EMPIRICAL RESEARCH



Family First? The Costs and Benefits of Family Centrality for Adolescents with High-Conflict Families

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Abstract Youth who do not identify with or value their families (i.e., low family centrality) are considered to be at risk for maladjustment. However, the current study investigated whether low family centrality may be adaptive in negative family contexts (i.e., high family conflict) because youth's self-worth should be less tied to the quality of their family relationships. Multilevel models using daily diaries and latent variable interactions using longitudinal questionnaires indicated that, among a sample of 428 Mexican American adolescents (49.8% male, $M_{\text{age}} = 15.02$ years), lower family centrality was generally detrimental to youth's well-being. However, for youth in adverse family environments, low family centrality ceased to function as a risk factor. The present findings suggest that family centrality values play a more nuanced role in youth well-being than previously believed, such that low family centrality may be an adaptive response to significant family challenges.

Keywords Adolescence · Family relationships · Family conflict

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Introduction

Adolescents' family relationships undergo significant changes as youth begin to individuate from their families and attain greater levels of cognitive, emotional, and behavioral maturity and autonomy (Laursen and Collins 2009). It is well-established that family relationships can play dual roles—both beneficial and deleterious—in youth's adjustment. However, researchers who have investigated adolescents' attitudes regarding their families have almost uniformly concluded that adolescents who place little value on their family relationships are at risk for a host of negative outcomes, from heightened suicidality (Kuhlberg et al. 2010) to increased substance use and association with deviant peers (Telzer et al. 2014). That is, valuing and identifying with the family, which we term high family centrality, is strongly beneficial and adolescents with low family centrality tend to experience negative consequences. Given that low family centrality (e.g., Telzer et al. 2014) and high family conflict (e.g., Cummings et al. 2015) have both been linked to poor adjustment, one might expect that youth who report having both these risk factors would show considerably worse outcomes in terms of their emotional well-being and behavioral problems. However, we suggest that family centrality values have more nuanced effects. Though low family centrality may generally be detrimental to adolescent well-being, some aspects of the family context may attenuate its negative effects. We used daily diary methodologies and longitudinal questionnaires to investigate whether psychologically distancing oneself from one's family might be an adaptive strategy specifically for adolescents who are situated in highly conflictual family environments.



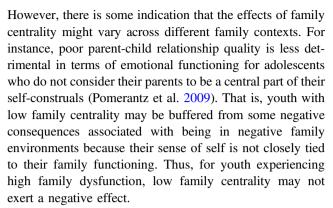
Myriad Benefits of Family Centrality

The effects of and extent to which adolescents value and feel connected to their families have been investigated through constructs such as familism (Germán et al. 2009), family identity (Hardway and Fuligni 2006), family interdependence (Phinney et al. 2005), and family obligation attitudes (Fuligni et al. 1999). We refer to these combined concepts as family centrality, which taps into how much individuals value and prioritize their family and family relationships, and consider family to be a central and important part of their identities. As children enter and progress through adolescence, aspects of family centrality undergo normative declines before stabilizing or rebounding during young adulthood (Tsai et al. 2013). Nonetheless, this sense of family centrality has been consistently associated with positive youth adjustment and provides a substantial buffer against a range of adverse life events and stressors (for an overview see Fergus and Zimmerman 2005).

Family centrality may be linked to adolescent adjustment in several ways. The first social group to which children belong is the family, which can represent a meaningful social identity that helps guide youth's behaviors and values (Fuligni and Flook 2005). Identification with a social group (e.g., family) or role (e.g., son or daughter) boosts individuals' self-worth (Stets and Burke 2000). Thus, considering family to be a central part of one's self might increase youth's self-worth and subsequently boost their socioemotional functioning. Indeed, when adolescents feel like good sons or daughters, they report a stronger sense of daily purpose, which is associated, in turn, with heightened positive affect (Kiang 2011). This sense of connection and security within one's family system has been linked to longitudinal decreases in adolescents' internalizing symptoms (Cummings et al. 2015). Adolescents who are high in family centrality may also be more willing to utilize their families as a resource. For example, adolescents who feel close to their parents and who endorse greater family obligation values are more likely to disclose their activities to their parents (Yau et al. 2009), which has been linked to youth's lower depressive symptoms (Hamza and Willoughby 2011) and delinquency (Keijsers et al. 2010).

Should Family Always Be So Central?

Extant research provides clear evidence that adolescents who are low in family centrality lack an important social identity and asset, likely putting them at heightened risk for maladaptive outcomes. For example, adolescents who are lower in family obligation values show longitudinal increases in depressive symptoms, which occur via decrements in self-esteem and life meaning (Telzer et al. 2015).



The current study investigates whether high family conflict is a context in which adolescents' low family centrality may not be associated with deleterious outcomes. Although family conflict occurs relatively infrequently (Chung et al. 2009), its effects are consistently negative. For instance, daily diary studies have shown that adolescents experience more emotional distress on days on which they have family conflict (Chung et al. 2009). The negative consequences of family conflict also spill over into other important domains of adolescents' daily lives; youth report more peer conflict (Chung et al. 2011) and problems at school (Flook and Fuligni 2008) in the days following family conflicts. On a more chronic, longitudinal level, youth with conflictual family relationships are at risk for a range of negative outcomes, from disrupted physiological stress responses and emotional dysregulation to physical and mental health problems (for review see Repetti et al. 2002). Therefore, while low family centrality may generally be associated with maladjustment, reducing the psychological importance of family relationships may be an adaptive strategy for those adolescents whose families are characterized by frequent or chronic conflict. This proposition may seem counterintuitive. That is, based on prior literature demonstrating the toxic effects of family conflict and the benefits of family centrality, one might expect that youth with both high family conflict and low family centrality would be in "double jeopardy" for maladjustment. However, several cognitive-emotional theories (e.g., contingent selfworth, self-discrepancy, and cognitive dissonance) offer support for our novel hypothesis that, in the case of high family conflict, low family centrality may not be detrimental to youth adjustment.

