child agreement about the family environment associated with worse psychological functioning? We hypothesized that higher levels of cohesion and organization in family would be associated with lower levels of total psychological problems. We hypothesized that lower levels of agreement between parent and child reports on family environment would be associated with worse psychological functioning of child. **Methods:** The study sample included 101 low income, ethnically diverse (59% Black, 43% Hispanic, 15% White, 58% Female, 42% male) youth between the ages 10-12. Youth and a guardian completed interviews and measures on family environment and psychological wellbeing. **Results:** The results support the hypothesis that higher levels of cohesion and organization are associated with worse psychological functioning. **Discussion:** Overall, the findings support that family environment is important to children's psychological well-being and provide implications for future directions.

Keywords: [Adolescence, Psychological well-being, Family environment]

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Family environment plays a significant role in children's formative years. The family is one of the first support systems that children rely on to get their basic needs met. A positive family environment can serve as a protective factor for stress, especially during adolescence when stress is heightened (Burt, 1988). This protector factor can maintain a healthy family environment and foster healthy development. Adolescents are going through rapid changes in emotion, behavior, cognition, and biology which can affect many areas of their life (Burt, 1988). These rapid changes can be a significant stressor in the family environment. There is a lot of confusion that surrounds this development period and can affect their relationships. Having strong relationships and an organized family can support adolescents when they are going through these rapid changes in life. A chaotic home environment marked by lack of organization can cause disruptions in the family environment which can lead to further stress for adolescents (Wachs, 2010). These disruptions in the family environment can heighten the stress adolescents are already facing. Organization can be defined as routines, responsibilities, and rules in the family. Low-income parents tend to have higher stress and fewer resources than non-poor families have, which can limit their ability to maintain cohesion and organization within the home (Evans, 2010). As a result, children who live in a low-income household are more likely to be exposed to chaos and instability which can have negative developmental outcomes (Evans, 2010).

Two important aspects of the family environment—organization and cohesion--are captured by the Family Environment Scale (FES; Lanz, 2014). Family organization includes things such as how the family is structured, rules, responsibilities, and routines (Lanz, 2014). Behere (2017) found that children who come from an intact family (higher family structure) were less likely to be exposed to adverse childhood experiences compared to disrupted families. Family cohesion is measured by looking at the interpersonal relationships in the family, especially the level of conflict and expressiveness (Lanz, 2014). Kliewer (1998) found that cohesion mediated the relationship between stressors and maladjustment, showing that lower levels of cohesion were predicted by stress and served as a risk factor for internalizing and externalizing behaviors.

Prior research has used parent reports or external observer ratings of family environment and has failed to consider the child's experiences (Slesnick, 2004). A child may not understand the struggles of the family which can make them perceive their family environment differently than the parent might. If they do not understand their situation, they might have trouble understanding why their parents do certain things and have a biased attitude towards their family. Berkien et al., (2012), for example, found that when a child perceives that their parents treat them with different levels of emotional warmth, children were more likely to have behavioral problems. While Burt (1988) found that positive family environment was related to positive psychological functioning, their findings did not support the hypothesis that positive family environment would serve as a stress mediator. The current study was therefore designed to examine the perceptions of both parents and young adolescents on structure and organization in the home, and how each perspective is associated with emotional/behavioral problems in the youth.

Furthermore, we know even less about how well parent and youth ratings of the home environment would correspond to each other. Studies have either obtained the parent's or child's perception of family environment but very few studies have obtained the perceptions of both parents and children (Slesnick, 2004). Even fewer studies have examined parent-child correspondence (or lack thereof) and its implications for child mental health (Berkien et al., 2012). Past literature on family environments has also mainly focused on Caucasian youths and most studies have very few participants that are of other races. Therefore, a second aim of this study is to examine the degree of correspondence between parent and child reports of structure and organization in the home and how (non-)correspondence is associated with emotional/behavioral problems in a racially and ethnically diverse sample of youths with high stress exposure levels.

