



Parentification and mental health symptoms: mediator effects of perceived unfairness and differentiation of self

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Existing research indicates that parentification can result in positive and negative outcomes for individuals; however, little is known about the mechanisms that account for the variability. This study tested a theoretical model of the relation between parentification tasks and mental health symptoms, with perceived unfairness and differentiation of self (DoS) as mediators. The results supported the proposed model in a sample of 783 college students. A significant total indirect effect existed between the latent construct of parentification and that of mental health symptoms. Significant specific indirect effects were observed between parentification and mental health symptoms with perceived unfairness as a mediator; between parentification and DoS with perceived unfairness as a mediator and between perceived unfairness and mental health symptoms mediated by DoS. Implications for clinical work with adult clients who have experienced parentification in their family of origin are addressed.

Key words: parentification; mental health symptoms; perceived unfairness; differentiation of self; affect regulation

Parentification occurs when one or both parents position a child to function in an adult role in the family system (Boszormenyi-Nagy and Spark, 1973; Minuchin, 1974). The child carries out instrumental tasks such as caregiving for younger siblings and expressive tasks such as emotionally comforting a hurting parent. When a parental-type role becomes a more consistent, patterned way of systemic functioning it is thought to have negative consequences for the parentified child. Parentification, or filial responsibility (Jurkovic *et al.*, 2001), tends to

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become problematic or dysfunctional when children 'assume excessive responsibility for other family members' (Jurkovic, 1998, p. 237) in a primary support role that is not 'appropriately acknowledged, supported, or reciprocated' (p. 239). In the empirical literature, the excessive responsibility aspect of dysfunctional parentification has primarily been operationalized in terms of the extent to which the child engaged in the two different types of tasks: instrumental and expressive (Hooper and Wallace, 2010), whereas the lack of acknowledgement and reciprocity in the way the family member relates to the caregiving child has been assessed by perceived unfairness (Hooper and Wallace, 2010). Existing research supports the general premise that higher engagement in parentification tasks and an increased perception of unjust, one-sided, or inequitable relating within the family system is indicative of a dysfunctional parentification process.

Several serious or chronic family stressors have been found to increase the risk for dysfunctional parentification in families, including alcoholism, mental disorders, divorce, employment problems and incarceration (Winton, 2002). It should be noted, however, that when parentification is a temporary structural arrangement for coping with and adjusting to a specific stressor, increased involvement in instrumental and expressive tasks can be functional and the lack of reciprocity may be more tolerated by the parentified child. In such instances the negative consequences for the parentified child may be reduced. Cultural factors may also influence the differential outcomes associated with parentification (East, 2010; Hooper and Wallace, 2010; Jurkovic *et al.*, 2001; Telzer and Fuligni, 2009). In addition, recent research has found an association between parentification roles and a number of positive outcomes, suggesting that in some instances the individual may experience developmental gains amidst potentially dysfunctional parentification processes (Hooper, 2007a, Hooper *et al.* 2008).

While evidence exists for parentification processes to result in differential outcomes for individuals, little is known about the mechanisms that account for the variability in outcomes. Research identifying relevant mediators is therefore needed, particularly since clinicians often work with individuals and systems facing the risk factors mentioned above, or find themselves working with an adult client whose childhood included experiences of dysfunctional parentification. Identifying relevant mediators will further solidify parentification as a viable clinical construct and possibly assist clinicians to discern (1) when intervention is required and (2) where to target

individual and relational interventions that will promote positive outcomes for the parentified client and relational system. Research on the differential outcomes of parentification has primarily focused on the retrospective perception of emerging and young adults' experience of their families of origin. The current study extended this line of research by addressing the need for understanding the mechanisms of the association between parentification and mental health outcomes. More specifically, we tested a model in which perceived unfairness and differentiation of self (DoS) mediated the relationship between the latent construct of parentification, consisting of the indicators of instrumental and expressive tasks and the latent construct of mental health symptoms in a sample of young adults.

Parentification and mental health outcomes

It has been shown that increased engagement in parentification tasks has associations with a variety of negative outcomes for the parentified individual (for example, Burton, 2007; Chase *et al.*, 1998; Hooper *et al.*, 2008, 2011; Hooper and Wallace, 2010; Jurkovic *et al.*, 2001; Stein *et al.*, 1999; Wells and Jones, 2000; Wells *et al.*, 1999), including anxiety, depression, psychological distress (Burton, 2007; Hooper and Wallace, 2010; Hooper *et al.*, 2008), shame (Wells and Jones, 2000), eating disorders (Rowa *et al.*, 2001) and substance misuse (Stein *et al.*, 1999). Sandage (2010) reported results from a qualitative family case study of intergenerational suicide in which a father and parentified adult daughter each committed suicide after sharing ideas about the topic, and a risk of suicide in parentified children has been noted in the literature (Byng-Hall, 2002; Jurkovic, 1997). The negative outcomes appear to be most associated with expressive parentification as opposed to (1) instrumental care-taking (Byng-Hall, 2008; Hooper and Wallace, 2010; Hooper *et al.*, 2008), (2) care-taking of siblings (Fitzgerald *et al.*, 2008), or (3) when care-taking occurs at normative levels or is supported by parent-child cohesion and beliefs about family respect and support (Telzer and Fuligni, 2009). However, of most significance, perhaps, in explaining the negative outcomes noted in the existing literature is the recent finding by Hooper and Wallace (2010) that, of the three parentification dimensions, only perceived unfairness was a significant and unique predictor of mental health symptoms.