Research and theory on *contingent self-worth* suggest that successes and failures in domains that an individual does not particularly value have lesser impacts on their self-worth and well-being (Crocker and Knight 2005; James 1890). For instance, young adults with difficulties developing and maintaining close friendships generally experience more depressive symptoms, but the effect is nonsignificant among those who reported low friendship-contingent self-esteem (Cambron et al. 2010). Similarly,



self-discrepancy theory posits that discrepancies between one's ideal self (i.e., the attributes that one would ideally like to possess, such as having positive family relationships) and one's actual self (i.e., the attributes that one believes they actually possess; Higgins 1987) lead to heightened depressive symptoms (Stevens et al. 2014). However, these negative effects are dampened if discrepancies occur in identity domains that one does not particularly value (Burke, Owens et al. 2003). Finally, cognitive dissonance theory suggests that individuals experience cognitive discomfort and negative affect when they hold cognitions that are relevant to but inconsistent with one another (Festinger 1957). However, dissonance is attenuated if it occurs in domains considered to be relatively unimportant. For example, in a sample of adolescent girls, peer rejection was unrelated to depressive symptoms for girls who did not consider peer relationships to be important (Prinstein and Aikins 2004). Prinstein and Aikins (2004) suggested that simultaneously endorsing high peer centrality and experiencing peer rejection might create cognitive dissonance and, subsequently, distress. Thus, reducing peer centrality may be an adaptive strategy for girls at risk for peer rejection.

When applied to family centrality, these combined theories suggest that high family conflict may represent a relatively minor failure for youth who do not consider family to be a central part of themselves, and who do not expect or hope to have positive family relationships. In such highly conflictual family environments, the expected links between youth's low family centrality and maladjustment may be weakened as adolescents may have a clear motivation to psychologically distance themselves from their families in order to limit the distress they might otherwise experience as a result of their frequent family conflicts. Thus, rather than low family centrality being doubly detrimental when combined with high family conflict, low family centrality may actually be an adaptive response among youth in high conflict homes and not lead to their distress and psychological maladjustment.

Current Study

The current study examines whether the harmful effects that low family centrality exerts on youth well-being might be mitigated among adolescents situated in high-conflict families. We took a comprehensive approach in addressing this question, investigating the role that low family centrality plays in youth's adjustment within the contexts of both acute (i.e., daily) and chronic (i.e., longitudinal) family conflict.

First, using daily diary methods, we investigated whether the daily links between family conflict and adolescents'

emotional distress varied as a function of adolescents' average levels of family conflict and family centrality. Adolescents reported on the daily instances of family conflict and the positive and negative emotions that they had experienced each day over the course of 2 weeks. This approach provides a more naturalistic view of these phenomena as daily, lived experiences (Bolger et al. 2003), and allowed us to investigate the acute associations between family conflict and adolescents' emotional distress. Prior daily diary studies have linked daily family conflict to heightened emotional distress among racially and ethnically diverse youth (Chung et al. 2009). Although we expected to replicate this effect, we predicted that it would be moderated by adolescents' average family conflict and family centrality such that, for adolescents with low family centrality who typically experience low average family conflict, distress associated with instances of daily family conflict would indeed be amplified. However, for adolescents with low family centrality who typically experience high average family conflict, the link between daily distress and family conflict would be attenuated.

Second, we investigated the longitudinal roles of family centrality and chronic family conflict in adolescents' well-being. Using questionnaires from two waves of data collection, we conducted latent variable interactions to test whether family conflict moderated the longitudinal effects of family centrality on adolescents' internalizing and externalizing symptoms a year later. We expected that low family centrality would generally be associated with increased internalizing and externalizing symptoms, as is consistent with prior literature. However, we anticipated that the relations between adolescents' low family centrality and maladjustment would be attenuated among youth who experience high family conflict.

Importantly, we examine these questions in a sample of Mexican American adolescents. Research on family relationships and among Latino subgroups in particular has focused on the protective benefits of high family centrality and the importance of positive family bonds and harmonious family interactions (e.g., Gérman et al. 2009; Telzer et al. 2014). Although critically important, this characterization and emphasis may prevent an understanding of whether and how Latino youth achieve positive psychological adjustment in families characterized by heightened conflict, discord, or dysfunction, as some certainly are. The current research not only offers a new perspective on the nuanced role of family centrality on well-being among adolescents in general, but also provides new insight on low family centrality within a population for whom high family centrality has been viewed as a foundational characteristic (e.g., Fuligni and Flook 2005; Kiang and Fuligni 2009; Knight and Carlo 2012).



Methods

Participants

Participants included 428 (49.8% male) ninth and tenth grade adolescents ($M_{\text{age}} = 15.02 \text{ years}, \text{SD} = 0.83 \text{ years}$) from Mexican backgrounds who were part of a larger longitudinal study. Adolescents were from households of relatively low socioeconomic status with 63% of mothers and 63.8% of fathers not completing high school and 33.6% of mothers and 19.6% of fathers being unemployed. Of the employed parents, 51.8% of mothers and 56.9% of fathers had unskilled or semi-skilled jobs. The majority (85.5%) of adolescents lived in dual-parent households (i.e., at least two adults in the home). Most (81.5%) adolescents were part of immigrant families (i.e., either they, their parents, or both had been born in Mexico then immigrated to the United States). Adolescents provided written assent and parents provided written consent, and all procedures were approved by the Institutional Review Board.