In this study, we plan to examine (1) Are parent and child reports of organization and cohesion in family environment associated with psychological functioning of child as reported by both parent and child? and (2) Are lower levels of parent-child agreement about the family environment associated with worse psychological functioning?

Based on prior research, we hypothesized that when higher levels of cohesion and organization were reported, lower levels of child's total psychological problems would be reported. We also hypothesized that when lower levels of agreement between parent and child reports on family environment, higher levels of child's total psychological problems would be reported.

Methodology

Parent study. Data for the current study were drawn from the Building a Strong Identity and Coping Skills (BaSICS) intervention clinical trial conducted by Martha Wadsworth, Ph.D. The parent study recruited low-income families with middle-school aged youth residing in neighborhoods in central Pennsylvania with elevated levels of poverty and violence to participate in the BaSICS clinical trial. The children in the study were age 10-12 at pre-test assessment, and were 59% Black, 43% Hispanic, 15% white, and 58% female. Children were randomly assigned to either receive the intervention or to a control group. Assessments occurred at four timepoints: pretest, posttest, 6-month follow-up, and 12-month follow-up. The assessments were conducted at community agencies local to the neighborhoods and happened outside of school hours. The parents were able to complete measures either in person or online, and the children's assessments were in person. At assessments, the families participated in interviews and completed questionnaires.

<u>Current study.</u> The current study used data from the BaSICS pre-test assessment. The current study used a cross-informant correlational design where the association between levels of organization/cohesion in family environment and psychological functioning of child was examined. The association between parent-child disagreement on organization/cohesion in family environment and psychological functioning of child as reported by both the parent and child was also examined. The measures included in the current study were child and parent report on organization/cohesion from the Family Environment Scale (Lanz, 2014) and total problem scores on the Child Behavioral Checklist (Achenbach and Rescorla, 2001). Parents completed the Child Behavior Checklist and the children filled out Youth Self Report. Both parents and youth completed the Family Environmental Scale.

<u>Measures</u>. The Family Environment Scale measures perceptions of cohesion within the family (e.g., "There is a feeling of togetherness in our family") and the emphasis on structure in the home (e.g., "Each person's duties are clearly defined in our family") (Lanz, 2014). To confirm internal reliability, an exploratory analysis was conducted for the subscales of the Family Environmental Scale and the subscales were adjusted based off the data for cohesion (4 items each, $\alpha s = .62 - .63$) and organization (5 and 8 items, $\alpha s = .63 - .65$) (Joos et al., 2019). The items removed from the subscales were primarily reverse scored items that might not have been clear to participants. The Child Behavioral Checklist yields a total problem score which is calculated from 112 and 113 items that are rated from 0 (never true) to 2 (very often true) about internalizing (e.g., depression, anxiety) and externalizing (e.g., delinquency, aggression) behaviors ($\alpha s = .90 - .93$) (Achenbach and Rescorla, 2001; Joos et al., 2019).

Data Analysis. To examine aim 1, within person and cross-informant correlations between organization and cohesion in family environment and total problems from the Child Behavioral Checklist and Youth Self-Report (Achenbach and Rescorla, 2001) were examined. To examine aim 2, a residualized, non-correspondence score was created by regressing parent FES scores onto child FES scores and saving the residual score. Second, I have examined correlations between the calculated correspondence score and total problems from the Child Behavior Checklist and Youth Self-Report.