Research attention has also turned to the ways in which involvement in parentification tasks may have positive consequences for the

individual (for example, Burton, 2007; Fitzgerald *et al.*, 2008; Hooper *et al.*, 2008; Stein *et al.*, 2007; Telzer and Fuligni, 2009; Thirkield, 2002; Tompkins, 2007). Tompkins (2007) found that when parental roles became a family response to the stress of a parent's medical condition, positive outcomes were reported in terms of parent-child intimacy and the child's adjustment to the demands of the medical condition on the family system. In addition, Thirkield (2002) found that instrumental parentification was associated with adult interpersonal competence. Stein *et al.* (2007) found that, at a 6-year follow up, their sample of racial minority adolescents with a parent with HIV/AIDS showed associations between greater parentification tasks, better coping skills and decreased substance use, which differed from the authors' earlier findings (see Stein *et al.*, 1999). Lastly, Hooper *et al.* (2008) found evidence of post-traumatic growth in a sample of college students who provided data on their childhood experiences of instrumental and emotional parentification. More specifically, a positive correlation between emotional parentification and post-traumatic growth occurred, although a measure of resilience was the best predictor of growth. Post-traumatic growth refers to gains derived from prior experiences of trauma. Parentification is conceptually likened to trauma in general and emotional neglect in particular due to the creation of an environment in which children's needs frequently go unmet and because of the exposure to chronic anxiety that often exists in such contexts (Hooper, 2007a; Widom, 1999).

Findings of both positive and negative outcomes, while consistent with the theoretical literature (Jurkovic, 1997), suggest that there are multiple factors, many yet unidentified, involved in the relationship between parentification and psychological health outcomes. Furthermore, recognition of the complexity of parentification processes has resulted in calls to examine mediators of the relationship between parentification tasks and well-being (Hooper and Wallace, 2010; Jurkovic *et al.*, 2001). Hooper and Wallace conducted a factor analysis of the parentification questionnaire (PQ; Jurkovic and Thirkield, 1998) and found support for the three-factor structure of parentification, thereby confirming the conceptualization of parentification as a multidimensional construct with distinct dimensions (see also Jurkovic *et al.*, 2001). They also found that perceived unfairness made a unique contribution to the prediction of increased somatic symptoms (Hooper and Wallace, 2010). Their work suggests that the subjective experience of unfairness or inequitable relating in the family system might account

for the differential outcomes associated with increased engagement in parentification tasks.

As a construct, perceived unfairness has received research attention as a mediator of the association between stressors and mental health outcomes. Katz and Nelson (2007) found that perceived unfairness in the context of past family member–child relating mediated the relationship between family stress and individuals' self-criticism. Beyond the parentification literature, Jackson *et al.* (2006) proposed a perceived unfairness model that demonstrated associations between perceived unfairness, psychological processes and health outcomes. Jackson *et al.* suggested that 'perceiving unfairness may be an important mechanism by which external inequities become internalized and influence health' (p. 23). Furthermore, perceived unfairness is associated with a range of negative emotions (Jackson *et al.*, 2006) which suggests that poor health outcomes may be due to a difficulty in regulating negative emotions. We suggest, therefore, that the types of parentification tasks may be forms of external inequities and that the extent to which these processes are perceived as unjust may be associated with increased mental health symptoms. We further suggest that the capacity to regulate negative emotions, conceptualized by the construct of DoS, may mediate the association between perceived unfairness and mental health symptomatology.

DoS and mental health outcomes

DoS has demonstrated positive associations with a variety of measures of psychological health (for example, Hooper and DePuy, 2010; Sandage and Jankowski, 2010; Skowron, 2004; Skowron *et al.*, 2003, 2004, 2009). The DoS construct consists of an intrapersonal and an interpersonal dimension (Kerr and Bowen, 1988). The intrapersonal dimension consists of the ability to lessen one's emotional reactivity. The interpersonal dimension consists of the ability to relate prosocially and intentionally to others. The intrapersonal dimension has most clearly been associated with the construct of affect regulation, while the interpersonal dimension has been characterized by interdependent relating (Skowron and Dendy, 2004; Skowron *et al.*, 2003). Interdependent relating seems tied to internal processes that enable individuals to regulate their emotions.