Procedure

Participants were recruited from two public high schools in the Los Angeles metropolitan area. The student bodies of both schools were predominantly Latino/a (62 and 94%) from lower- to lower-middle class families. In both schools, over 70% of students qualified for free or reduced meals (California Department of Education 2011). Students were recruited during the 2009-2010 academic year. Classroom rosters of all 9th and 10th graders were obtained from the participating schools and then randomly allocated for study recruitment across the school year. Each week, several classrooms were selected and presentations about the study were given during class. Consents were mailed to students' homes and phone calls to parents were made to determine interest and eligibility. Both the adolescent and primary caregiver had to report a Mexican background and be willing to participate. A total of 428 families agreed to participate, which represented 63% of families who were reached by phone and determined to be eligible for the study. One year later, families were re-recruited to participate in the second wave of data collection. Retention at Wave 2 was 78.7% (n = 337).

At both waves, bilingual interviewers visited participants at home, where adolescents completed a self-report questionnaire that took about 45–60 min to complete. Questionnaires were available in both English and Spanish; almost all (98.6%) adolescents chose English. Next, adolescents were provided with 14 daily checklists to complete every night before going to bed for the following 2 weeks. The three-page checklists took approximately 5 to 10 min to complete each night. Participants were instructed to fold

and seal each checklist upon completion and to stamp the seal with an electronic time stamper each night. The time stamper printed the current date and time and was programmed with a security code such that adolescents could not alter the correct date and time. Participants were told that if inspection of the data indicated that they had completed the checklists correctly and on time, each family would also receive two movie passes. At the end of the 2-week period, interviewers returned to participants' homes to collect the diary checklists. Adolescents received \$30 for participating. The time-stamper monitoring and incentives resulted in a high rate of compliance. On average, adolescents completed 13 checklists (SD = 2.44). Although adolescents completed daily checklists at both waves, only data from Wave 1 are presented in the current study.

Daily Measures

Daily family conflict

At Wave 1, adolescents indicated each evening for 14 days whether any of five conflicts had occurred in their family (i.e., argued with their mom, argued with their dad, argued with another family member, punished by parents, parents argued; 0 = no, 1 = yes). An index of daily family conflict was derived by taking the average of these items on each day. The index had a possible range of 0 to 1 (0 =experienced no conflicts that day, to 1 =experienced all five conflicts that day). Reports of family conflict were also averaged across days to create a variable representing average family conflict experienced over the 2-week period (Range = 0.00-0.77, M = 0.09, SD = 0.10).

Daily distress

At Wave 1, adolescents reported their daily distress every evening for 14 days using items from the Profile of Mood States (Lorr et al. 1971), a measure that has been widely used in previous daily checklist studies of stress and psychological well-being (e.g., Bolger and Zuckerman 1995; Kiang 2011; Telzer et al. 2015). On a 5-point scale (1 = not)at all, to 5 = extremely), adolescents indicated the extent to which they felt each of seven negative emotions tapping anxious and depressed feelings (i.e., on edge, sad, unable to concentrate, uneasy, hopeless, nervous, discouraged; M = 1.53, SD = 0.57). The scale had good daily reliability $(\alpha = 0.75)$. Each emotion was loaded onto a distress latent with "sad" as the scaling indicator. To ensure that the "meaning" of distress was equivalent across the different levels of analyses, we constrained each emotion's factor loading to be equal at both the daily and individual levels. The measurement model demonstrated acceptable model fit, $\chi^2(34) = 150.12$, p < 0.001, CFI = 0.95, RMSEA = 0.03.



Table 1 Means, standard deviations, and internal reliabilities of questionnaire measures

Measure	M	SD	α
Wave 1			
Family identity	4.06	0.85	0.87
Respect for family	3.94	0.83	0.85
Future support for family	3.45	0.83	0.77
Family conflict	1.78	0.92	0.84
Internalizing: Anxious	4.87	4.00	0.80
Internalizing: Withdrawn	3.88	2.75	0.67
Internalizing: Somatic	3.46	3.07	0.75
Externalizing: Rule-breaking	5.09	3.80	0.76
Externalizing: Aggression	6.83	4.56	0.78
Wave 2			
Internalizing: Anxious	4.56	3.78	0.79
Internalizing: Withdrawn	3.77	2.79	0.71
Internalizing: Somatic	3.10	2.72	0.69
Externalizing: Rule-breaking	5.02	3.69	0.76
Externalizing: Aggression	6.41	4.67	0.80

Standardized loadings ranged from 0.32 to 0.62 on the daily level and from 0.46 to 0.97 on the individual level. All loadings were significant at p < 0.001.

Questionnaire Measures

Descriptive statistics and reliabilities of the questionnaire measures are presented in Table 1.

Family centrality

At Wave 1, adolescents reported their family identity and their values regarding respect for their family and future support for their family. Family identity measured the extent to which adolescents valued their families as part of their identity and felt valued by their families in turn (12 items; e.g., "My family is important to the way I think of myself as a person"; adapted from Hardway and Fuligni 2006). Participants completed the using a 5-point scale (1 = strongly)disagree, to $5 = strongly \ agree$). Respect for family assessed participants' beliefs about the importance of respecting and following the wishes, desires, and expectations of their family members (8 items; e.g., "How important to you is it to...do well for the sake of your family"; Fuligni et al. 1999). Future support for the family assessed adolescents' beliefs about the importance of providing support to and being near their families in the future (10 items; e.g., "How important to you is it to...help your parents financially in the future"; Fuligni et al. 1999). The importance of respect and future support for family were assessed using a 5-point scale ($1 = not \ at \ all \ important$, to $5 = very \ important$). In the longitudinal analyses, family centrality was modeled as a latent factor. In the daily-level analyses, due to the complexity of the models, we extracted a family centrality factor score based on a latent factor with the three subscales as indicators using Mplus (Muthén and Muthén 1998-2012).

Family conflict

At Wave 1, adolescents reported on how frequently in the past month they had experienced three types of conflict in their families (3 items; i.e., how often "you and your parents..." "had a serious argument or fight", "became very frustrated with each other", and "yelled or raised [their] voices at each other"; $1 = almost\ never$, to $5 = almost\ always$) using a measure previously employed among Latino/a youth (e.g., Telzer et al. 2014).