Results

Within person and cross-informant correlations between organization and cohesion in family environment and total problems from the Child Behavioral Checklist and Youth Self-Report were conducted (Achenbach & Rescorla, 2001). Parent report on cohesion and parent report on organization was significantly correlated (r=.399, p<.001). Parent reports on cohesion and child reports on cohesion are negatively correlated but the correlation did not reach statistical significance (r=-.179, p=.055). Parent report on cohesion in family environment and parent report on child total problem score were significantly negatively correlated (r=-.281, p=.003). Parent report on organization in the family environment and parent report on child total problems score were negatively correlated (r=-.228, p=.015). Child report on organization and child report on total problem score were significantly negatively correlated (r=-.285, p= .003). Parent report on organization and total problems score reported by child were correlated but not statistically significant (r=-.175, p=.080). There was a significant correlation between parent report on child total problems and child report on child total problems (r=.245, p=.015). A residualized correspondence score was created by regressing parent FES scores onto child FES scores and saving the residual score to measure agreement in reports of family environment. There was a significant negative correlation between the agreement cohesion score and parent report on child's total problems (r=-.276), p=.003). There was a significant negative correlation between the agreement organization score and parent report on child total problems (r=-.226, p=.017). A regression model was run using the agreement scores for cohesion (p = .53, B = .07, t(100) = .63) and organization (p=.11, B=.18, t(100)=-1.62) and children's total problems score reported by child which was not significant ($R^2 = .026$, F(2, 98) = 1.31). A regression model was run on the agreement scores and children's total problems reported by parents which was significant for the cohesion residual score (p=.03, B=-.22, t (110) = -2.2) but not for the organization (p=.18, B=-.14, t (110) =-1.36) residual score (R²=.92, F (2, 108) = 5.44).

A regression model was run with the dependent variable being total problem scores reported by parents and reports of cohesion and organization by parent and child ($R^{2}=.95$, F (4,106) =2.77). Parent organization (p=.19, B=-.13, t (110) =-1.3), child organization (p=.8, B=-.03, t (110) = -.251) and cohesion (p=.89, B=.014, t (110)=.14) were not significant in this model. Cohesion reported by parent and children's total problem score reported by parent was the only significant relationship in this model (p=.035, B=-.22, t (110) =-2.14). A regression model was run with the dependent variable being total problem scores reported by child and the reports of cohesion and organization by parent and child ($R^{2}=.108$, F (4, 96) =2.92). Child cohesion (p=.65, B=-.045), parent organization (p=.097, B=-.18, t (100) = -1.68) and cohesion (p=.38, B=.095, t (100) =.88) were not significant in this model. Within this model, the child report organization was the only significant relationship to total problems reported by child (p=.02, B=-.24, t (100) =-2.36).

Discussion

This study aimed to examine if reports of family cohesion and organization are associated with children's psychological functioning. The study also aimed to examine if lower levels of agreement on family environment is associated with children's psychological functioning. Both hypotheses were supported by the data analysis, though within person effects were stronger than cross-informant effects. The hypothesis that family environment reports would be associated with psychological functioning was supported by the results. The hypothesis that lower levels of agreement would be associated with worse psychological functioning was also supported by the results.

This study helped fill in some of the gaps from previous research which has relied almost completely on reports from only one informant and on samples lacking in socioeconomic and racial diversity. This study used both parent and child reports for family environment and psychological functioning. Our participants were ethnically diverse as well as low income. Further, there is a dearth of research on parent-child agreement on family environment, and hence, examining parent-child agreement was one of the aims for the study. Since the design of the study was cross-sectional, we are unable to determine the direction of the correlations. The results of this study suggest that parent FES reports are not associated with children's FES reports. This was especially true for reports of organization in the home as correlations were quite small. This could be because children may feel differently about things such as rules and responsibilities than their parents do. The negative relationship between parent-reported cohesion and child-reported cohesion approached significance. Since the cohesion relationship is negative, this could mean that their opinions of cohesion in the home differ vastly. Children may be better raters when it comes to cohesion in the home. If the sample size were larger, this correlation would likely have been significant and would help inform the research more. Consistent with our hypothesis, we did see that the parent reports of FES were correlated with parent reports on total problems.

The positive correlation between parent reports on organization and cohesion infers that there is overlap on agreement of these two variables and that parents are consistent in their reports of family environment. The negative correlation between parent reports of cohesion and parent reports on total problems means that when parents reported a higher level of cohesion, they reported lower total problem scores. This supports the hypothesis that higher levels of cohesion would be associated with better psychological functioning. The correlation between parent organization and total problems reported by children was close to significance. This negative relationship could mean that when families have more structure, the psychological functioning of the child improves. Cohesion seems to be the more crucial factor in predicting psychological functioning of children in this model. The negative relationship between parent organization and total problems reported by parent could mean that higher levels of organization benefits children's psychological functioning. This relationship supports the initial hypothesis that higher levels of family organization would be associated with better psychological functioning. This relationship could mean that parents are more reliable when it comes to levels of organization in the home and how they affect children's behaviors.