The trend in the literature appears to be to posit DoS as a mediator in association with psychological health (for example, Knauth and Skowron, 2004; Sandage and Jankowski, 2010; Skowron and Dendy,

2004; Skowron *et al.*, 2004; Williamson *et al.*, 2007), with DoS largely framed as an indicator of affect-regulating capacities. For example, in a rare study that included measures of both DoS and adult attachment, Skowron and Dendy (2004) found that DoS predicted effortful control over and above attachment security. DoS also mediated the relationship between forgiveness and well-being as measured by spiritual instability and mental health symptoms (Sandage and Jankowski, 2010). Spiritual instability, a negative index of spiritual maturity, represents a style of relational spirituality that is characterized by emotional dysregulation. DoS mediated the relationship between forgiveness and both spiritual instability and mental health symptoms. Lastly, Williamson *et al.* (2007) found evidence for the mediating effect of DoS on the relationship between social connectedness and proneness to shame.

Parentification, affect regulation and mental health symptoms: a proposed model

Based upon the reviewed literature, we tested a multiple-mediation model of the relationship between the latent construct of parentification and the latent construct of mental health symptoms, with perceived unfairness and DoS as mediating variables (see Figure 1). We examined mediation in terms of five hypothesized significant indirect effects within the model (Hayes, 2009; Preacher and Hayes, 2008). Firstly, a significant total indirect effect between parentification and mental health symptoms was hypothesized, with perceived unfairness and DoS as mediators. Secondly, a significant specific indirect effect between parentification and DoS by way of perceived unfairness was hypothesized. Thirdly, a significant specific indirect effect between perceived unfairness and mental health symptoms through DoS was expected. Fourthly, a significant specific indirect effect between parentification and mental health symptoms with perceived unfairness as a mediator was hypothesized. Lastly, a specific indirect effect between parentification and mental health symptoms with DoS as a mediator was hypothesized.

The hypotheses about specific indirect effects stem from previous research demonstrating an association between increased engagement in parentification tasks and mental health symptomatology (for example, Hooper and Wallace, 2010; Hooper *et al.*, 2011) and an association between the construct of perceived unfairness and mental health symptoms (Hooper and Wallace, 2010; Jackson *et al.*, 2006). In

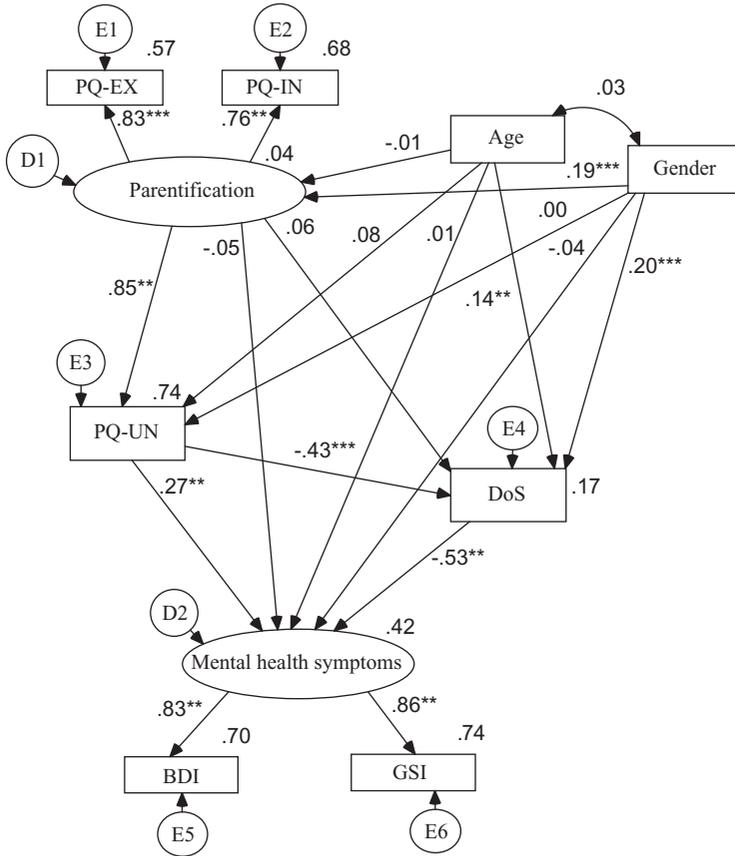


Figure 1. Model predicting mental health symptoms.