Internalizing and externalizing symptoms

At Waves 1 and 2, adolescents completed the Youth Self-Report form of the Child Behavior Checklist (YSR; Achenbach 1991). At both waves, adolescents used a 3-point scale (0 = not true of me, 1 = somewhat or sometimes true of me, 2 = true or often true of me) to report their internalizing symptoms (29 items; anxious: 17 items, e.g., "I am too fearful or anxious"; somatic: 7 items, e.g., "I don't have much energy"; withdrawn: 5 items, e.g., "I feel lonely") and externalizing symptoms (9 items; rule-breaking: 6 items, e.g., "I lie or cheat"; aggressive behaviors: 3 items, e.g., "I am mean to others").

Results

Attrition

Adolescents who participated in both waves had significantly fewer withdrawn symptoms at Wave 1 (M = 3.72, SD = 2.54) than did those who did not participate at Wave 2 (M = 4.50, SD = 3.35), t(119.33) = 2.06, p = 0.041. Adolescents did not vary by level of participation on any other study variable of interest.

Bivariate Correlations

The bivariate correlations between all questionnaire measures are presented in Table 2. The family centrality measures were negatively correlated with family conflict as well as with internalizing and externalizing symptoms at Waves 1 and 2. Family conflict was associated with greater internalizing and externalizing symptoms at Waves 1 and 2.



Table 2 Bivariate correlations between questionnaire measures

	1 2	3	4	S	9	7	∞	6	10	11	12	13	14
Wave 1													
1. Family identity	- 0.57**	** 0.42**	-0.31**	-0.30**	-0.27**	-0.31**	-0.35**	-0.31**	-0.28**	-0.23**	-0.20**	-0.28**	-0.30**
2. Respect for family	I	**09'0	-0.28**	-0.16**	-0.24**	-0.20**	-0.36**	-0.31**	-0.18**	-0.20**	-0.14**	-0.31**	-0.33**
3. Future support for family		I	-0.08	-0.08	0.14*	-0.10*	-0.22**	-0.12*	-0.11	-0.16*	-0.01	-0.22**	-0.18*
4. Family conflict			ı	-0.37**	0.29	0.33**	0.38**	0.45**	0.19**	0.13*	0.16*	0.18**	0.31**
5. Internalizing: Anxious				1	**69.0	0.55**	0.27**	0.48**	0.57**	0.42**	0.30**	0.11*	0.33**
6. Internalizing: Withdrawn					ı	0.46**	0.30**	0.47**	0.48**	0.55**	0.29**	0.16**	0.33**
7. Internalizing: Somatic						1	0.31**	0.44**	0.38**	0.29**	0.51**	0.21**	0.37**
8. Externalizing: Rule-breaking							1	0.65**	0.23**	0.24**	0.17**	**09.0	0.44**
9. Externalizing: Aggression								1	0.40**	0.33**	0.26**	0.46**	0.65**
Wave 2													
10. Internalizing: Anxious									ı	**0′.0	0.52**	0.29**	0.51**
11. Internalizing: Withdrawn										1	0.44**	0.32**	0.48**
12. Internalizing: Somatic											1	0.30**	0.42**
 Externalizing: Rule-breaking 												1	**99.0
 Externalizing: Aggression 													1

 $^*p \le 0.05; \ ^*p \le 0.01$



How do Family Centrality and Average Family Conflict Impact the Daily Associations Between Family Conflict and Adolescents' Distress?

To test whether the daily associations between adolescents' experiences of family conflict and distress were contingent upon their family centrality and overall levels of family conflict experienced over 2 weeks, we fit a taxonomy of nested multilevel models (MLMs) in Mplus version 7.11 (Muthén and Muthén 1998–2012) using the MLR estimator and FIML for missing data. We first fit the following model with a random intercept and fixed slopes:

$$\begin{aligned} \text{Distress}_{\text{ij}} &= b_{0\text{j}} + b_{1\text{j}}(\text{Family Conflict}) + b_{2\text{j}}(\text{Weekend}) + e_{\text{ij}} \\ b_{0\text{j}} &= c_{00} + c_{01}(\text{Average Family Conflict}) + c_{02}(\text{Gender}) \\ &+ c_{03}(\text{Family Generational Status}) + u_{0\text{j}} \end{aligned}$$

A particular adolescent's (j) reports of experiencing seven anxious and distressed emotions were used as indicators of a distress latent variable on a particular day (i). Distress was modelled as a function of that adolescent's average amount of distress across the 14 days (b_{0i}), the amount of family conflict that day (b_{1j}) , and whether that day was a weekday (b_{2i} ; 0 = weekday, 1 = weekend). We controlled for between-person variation in family conflict by entering a mean-centered average of family conflict across the 14 days of checklists as an individual-level predictor (c_{01}) of adolescents' average distress (b_{0i}) . Due to known differences in mood and affective disorders linked to individuals' gender (Hankin 2009) and immigrant generational status (e.g., Alegria et al. 2008), we included gender $(c_{02}; -1 = boys, 1 = girls)$ and family generational status $(c_{03}; 0 = \text{immigrant family}, 1 = \text{non-immigrant family})$ as additional individual-level covariates. Results indicated that adolescents experienced heightened distress on days with higher family conflict, B = 0.69, SE = 0.11, p < 0.001. Adolescents who experienced more family conflict on average over the course of the 14 days also experienced greater distress overall, B = 0.98, SE = 0.39, p = 0.013.