The relationship between child reports of organization and child reports on cohesion were positive which infers that child are consistent when reporting on these variables. Child report on organization was negatively associated with total problems reported by child which infers that high organization levels are associated with lower total problems. This relationship could be because things such as routines and responsibilities help maintain structure in the home which can improve psychological functioning. Children may also be better raters of their psychological functioning than parents as they are the ones experiencing symptoms. The positive relationship between parent reports on total problems and child reports of total problems may infer that typically, they agree on the child's psychological state. The reason we believed this is that it can be hard for a parent to truly know how their child is doing as sometimes psychological problems are internalizing symptoms. The child may also not be comfortable telling their parents about their struggles.

The agreement regression model was positively correlated with parent cohesion and organization. The agreement score for cohesion was negatively correlated with parent reports of total problems which infers that cohesion is an important predictor of child total problems; When agreement is low on this variable, levels of total problems will be high. The agreement score for organization was also negatively correlated with total problems reported by the parent. This suggests that low parent-child agreement on family will be associated with higher total problems. These correlations help inform us that how well parents and children agree on family environment can affect psychological functioning. The regression model that used the agreement scores and total problems reported by child was not significant which lines up with the correlation table as it was not significant in the table. This could be that child reports are not as reliable as parent reports. It could also be that our sample size was low.

The regression model showed that parent-child agreement on family cohesion was more strongly associated with children's emotional and behavioral functioning than was agreement about family organization. This could be due to several factors. This could mean that cohesion is a more reliable predictor of psychological functioning. It could also be that cohesion is easier to report rather than the different variables involved in organization. Parent and children could also disagree more on organization as it has to do more with rules and routines. Similarly, parentreported cohesion was the only variable out of the full set of family environment variables that significantly predicted parent-reported total problems. This pattern of findings suggests that strong relationships among family members can foster a positive environment and help children be emotionally healthy. In the regression model containing all the family environment variables to predict child-reported total problems revealed that child-reported family organization was the only significant predictor in the model. This could reflect that when children feel like there is more structure in the home it can buffer psychological symptoms. This is consistent with existing research showing that children from highly organized homes have better psychological health.

This study had a few limitations. Since I used existing data, I did not get to conduct my own experiments and had to adapt to what was available. The data I used was collected during pre-test for the BaSICS intervention. In the future, analyzing the post-test and follow-up assessments could lead to better understanding of the direction of the correlations. We would be able to make more inferences with longitudinal data. In future research, it will be important to include covariates such as race and ethnicity to understand the effects of these important demographic factors on the results. Another limitation of this study is that the children themselves were reporting on family environment and psychological functioning. While it is good to have their point of view, children are not the most reliable reporters. Furthermore, self-report measures can contain biases. Future research should examine the extent to which these findings would be similar when examining other psychological outcomes.

To conclude, family environment is associated with children's psychological functioning. Cohesion seems to be more significant when looking at total problems reported by parents whereas organization seems to be more significant when looking at total problems reported by child. Further, the extent to which parents and children agree about the quality of their home environment appears to be a phenomenon worthy of continued study.

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	1	2	3	4	5	6	7	M(SD)
Parent re Cohesion	-							6.94(1.57)
Parent re Organization	.399**	-						6.06(2.13)
Kid re Organization	.033	.098	-					6.19(1.84)
Kid re Cohesion	179	052	.341**	-				6.94(1.57)
Total Problems K re K	.022	175	- .285**	146	-			53.37(10.78)
Total Problems P re K	- .281**	228*	043	.054	.245*	-		56.28(12.52)
Standardized Residual C	.984**	.403**	.097		002	276**	-	
Standardized Residual O	.404**	.995**		086	149	226**	0.395	

Tables Table 1. Within Person and Cross-Informant Correlation

*Note: Correlation is significant: p<0.01**, p<0.05**