Note. ** $P < 0.01$, *** $P < 0.001$. $\chi^2 = 10.16(9)$, $P = 0.34$, Bollen–Stine bootstrap $P = 0.41$, standardized root mean square residual = .01, comparative fit index = .999, root mean square error of approximation = .01, $R^2 = .42$. $N = 781$, Gender: female = 1, male = 2. BDI, Beck depression inventory; DoS = differentiation of self; GSI, global severity index; PQ-EX, expressive parentification; PQ-IN, instrumental parentification; PQ-UN, perceived unfair parentification.

addition, the hypotheses are informed by evidence that the construct of perceived unfairness functioned as a mediator between family stress and psychological health (Katz and Nelson, 2007), evidence that DoS mediated associations between various predictors and psychological health (for example, Hooper and DePuy, 2010; Knauth and Skowron,

2004; Sandage and Jankowski, 2010; Skowron *et al.*, 2004; Williamson *et al.*, 2007) and the empirical literature demonstrating a positive association between regulatory capacities and psychological health in general (McCullough and Willoughby, 2009).

Method

Participants

The participants were 783 students from a large state university in the southern USA. Two participants did not provide gender data and two did not provide information on race. The two participants with missing gender data were retained for the initial statistical tests but were removed when gender was used as a control variable to test model fit. The participants ranged in age from 18 to 48-years old and the mean was 20.92 (SD = 3.73). The sample was 76.4% female ($n = 598$) and 23.4% male ($n = 183$). The participants identified as 80.7% ($n = 640$) non-Hispanic White, 13% ($n = 102$) African-American, 2.7% ($n = 21$) mixed race, 1% ($n = 8$) Hispanic, 0.5% ($n = 4$) Asian or Asian-American, 0.4% ($n = 3$) Native-American and 0.4% ($n = 3$) other.

Measures

Parentification. The PQ (Jurkovic and Thirkield, 1998) is a 30-item, self-report instrument that measures retrospectively three distinct dimensions of dysfunctional parentification: instrumental tasks, emotional tasks and perceived fairness or unfairness of the parentified role in the family system. Of the thirty items, ten pertain to instrumental parentification (PQ-IN), ten pertain to expressive or emotional parentification (PQ-EX) and ten pertain to perceived unfairness (PQ-UN). The participants rated how true the statements were on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Example items, one from each respective sub-scale, included: 'I helped my brothers or sisters a lot with their homework', 'My parents often tried to get me to take their side in conflicts' and 'In my family I often made sacrifices that went unnoticed'. Higher scores reflected a greater involvement in parentification tasks and perceived unfairness. Cronbach's alphas for the PQ sub-scale scores range from .82 to .92 (Burnett *et al.*, 2006; Hooper and Wallace, 2010; Jurkovic *et al.*, 2001; Kelley *et al.*, 2007). In addition, the factor analytic work of Hooper and Wallace (2010) offered construct validation for the PQ as a measure of the three distinct dimensions of parentification. For the current study, scores

from the three sub-scales demonstrated internal consistency alphas of .84 for PQ-IN, .84 for PQ-EX and .90 for PQ-UN.

DoS. The DoS inventory-revised (DSI-R; Skowron and Schmitt, 2003) is a 46-item, self-report measure used to assess Bowen's concept of differentiation. Two of the sub-scales (I position, emotional reactivity) assess the intrapersonal dimension of differentiation. The other two sub-scales (fusion with others, emotional cut-off) assess the interpersonal dimension. The full scale score was used in the current study. Higher scores reflected greater differentiation. The participants were asked to rate how generally true the items were about them on a scale from one (not at all true of me) to six (very true of me). Sample items included 'There's no point in getting upset about things I cannot change' and 'When things go wrong, talking about them usually makes it worse'. Evidence for the construct validity of the DSI-R exists in terms of the correlation with measures of attachment security and individuation (Skowron and Schmitt, 2003). The DSI-R has generated an internal consistency score of .92 on the full scale (Skowron and Schmitt, 2003). For the current study, the full scale score demonstrated an internal consistency alpha of .89.

Mental health symptoms. The Beck depression inventory (BDI; Beck *et al.*, 1996) and the brief symptom inventory (BSI; Derogatis, 1993) were used to assess the participant's level of mental health symptoms in the current study. The BDI consists of twenty-one self-report questions that capture depressive symptomatology. Scores for each item ranged from zero to three. Higher scores reflected a greater severity of depression symptomatology and a greater likelihood of major depression. The BDI is one of the most widely used instruments that measures depression and scores from this instrument have been shown to have good reliability and validity. Consistent with stability coefficients in other studies (Beck *et al.*, 1996), the reliability obtained from the BDI score was .92 in the current study.