We next tested whether the daily association between conflict and distress (b_{1j}) varied significantly between adolescents. Allowing the slope to vary randomly improved model fit relative to the model with a fixed slope, $-2\Delta LL$ (1) = 175.32, p < 0.001. There was indeed significant variance in the slope, $u_{01} = 1.40$, SE = 0.29, p < 0.001. In order to test whether the extent to which adolescents experienced distress in conjunction with daily family conflict was contingent upon their average family conflict, family centrality, and the interaction between conflict and centrality we estimated the following individual-level

equations:

$$b_{0\mathrm{j}} = c_{00} + c_{01} (ext{Average Family Conflict}) \ + c_{02} (ext{Family Centrality})$$

 $+c_{03}$ (Average Family Conflict × Family Centrality)

 $+c_{04}$ (Gender) $+c_{05}$ (Family Generational Status) $+u_{0i}$

$$b_{1j} = c_{10} + c_{11}$$
 (Average Family Conflict)
+ c_{I2} (Family Centrality)

 $+c_{13}$ (Average Family Conflict × Family Centrality)

$$+c_{14}$$
(Gender) $+c_{15}$ (Family Generational Status) $+u_{1i}$

An adolescent's average level of distress across the 14 days (b_{0i}) was modeled as a function of their meancentered levels of family conflict across days (c_{01}) , their family centrality as reported in the initial questionnaires (c_{02}) , an average family conflict \times family centrality interaction (c_{03}) , their gender (c_{04}) , and their family generational status (c_{05}). The average family conflict \times family centrality interaction was created by multiplying the mean-centered average of family conflict across the 14 days by the family centrality factor score. Of primary interest, adolescents' daily association between their family conflict and distress (b_{1i}) was also modeled as a function of their mean-centered average family conflict across days (c_{12}) , family centrality (c_{12}) , and average family conflict \times family centrality (c_{13}) . A larger positive value representing the daily association between family conflict and distress (i.e., b_{1i}) indicates that the adolescent's experiences of family conflict are more strongly linked to their distressed feelings. The residual variances of adolescents' average levels of distress (u_{0i}) and their daily association between family conflict and distress (u_{1i}) were allowed to covary.

This full model represented a significant improvement in fit compared to the previous model that estimated a random daily association between family conflict and adolescent distress with no predictors, $-2\Delta LL$ (12) = 94.76, p < 0.001. Results indicated that adolescents who had more family conflict over the 14 days experienced greater distress overall (see Table 3). Those with higher family centrality experienced less distress. Importantly, the average family conflict × family centrality interaction was significant when considering the daily associations between family conflict and adolescent distress. That is, the extent to which an adolescent's daily experience of family conflict was associated with their distress was not only contingent upon their



Table 3 The daily association between family conflict and distress varies as a function of adolescents' average family conflict and family centrality

	В	SE	p		
Fixed effects					
Level 1 (Daily): Predicting daily dis	stress _{ij}				
Weekend (b _{1j})	-0.10	0.02	< 0.001		
Level 2 (Individual): Predicting dist	ress interce	pt (b _{0j})			
Average family conflict (c_{01})	1.11	0.38	0.003		
Family centrality (c ₀₂)	-0.19	0.07	0.005		
Family conflict \times centrality (c ₀₃)	-1.44	0.80	0.072		
Gender (c_{04})	0.06	0.03	0.045		
Family generational status (c ₀₅)	0.08	0.08	0.333		
Level 2 (Individual): Predicting daily association between family conflict and adolescent distress (b_{1j})					
Intercept (c ₁₀)	0.63	0.12	< 0.001		
Average family conflict (c ₁₁)	-1.39	0.77	0.071		
Family centrality (c ₁₂)	-0.30	0.18	0.097		
Family conflict \times centrality (c ₁₃)	3.04	1.40	0.031		
Gender (c ₁₄)	0.24	0.09	0.008		
Family generational status (c ₁₅)	0.45	0.24	0.061		
Random effects					
Level 1 (Daily)					
Daily distress residual (e _{ij})	0.19	0.02	< 0.001		
Level 2 (Individual)					
Distress intercept (u _{0j})	0.28	0.05	< 0.001		
Conflict to distress slope (u1j)	1.25	0.28	< 0.001		
Intercept and slope covariance	0.02	0.06	0.734		

Note: Weekday: 0 = weekday, 1 = weekend. Gender: -1 = boys, 1 = girls. Family generational status: 0 = immigrant family, 1 = non-immigrant family

family centrality, but also the amount of family conflict they experienced averaged over 2 weeks.

To unpack this three-way interaction, we calculated the daily associations between family conflict and distress (b_{1i}) for adolescents who had high or low family centrality at low, average, and high levels of average family conflict (Fig. 1). High and low average family conflict and family centrality were computed as one standard deviation above and below the mean. Regardless of adolescents' levels of average family conflict and family centrality, greater daily family conflict was significantly associated with greater distress within the same day, Bs > 0.46, ps < 0.04. Lower family centrality values exacerbated the daily association between family conflict and adolescent distress only for youth who experienced low levels of family conflict, B =0.61, SE = 0.27, p = 0.024. Among those who experienced higher levels of family conflict, family centrality was unrelated to the daily association between family conflict and adolescent distress, $Bs \ge -0.29$, $ps \ge 0.097$. For

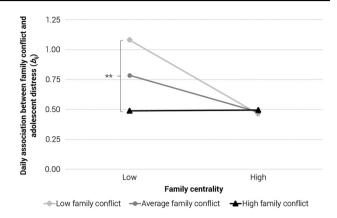


Fig. 1 Unstandardized daily-level associations between family conflict and adolescent distress (b_{ij}) by Wave 1 family centrality and average family conflict. High and low family centrality and family conflict = 1 SD *above* and *below* the mean. All effects control for whether that day was a weekday, adolescent gender, and family generational status. **p = 0.005

adolescents with high family centrality, the daily association between family conflict and adolescent distress was consistent regardless of their average family conflict over the 14 days. That is, experiencing more average family conflict overall did not amplify the daily relations between distress and family conflict for youth with high family centrality, B = 0.16, SE = 1.05, p = 0.881.

What are the Longitudinal Effects of Family Centrality and Family Conflict on Internalizing and Externalizing Symptoms?