The BSI is a fifty-three-item self-report inventory designed to reflect the psychological symptom patterns of psychiatric and general community groups. The psychometric properties of the BSI and sub-scale scores are excellent (Derogatis and Spencer, 1982). The instrument has a long history of being both highly reliable and valid. Cronbach's alphas for the nine symptom categories and global indices range from .71 to .85. The current study utilised the global severity index (GSI). The participants responded to the questionnaire using a

five-point Likert scale from zero (*not at all*) to four (*extremely*). GSI scores were calculated by summing the 53-items and then dividing by 53. Cronbach's alpha for the GSI was .97 in the current study.

Procedures

Following Institutional Review Board approval, we recruited participants to take part in a study investigating the link between childhood roles and responsibilities and adult psychological functioning. We utilised an online survey method. The electronic invitation included a description of the study, a direct link to the electronic survey and an informed consent form. Extra course credit was provided as an incentive and compensation for participating in the study.

Data analytic procedures

The proposed model of the relationships between variables was examined using structural equation modelling in AMOS 7.0 (Arbuckle, 2006; Byrne, 2010; Kline, 2005). Data on 805 participants were initially examined for outliers and normality. Univariate outliers (z scores greater than 3.29 and less than -3.29) were removed from analyses ($n = 22$). Multivariate outliers were non-problematic (D^2 values were not distinctively apart; Byrne, 2010), which resulted in a sample of 783 participants. Multivariate normality was violated (that is, multivariate kurtosis critical ratio was greater than 5.00; Byrne, 2010). All variables exhibited univariate skew except the DSI-R (that is, skewness critical ratios were greater than 2.5 or less than -2.5) and univariate kurtosis occurred for perceived unfairness, DSI-R, GSI and BDI (that is, kurtosis critical ratios were greater than 2.5 or less than -2.5). Given multivariate non-normality and problematic skew and kurtosis values, bootstrap analyses were conducted (Arbuckle, 2006; Bollen and Stine, 1990, 1992; Byrne, 2010; Hayes, 2009; Nevitt and Hancock, 2001), using the recommended bias-corrected (BC) confidence intervals (CI) and 5000 bootstrap samples (Preacher and Hayes, 2008).

Results

Table 1 contains descriptive statistics and bivariate correlations for the variables used in the analyses. DoS ($r = .11, P = 0.002$) and perceived unfairness ($r = .08, P = 0.04$) were significantly correlated with age. Participants differed on all but the GSI by gender (see Table 2). Race

TABLE 1 Descriptive statistics and bivariate correlation matrix of parentification, perceived unfairness, differentiation of self (DoS) and mental health symptoms

	1	2	3	4	5	6
1. PQ-EX	–					
2. PQ-IN	.63***	–				
3. PQ-UN	.70***	.65***	–			
4. DoS	-.24***	-.19***	-.33***	–		
5. BDI	.23***	.23***	.34***	-.53***	–	
6. GSI	.21***	.19***	.33***	-.51***	.72***	–
M	22.34	17.76	17.68	4.00	7.96	.50
SD	6.90	6.44	7.33	.58	7.61	.49

Note. *** $P < 0.001$. $N = 783$. BDI, Beck depression inventory; GSI, global severity index; M, mean; PQ-EX, expressive parentification; PQ-IN, instrumental parentification; PQ-UN, perceived unfair parentification; SD, standard deviation.

TABLE 2 Comparison by gender of parentification, perceived unfairness, differentiation of self (DoS) and mental health symptoms

	Gender				F statistic (1, 779)
	Female ($n = 598$)		Male ($n = 183$)		
	M	SD	M	SD	
PQ-EX	21.77	7.00	24.19	6.36	17.60***
PQ-IN	17.20	6.26	19.58	6.67	19.63***
PQ-UN	16.98	7.28	19.90	7.06	22.63***
DoS	3.95	.58	4.15	.55	17.47***
BDI	8.30	7.58	6.74	7.58	6.01*
GSI	.51	.48	.44	.51	2.58

Note. * $P < 0.05$, *** $P < 0.001$. $N = 781$. BDI, Beck depression inventory; GSI, global severity index; M, mean; PQ-EX, expressive parentification; PQ-IN, instrumental parentification; PQ-UN, unfairness parentification; SD, standard deviation.

was not examined due to the small sample sizes in all but two of the groups. Analysis tested the model for fit with the data while controlling for the effects of age and gender, with cases with missing gender data ($n = 2$) removed from the analysis. The model is presented with standardized regression weights from the bootstrap procedure in Figure 1. The results supported the hypothesized multiple-mediation model: $\chi^2 = 10.16(9)$, $P = 0.34$, Bollen–Stine bootstrap $P = 0.41$, standardized root mean square residual (SRMR) = .01, comparative fit index (CFI) = .999, root mean square error of approximation (RMSEA) = .01, $R^2 = .42$.

Examination of the indirect effects

Determination of mediation in the model was based on examining the significance of the indirect effects from the bootstrap procedure (Bollen and Stine, 1990; Hayes, 2009; Preacher and Hayes, 2008) and the Monte Carlo method for assessing mediation (MCMAM; MacKinnon *et al.* 2004; Selig and Preacher, 2008). MCMAM was used for comparison with the bootstrap analyses and when the AMOS bootstrap analysis prevented assessment of a specific indirect effect. The bootstrap procedure revealed a significant total indirect effect between parentification and mental health symptoms with perceived unfairness and DoS as mediators: total standardized indirect effect = .35, standard error of mean (*SE*) = .05, BC 95% CI (.25, .43), *P* = 0.001. For hypothesis two, the bootstrap analysis revealed a significant specific indirect effect between parentification and DoS, with perceived unfairness as the mediator: standardized indirect effect = -.36, *SE* = .08, BC 95% CI (-.52, -.22), *P* = 0.000, as did the MCMAM 95% CI (-.06, -.03). Thirdly, the bootstrap analysis revealed a significant specific indirect effect between perceived unfairness and mental health symptoms with DoS as the mediator: standardized indirect effect = .23, *SE* = .05, BC 95% CI (.13, .32), *P* = 0.000, as did the MCMAM 95% CI (.01, .02). Fourthly, the MCMAM revealed a significant specific indirect effect between parentification and mental health symptoms with perceived unfairness as the mediator 95% CI (.01, .03). Lastly, contrary to expectations, the MCMAM revealed a non-significant specific indirect effect between parentification and mental health symptoms with DoS as the mediator 95% CI (-.01, .01).

Discussion

The findings supported the proposed multiple-mediation model in which the relationship between the latent construct of parentification and the latent construct of mental health symptoms was mediated by perceived unfairness and DoS. More specifically, the results supported perceived unfairness as a distinct mediator in the model, as a significant specific indirect effect was observed between parentification and mental health symptoms with perceived unfairness as the mediator. Support was also found for a doubly mediated association between parentification and mental health symptoms with both perceived unfairness and DoS as mediators. A significant total indirect effect was observed, as was a specific indirect effect between parentification and

DoS, with perceived unfairness as the mediator; and a significant specific indirect effect between perceived unfairness and mental health symptoms was found with DoS as the mediator. Contrary to hypothesis five, a non-significant specific indirect effect was found between parentification and mental health symptoms with DoS as the mediator.

The findings primarily add to the existing literature by offering empirical support for two ideas. Firstly, perceived unfairness appears to be a distinct construct that has a unique relationship to instrumental and expressive tasks (Hooper and Wallace, 2010; Jurkovic *et al.*, 2001). Perceived unfairness functioned as a mechanism of the parentification–mental health association, independent of and in conjunction with DoS. Increased engagement in parentification tasks corresponded to increased perceptions of unfairness, which then corresponded to increased mental health symptoms. In addition, increased parentification tasks corresponded with increased perceived unfairness, which then corresponded to a decreased capacity for affect regulation as measured by DoS; lowered DoS then corresponded to increased mental health symptoms. The findings are also consistent with previous research in which perceived unfairness mediated the association between family stress and an indicator of psychological health (Katz and Nelson, 2007). In the context of this study, parentification tasks can be conceptualized as family stressors.

Second, DoS as a measure of affect regulation (Skowron and Dendy, 2004; Skowron *et al.*, 2003) functioned as a mechanism of association between perceived unfairness and mental health symptoms. The finding of a mediating function for DoS is consistent with prior research predicting psychological health (for example, Hooper and DePuy, 2010; Sandage and Jankowski, 2010; Skowron, 2004; Skowron *et al.*, 2003, 2004, 2009; Williamson *et al.*, 2007) and previous research indicating that DoS involves the capacity to regulate negative emotion (for example, Sandage and Jankowski, 2010; Skowron *et al.*, 2003). The results, therefore, offer support for a central construct of Bowen's family systems theory, that of DoS (Kerr and Bowen, 1988). Taken together, the findings offer a possible explanation for some of the variability in outcomes found in previous research on parentification. The extent to which parentification is perceived as unfair and variations in the capacity for regulating affect seem to account for some of the differential associations between parentification tasks and psychological health outcomes found in the existing literature.