Next, we tested whether the varying levels of family conflict moderated the effects of low family centrality on internalizing and externalizing symptoms a year later. Youth's internalizing and externalizing symptoms at each wave were modelled as latent factors using their YSR subscale scores as the indicators. In these analyses, family centrality was also modeled as a latent factor. We adopted the unconstrained product indicator approach to latent variable interactions proposed by Marsh and colleagues (Marsh et al. 2004). Simulations have shown that this method provides unbiased estimates of latent interactions even when distributional assumptions of multivariate normality in the exogenous variables are violated (Cham et al. 2012). Data analyses were performed using Mplus version 7.11 (Muthén and Muthén 1998-2012) using the maximum likelihood (ML) estimator and full information maximum likelihood (FIML) for missing data. All models controlled for adolescents' gender (-1 = boys and 1 = girls), family generational status (0 = immigrant family and 1 = non-immigrantfamily), and their Wave 1 reports of internalizing and externalizing symptoms, which were allowed to covary with the other independent variables.



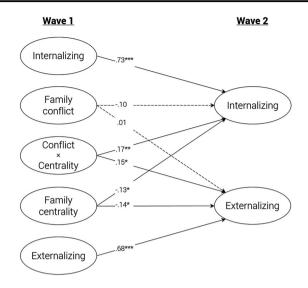


Fig. 2 Simplified moderation model with family conflict, family centrality, and their interaction at Wave 1 predicting internalizing and externalizing at Wave 2, controlling for baseline. For readability, only the effects of interest and the stability of internalizing and externalizing are depicted. All effects are standardized and control for adolescent gender and family generational status. $*p \le 0.05$; $**p \le 0.01$; $***p \le 0.001$

To create a latent interaction term representing family conflict × family centrality, we centered each predictor variable then created cross-products between the centered indicators of family conflict and family centrality. In order to produce the most reliable and precise indicators of the latent interaction term, we matched indicators based on their factor loadings (Marsh et al. 2004, 2012). For example, the family conflict variable with the highest loading (very frustrated, $\lambda = 0.84$) was matched with the family centrality variable with the highest loading (respect for family, $\lambda =$ 0.90). The resultant cross-products were used as indicators of the family conflict × family centrality interaction. The first-order and interaction latent factors were allowed to covary and were simultaneously entered as predictors of internalizing and externalizing symptoms at Wave 2. Traditional approaches to modeling latent interactions commonly entail imposing complex nonlinear constraints upon the cross-products, a practice that assumes multivariate normality (e.g., Kenny and Judd 1984). However, Marsh et al. (2004) found that eliminating these constraints did not result in more biased results. Indeed, under conditions of non-normality in the exogenous variables, the unconstrained method was superior. Hence, we did not impose further constraints upon the cross-products.

The full model with the main effects of family conflict and family centrality and their interaction predicting internalizing and externalizing fit the data well, $\chi^2(153) = 319.49$, p < 0.001, CFI = 0.95, RMSEA = 0.05. Additionally, a log-likelihood ratio test indicated that the full model

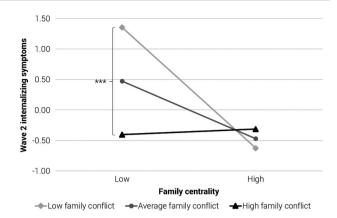


Fig. 3 Internalizing symptoms at Wave 2 by family centrality and family conflict at Wave 1. High and low family centrality and conflict = 1 SD above and below the mean. All effects control for adolescents' gender, family generational status, and baseline internalizing symptoms. *** $p \le 0.001$

provided significantly better fit when compared to a nested first-order model wherein the paths from family conflict \times family centrality to internalizing and externalizing were constrained to equal zero, $-2\Delta LL(2) = 9.92$, p = 0.007. Thus, including the interaction term represented a significant improvement in fit over a model with only the main effects of family conflict and family centrality. The full model showed that family centrality predicted fewer internalizing and externalizing symptoms a year later (Fig. 2). Of particular interest, the interaction mirrored that found using daily diary methods: The extent to which adolescents' family centrality predicted their later internalizing (Fig. 3) and externalizing symptoms (Fig. 4), above and beyond baseline levels, was contingent upon their experiences of family conflict.

Family centrality and family conflict were designated as being high or low if scores were one standard deviation above or below the mean, respectively. Consistent with prior literature, low family centrality worsened internalizing symptoms, but only among youth who experienced low and average levels of family conflict, $Bs \le -0.83$, $ps \le 0.012$. However, among youth who experienced high family conflict, family centrality was unrelated to internalizing symptoms, B = 0.04, SE = 0.49, p = 0.931. Again, differences arose among youth with low family centrality such that those who experienced high family conflict reported significantly fewer internalizing symptoms than those who experienced low family conflict, B = -0.94, SE = 0.26, $p \le$ 0.001. As in our daily diary analyses, high family centrality completely mitigated the effects of family conflict, B =0.17, SE = 0.37, p = 0.651. The findings for externalizing were parallel to those for internalizing. Low family centrality predicted more externalizing behaviors among youth who experienced low and average levels of family conflict, $Bs \le -0.61$, $ps \le 0.014$. Among those who experienced



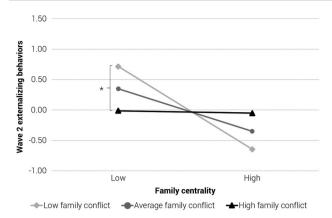


Fig. 4 Externalizing behaviors at Wave 2 by family centrality and family conflict at Wave 1. High and low family centrality and conflict $= 1 \, \text{SD}$ above and below the mean. All effects control for adolescents' gender, family generational status, and baseline externalizing symptoms. *p = 0.045

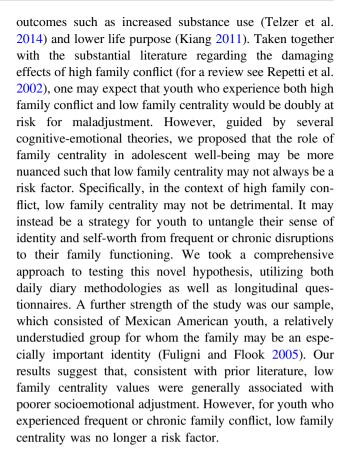
high levels of family conflict, the longitudinal link between low family centrality and externalizing behaviors was attenuated, B = -0.06, SE = 0.36, p = 0.872. For those adolescents with low family centrality, youth who experienced high family conflict reported fewer externalizing behaviors than did those who experienced less, B = -0.39, SE = 0.19, p = 0.045. High family centrality buffered youth from the effects of family conflict, B = 0.32, SE = 0.26, p = 0.225.