Perceived unfairness

The emergence of perceived unfairness as a mediator in the model, separate from and in conjunction with DoS, suggests that when children experience higher degrees of parentification tasks they can develop and experience a dysregulating sense of injustice as emerging adults. The finding that a sense of injustice, measured by perceived unfairness, demonstrated associations with a measure of affect regulation and the latent construct of mental health symptoms seems consistent with prior research that has found associations between perceived unfairness and negative emotions (Jackson *et al.*, 2006) and research demonstrating associations between DoS and forgiveness and attachment security and forgiveness (for example, Jankowski and Sandage, 2011; Sandage and Jankowski, 2010). DoS and attachment security can be conceptualized as indicators of affect regulation capacities (Skowron and Dendy, 2004), while forgiveness involves responding to interpersonal injustice by regulating negative emotions in the face of unjust offenses without continuing to ruminate on them (McCullough *et al.*, 1997, 1998). Lee and Enright (2009) found that forgiveness moderated the relationship between adult children's perception of unfair treatment from their fathers and the experience of anger in their current relationships with their sons. Increased forgiveness also demonstrated associations with decreased perceptions of unfairness. Lee and Enright interpreted the results as support for forgiveness as a strategy in resolving the effects of perceived unfairness in the context of the intergenerational transmission of hurt and anger.

In addition, rumination about interpersonal injustices tends to correlate with increased negative emotions such as stress, anger and fear (Wade *et al.*, 2008), whereas forgiveness has been negatively correlated with psychological distress (Berry and Worthington, 2001; Orcutt, 2006). Schwartz and Finley (2010) found that, in their sample of emerging adults, ruminations about parental rejection and lack of parental support demonstrated associations with a variety of measures of poor psychological health.

It should be noted, however, that forgiveness and rumination were not directly assessed in the current study and that forgiveness is just one of numerous potential strategies for effective coping with perceived injustice. It would be useful in future research to investigate different strategies – including forgiveness and rumination – employed by individuals to mitigate the perceived effects of unfair parentification.

Items comprising the sub-scale of perceived unfairness tap into attachment-related concepts, such as parent dependability and availability, trust and acceptance; therefore, the finding of an association between perceived unfairness and an indicator of affect regulation such as DoS is not surprising when considered from the perspective of attachment theory. Others have made conceptual links between parentification and attachment theory (for example, Byng-Hall, 2002, 2008; Doucet and Rovers, 2010; Hooper, 2007b; Katz and Nelson, 2007) and between DoS and attachment theory (Skowron and Dendy, 2004; Skowron and Schmitt, 2003). Perhaps the perception of injustice reflects unmet needs for a secure attachment and a need for developmentally appropriate balancing of autonomy and togetherness in one's relationship with parents, while also emotionally and instrumentally care-taking those parents. Future research might explicitly assess attachment experiences and intergenerational differentiation processes between parent and child in order to test the theoretical assertion that the parentified children's own unmet needs in conjunction with meeting the needs of their parent(s) might account for their experience of perceived injustice.

Clinical implications

The concept of parentification shows potential for continued use in theory and practice, particularly where family systems, attachment-based and phenomenological models have already been integrated (for example, Byng-Hall, 2002, 2008; Elliott *et al.*, 2004; Greenberg and Goldman, 2008; Johnson, 1996, 2002). The findings of this study seem to suggest two unique avenues for therapy with parentified emerging and young adults: (1) resolving the experience of injustice and (2) facilitating affect regulation. One contribution to clinical practice concerns a focus on the experience of injustice associated with parentification tasks and the implication that perceived unfairness should perhaps receive more attention than has been the case thus far. Persistent experiences of injustice may not only be traumatic (Cicchetti, 2004; Hooper, 2007a; Hooper *et al.*, 2008; Widom, 1999) and therefore potentially deleterious but, if linked to rumination and unforgiveness, could have additional detrimental consequences. Research has demonstrated an association between rumination and unforgiveness (Burnette *et al.*, 2007, 2009) and the reduction of unforgiveness has demonstrated mental health benefits (Greenberg *et al.*, 2008, 2010; Lee and Enright, 2009; Toussaint and Webb, 2005). A common thread

linking rumination and the capacity to forgive is generally thought to be affect regulation (Burnette *et al.*, 2007; Lawler-Row *et al.*, 2006).

Beyond possibly assessing clients for perceived unfairness and exercising caution in trying to intervene directly in experiences of injustice, the findings of this study suggest that efforts directly aimed at promoting affect regulation could benefit parentified emerging adult clients. Practitioners may facilitate affect regulation by resolving the negative affect associated with relational injustice (Greenberg *et al.*, 2010; see also Lawler-Row *et al.*, 2006) and facilitating positive emotion (Doucet and Rovers, 2010; Greenberg *et al.*, 2010). It may be that unacknowledged and unexpressed primary emotions are preventing such clients from regulating their emotions (Doucet and Rovers, 2010; Lawler-Row *et al.*, 2006). For example, one primary emotion that has demonstrated an association with experiences of parentification is shame (Wells and Jones, 2000). Practitioners may therefore decide to facilitate increased awareness and sense-making of their clients' experience by directly attending to emotions associated with perceived relational injustice (Elliott *et al.*, 2004). Clinicians may also decide to intervene in the significant attachment relationships of their adult client and promote increased affect regulation by facilitating emotional expression in the context of safe and supportive relational experiences (Greenberg and Goldman, 2008; Johnson, 1996, 2002). Increasing interpersonal differentiation (Kerr and Bowen, 1988) might also be a relevant clinical objective. Clinicians can coach the adult client on how to engage non-reactively with parents in a way that allows for a balanced connection and separation in those relationships. Intervention may also involve finding ways to care for family members without problem-solving at home or soothing the anxiety of others in those relationships. However, it is worth noting that some parentified individuals may take a while to get used to the role of receiving care, since they have more typically functioned in a care-taker role. Practitioners should therefore remain cognizant of experiences such as guilt or grief and loss that could emerge as clients adapt to a non-care-taking role. Of significance, the utility of our preliminary clinical recommendations needs to be investigated and tested to determine their efficacy and effectiveness among diverse groups.