Alternate Model

Our daily and longitudinal questionnaire measures of family conflict were not exactly parallel. Whereas the longitudinal measure assessed parent-adolescent conflict, the daily measure was broader, including reports of arguments with other family members as well as interparental arguments. Recognizing this, we ran an alternative daily diary model in which daily family conflict was restricted to parentadolescent conflict (i.e., argued with their mom, argued with their dad, punished by parents). Daily associations between parent-adolescent conflict and distress were weaker for youth who experienced high parent-adolescent conflict over the 2-week study period, relative to those who experienced low conflict, B = -1.12, SE = 0.54, p = 0.039. This suggests that youth who have frequent conflicts with their parents may become somewhat inured to them such that they experience less distress on days when conflict occurs. However, this effect was not contingent upon their levels of family centrality, B = 1.25, SE = 0.98, p = 0.202.

Discussion

An abundance of studies have demonstrated that youth with low family centrality are at risk for a host of negative



Yet More Benefits of High Family Centrality

The current study replicated prior research demonstrating that youth with high versus low family centrality evince more optimal socioemotional functioning (e.g., Kuhlberg et al. 2010) as measured by the daily links between their family conflict and distress, as well as their internalizing and externalizing symptoms. Indeed, adolescents with high family centrality consistently reported better adjustment regardless of the severity of family conflict they were exposed to. One possibility is that adolescents' family centrality may be associated with a sense of security in their families, which buffers youth from instances of family conflict (Cummings et al. 2015). Thus, when family conflict occurs, adolescents with high family centrality may still feel like they are an important and valued part of their family, which may function as a safeguard against distress and maladjustment. Another explanation may be that adolescents who have cultivated a strong sense of family centrality may cope with conflict more successfully when it does arise, or have families who are more skillful at negotiating and resolving conflicts. Therefore, disagreements in the family may actually become settings for constructive communication and growth rather than major threats to family relationship quality and adolescent well-being (Laursen and Collins 2004).



Low Family Centrality is Not Maladaptive for Youth from High Conflict Families

The present study provides yet more support for the benefits of adolescents' high family centrality and the costs of low family centrality in some contexts. In general, low family centrality had the same negative effects found in prior studies, as measured by daily associations between adolescents' family conflict and emotional distress and their self-reported internalizing and externalizing symptoms. However, we provide the first novel evidence that low family centrality, which has been extensively linked to youth maladjustment, ceased to function as a risk factor for adolescents with high conflict families. Indeed, among those in high conflict homes, youth with low family centrality did not differ in terms of adjustment from their counterparts with high family centrality.

Our hypothesis and results may seem counterintuitive; however, they are consistent with several cognitiveemotional theories such as contingent self-worth (Crocker and Knight 2005), self-discrepancy theory (Higgins 1987), and cognitive dissonance (Festinger 1957). Generally, these theories suggest that individuals' self-esteem, self-worth, and well-being suffer less when failures occur in domains that are not highly valued. Some researchers have previously applied such theories to research on social relationships. For instance, Prinstein and Aikins (2004) found that, although peer relationships take on increasing significance during adolescence, adolescent girls who placed low importance on peer relationships were buffered from the negative effects of peer rejection. Guided by a cognitive dissonance framework, the authors theorized that devaluing peer relationships may be an adaptive strategy for youth experiencing peer rejection. Our present findings are consistent with this theory: Although low family centrality was generally associated with greater maladjustment, emotionally disconnecting from family was no longer detrimental for youth embedded in highly conflictual family environments.

It is particularly noteworthy that we found evidence for the more nuanced role of low family centrality using both daily diary methods and longitudinal questionnaires, which lends confidence to the robustness and generalizability of our results. On an acute daily level, youth, particularly those with low family centrality, felt more distressed on days on which they experienced family conflict. However, for those adolescents with low family centrality who also reported more intense family conflict over the 2 weeks of daily diaries, the relation between daily conflict and distress was attenuated. On a chronic, longitudinal level, youth with low family centrality reported more severe internalizing and externalizing symptoms a year later. However, parallel to our daily diary findings, low family centrality was no longer

associated with increased maladjustment for youth who experienced high family conflict. Taken together, these results suggest that low family centrality could impact the everyday lives of adolescents with highly conflictual family relationships by dampening their distress associated with daily occurrences of family conflict. These effects may accumulate over time such that youth with low family centrality experience fewer decrements to well-being as they become more "used to" their chronic or intense family conflict. Importantly, in no case did youth with low family centrality report superior well-being relative to their counterparts with high family centrality. However, for youth who experience high family conflict, diminishing the importance of family to their identities may be a "good enough" strategy.

In contrast to youth who report low family identity in the context of high family conflict, those with both low family centrality and low family conflict display the poorest adjustment across all our measurements, reporting high distress associated with daily family conflict and greater internalizing and externalizing symptoms over time. These individuals may be at greatest risk because they have weaker ties to the core belief that family is important as well as less experience navigating family conflict. Thus, they have neither a protective family centrality value system nor the predictability of frequent conflict that might enable them to cope with family conflict when it does occur. These youth may also have highly uninvolved or indifferent parents. Although this may reduce opportunities for conflict to occur, parental disengagement places youth at heightened risk for socioemotional deficits and antisocial behaviors (Steinberg 2000).