Limitations and future research

One limitation of the current study is that the sample consisted of mostly White emerging adults from the southern USA. Because of the

complex nature of parentification, it is imperative that researchers aim to include racially diverse participants in their studies (Hooper, 2011; National Institute of Mental Health, 2010; National Institutes of Health, 2002; Sperry, 2010) and consider culturally relevant factors that may relate to family-systems constructs such as parentification (Winton, 2002). Moreover, this first limitation seems pertinent given that there is some evidence of a difference between ethnic groups on types of parentification. For example, African-American college students reported more instrumental care-giving than Caucasian students and yet there were no group differences on perceived unfairness (Jurkovic *et al.*, 2001). The same findings occurred between African-American and non-Hispanic White participants in the present study. However, given the small sample size in some of the other ethnic group categories ($n = 3$), meaningful interpretation of group differences was not possible. Future research should include a more diverse sample from other geographical regions and contexts beyond the USA, including greater numbers of racially diverse participants so as to allow for meaningful comparisons between ethnic groups. The cultural generalizability of the model clearly needs further study as the findings and implications may not translate to contexts beyond the USA.

Secondly, research on parentification to date has been disproportionately oriented to emerging adult samples and has been predominantly cross-sectional in design. While the participants in this study ranged considerably in age, they were for the most part in the life-cycle stage of emerging adulthood. Furthermore, the study demonstrated a significant positive bivariate correlation between age and perceived unfairness. Future research, involving a more age-diverse sample, could examine the unfairness–age association further and explore possible mechanisms of the association. For example, the constructs of rumination and unforgiveness could possibly account for the association. A more age-diverse sample could also allow for meaningful comparisons of participants at different life-cycle stages. Longitudinal designs, such as that employed by Stein *et al.* (2007), might also be employed to better discern the ways in which parentification changes over time and the factors most associated with those changes. In these authors' work, adolescent reports of increased engagement in parentification tasks were associated with negative outcomes (Stein *et al.*, 1999), while as emerging adults the earlier experiences of parentification were associated with positive developmental outcomes (Stein *et al.*, 2007).

Theoretical multiple-mediation models that are alternatives to the one proposed here should also be tested by including measures of attachment security and prosocial constructs, as additional exogenous and endogenous variables, depending upon the theoretical formulation. More specifically, direct measures of forgiveness, shame and rumination could be included in future studies, thereby clarifying some of the conceptual links made in the discussion section of the current study. In addition, positive, growth-oriented indicators of psychological health could meaningfully expand the model. For example, existential well-being, positive emotionality and relational well-being could be included as outcome measures in the model.

It is also important to acknowledge that the present findings are from a non-experimental design with a non-clinical sample. The clinical utility of the ideas expressed in this article is therefore limited and the implications discussed are based on conceptual associations that are in need of empirical examination. The clinical utility of the ideas could also benefit from research that specifically employs clinical effectiveness designs.

Conclusion

The results of this study are consistent with previous research that has demonstrated an association between increased parentification tasks and increased mental health symptoms. The findings therefore support longstanding theorizing on parentification (Boszormenyi-Nagy and Spark 1973; Jurkovic, 1997; Minuchin, 1974). More importantly perhaps, the findings also extend recent theorizing on parentification or filial responsibility (Hooper and Wallace, 2010; Jurkovic *et al.*, 2001; Katz and Nelson, 2007) that attends to the dimension of perceived unfairness as a potentially key influence on the differential outcomes associated with performing parental-type roles and responsibilities within the family as a child. In this study, we identified two mediators which might account for the variations in outcomes observed in the existing literature on the parentification–psychological health association. While prior theorizing posited that parentification need not correspond to negative outcomes and research has supported this contention, this study expands the existing literature by suggesting that perceptions of injustice and affect-regulating capacities appear to play an influential role in outcome experiences. The study can serve as a preliminary guide to clinical intervention by encouraging practitioners to consider assessing their

adult clients for perceived injustice in their family of origin experiences and to possibly intervene by facilitating increased affect regulation.

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