These novel findings not only advance the extant literature regarding family centrality but may also have significant implications for practitioners who work with adolescents and their families. Given the abundance of research touting the benefits of high family centrality, it is unsurprising that recommendations for improving adolescents' psychological and behavioral adjustment, and among Latino youth in particular, have focused on promoting family centrality (e.g., Calderón-Tena et al. 2011). However, although we found that youth with high family centrality reported better adjustment overall, focusing primarily on increasing family centrality may not be the optimal strategy for all youth. Instead, maintaining a level of psychological distance from the family may serve an important function for some adolescents in dysfunctional family contexts. It may therefore be beneficial to employ familyfocused strategies that directly target both family conflict and youth's family centrality, simultaneously improving the quality of family interactions and strengthening adolescents' psychological connections to their families (e.g., Gonzales et al. 2012; Prado et al. 2007).



Limitations and Future Directions

The current study has some limitations that suggest avenues for future research. Although our sample of Mexican American adolescents was a notable strength, it is unknown how the findings will generalize to other populations. Prior studies have shown that Latino youth particularly value family, endorsing greater family obligation values and spending more time assisting their families than do European American youth (e.g., Kiang and Fuligni 2009). Given their cultural emphasis on family centrality, it is possible that Mexican American youth are particularly vulnerable to disruptions in family functioning such as family conflict. Additionally, the majority of participants in the current study were from economically disadvantaged families. Socioeconomic status can strongly shape family processes and children's development (Barnett 2008), and may have impacted youth's perceptions of family functioning as well as their own adjustment. Future research should examine whether low family centrality may play a similar role among youth from other ethnic, cultural, and socioeconomic backgrounds.

In addition, the current study is unable to characterize those adolescents with low family centrality. It is possible that low family centrality youth with high versus low family conflict are qualitatively different. For instance, youth with high family conflict and low family centrality may experience heightened family conflict as a result of their low family centrality values, or they may psychologically distance themselves from their families in an adaptive response to chronic family conflict. The nature of family conflict might also differ among these youth; some may experience frequent but mild conflict while some may experience intense conflict, but only rarely. Capturing such nuances was beyond the scope of the present investigation, particularly within the context of a daily diary study. Future research should investigate the reciprocal longitudinal relations between family conflict and family centrality, as well as provide a more fine-grained investigation into the ways in which family conflict manifests.

It is also important to acknowledge some methodological limitations. We sought to test the roles of family centrality and family conflict in adolescent well-being using two longitudinal methods—in the short term using 2 weeks of daily diary reports and in the long term using 2 years of traditional questionnaires. Although both sets of analyses produced the same results, our daily models tested associations between family conflict and adolescents' distress within the same day. We argue that daily family conflict precedes adolescents' distress but cannot draw strong temporal conclusions. Furthermore, the effects we found, while consistent across methods, were not particularly strong, and were no longer significant when daily family conflict was

restricted to only parent-adolescent conflict. Given prior findings of spillover effects between parent-adolescent conflict and interparental conflict (e.g., Bradford et al. 2008), we expect that families of youth who report high conflict with their parents likely have more conflictual relationships between members. However, unlike our daily measures, our longitudinal questionnaires did not capture more general family conflict. More research is necessary to understand what factors (e.g., different demographic backgrounds, different measurements of conflict) either strengthen or weaken the links we uncovered between family centrality, family conflict, and youth well-being. Finally, the present study is based on adolescents' selfreports. This was ideal in assessing adolescents' own family centrality attitudes, which were of primary importance to the current research. With regard to family conflict, adolescents' perceptions of family tensions may deviate from those of other family members or external observers, and other contexts such as in-lab family interactions may elicit conflict differently. However, it should be noted that, although parents' and adolescents' perceptions of family functioning diverge, adolescents' reports have been shown to be more accurate and likely have a greater impact on their own adjustment (Gonzales et al. 1996). Adolescents' daily diaries in particular have the added benefit of capturing family conflict more naturalistically, in close to "real time." Nonetheless, future studies of the nuanced role of family centrality should include assessments of family dysfunction and adolescents' psychological well-being from other family members as well as external observers to test the robustness and generalizability of the conclusions across different reporters and contexts. While it is possible that the current findings were amplified by shared-reporter variance, their consistency across two different longitudinal methods lends support to their validity.

Interestingly, although not a focus of the current research, we found some significant effects of gender that were consistent with prior research. For instance, girls reported both greater daily distress and a stronger association between daily family conflict and distress. Due to the complexity of our models and our study's focus on providing a first, statistically rigorous examination of contexts in which low family centrality may perform an adaptive role, we chose to treat gender as a covariate. Exploring the complex ways in which gender, family centrality, and family conflict interact to influence adolescent well-being would be an important avenue for future research.

Conclusion

Literatures regarding the damaging effects of high family conflict and low family centrality suggest that youth who



report both of these attributes would be at substantial risk for maladjustment. However, the current study provides a novel perspective on the role that adolescents' family centrality values plays in their psychological well-being. Using both daily diary methodologies and longitudinal questionnaires, we demonstrated that low family centrality, previously considered to be a risk factor, is no longer maladaptive for youth experiencing high family conflict. Although family centrality is generally beneficial, the present findings suggest that youth without these values may not necessarily be at heightened risk. Rather, low family centrality may in fact be an adaptive response to significant family challenges.

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Author Contributions E.T., A.F., N.G. conceived of the study design. C.Y. performed statistical analyses. C.Y., A.F., N.G., E.T. drafted the manuscript. All authors read and approved the final manuscript.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no competing interests.

Ethical Approval All procedures were approved by the Institutional Review Board.

Informed Consent Informed consent and assent were obtained from all individual participants included in the study.

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