

## ASSESSING FAMILY CAREGIVING: A COMPARISON OF THREE RETROSPECTIVE PARENTIFICATION MEASURES

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*Despite the frequent use of the Parentification Questionnaire (PQ) and the Parentification Scale (PS) in research studies, scant attention has been directed toward the psychometric properties of the scores derived from these measures. Moreover, given the importance of parentification as a clinical topic for treatment, it is surprising that more attention has not been paid to the accuracy and psychometric properties of parentification instruments. The current study was the first to compare the psychometric properties of these two commonly used parentification instruments (i.e., PQ and PS). This study also examined another parentification instrument, newly developed: the Parentification Inventory (PI). More specifically, the psychometric properties of the PI were compared comprehensively with those of the PQ and PS in a sample of college students (N = 787). Scores derived from the three measures were found to be comparable, valid, and reliable. Implications for couple and family system practice, and directions for future research are proffered.*

Parentification is “a disturbance in generational boundaries” (Hooper, 2007a; p. 332) that can be evidenced by a reversal of roles within the family system (McMahon & Luthar, 2007; Wells & Jones, 1998, 2000). In its simplest form, parentification occurs when a child assumes adult-like roles and responsibilities (Boszormenyi-Nagy & Spark, 1973; Champion, 2005; Locke & Newcomb, 2004). Typically, parentified children suppress and defer their own needs so that they can meet the needs of another family member (e.g., parent, caregiver, or sibling; Carroll & Robinson, 2000; Chase, Deming, & Wells, 1998; Fagan, 2003; Hooper, 2007a, 2011; Kelley et al., 2007; Macfie, McElwain, Houts, & Cox, 2005b; McMahon & Luthar, 2007). Although people who are parentified as children are not fated to experience negative outcomes in adulthood, the aftereffects and pernicious outcomes often seen in adulthood have been studied empirically and reported extensively in the clinical and research literature base (Chase, 1999; Hooper, Marotta, & Lanthier, 2008). Indeed, retrospective, self-reported parentification in childhood is associated with deleterious outcomes in overall health and wellness across the life span (see Chase, 1999).

Given the importance of parentification as a clinical topic for treatment, it is surprising that more attention has not been paid to the accuracy and psychometric properties of parentification instruments. The purpose of this study was to examine and compare the psychometric properties of two commonly used measures of retrospective parentification—Parentification Questionnaire (PQ; Jurkovic & Thirkield, 1998) and Parentification Scale (PS; Mika, Bergner, & Baum, 1987)—with those of one new measure: Parentification Inventory (PI; Hooper, 2009). Although the research suggests indirectly that scores derived from the PQ and PS yield satisfactory psychometric properties, relatively few studies have purposefully and directly examined their psychometric properties, and no studies have directly compared the psychometric proper-

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ties of the two traditional measures. Moreover, the scant attention paid to the psychometric properties of these instruments may explain why they are used in the research base primarily and less in clinical settings. The current study allowed for the comparison of incremental validity (Haynes & Lench, 2003) among all three retrospective, self-report parentification measures. Additionally, the results of the study may engender confidence in the instruments among the clinical community so that they may be used in the context of research and practice alike.

Therefore, this study was designed to fill these three important gaps: (a) to examine purposefully the psychometric properties of two commonly used instruments in the research literature base that measure parentification; (b) to compare a new measure—one that attempts to combine elements from existing measures into one comprehensive measure—with the other measures; and (c) to report on the relations between retrospective childhood parentification and adult functioning—both psychological health and physical health—which may engender confidence in their use among therapists in the clinical and practice community.

## BACKGROUND

Previous research using the PQ (Jurkovic & Thirkield, 1998) and PS (Mika et al., 1987) has suggested that the consequences of parentification fall along a continuum from mild to great depending on the demands placed on the child, the length of time in which the responsibilities are carried out, the extent to which the parent-like roles and responsibilities are valued, to whom the parentification roles and responsibilities are directed (i.e., parent, sibling, grandparent and so forth), and the personality characteristics that the child possesses. The next section describes the accumulated indirect evidence of validity and reliability of the PQ and PS and empirical evidence that has been informed by these measures.

According to Aldridge (2006), Hooper (2011), and Mika et al. (1987), the caretaking role can become detrimental both in childhood and throughout the life span when it becomes a long-term role that requires more of the child, physically and emotionally, than the child can give because of age and maturity levels. Godsall, Jurkovic, Emshoff, Anderson, and Stanwyck (2004), and Mika et al. also asserted that the caretaking role can become harmful to a child if the child's needs are neglected because of the responsibilities placed upon him or her, if the parent takes on a child-like role in relation to the child and if the child is not recognized for fulfilling the role or is punished for performing its duties. Because of the additional concerns and responsibilities of caretaking, the parentified child may not learn "developmentally appropriate tasks that build self-concept," which can negatively affect a child (Godsall et al., 2004, p. 799) and the adult that he or she later becomes (Hooper, DeCoster, White, & Voltz, 2011).

An important point highlighted by child development and family system scholars is that childhood relationships and attachments can greatly influence relational patterns during adulthood (Byng-Hall, 2008a; Hooper, 2003). Parentification has been associated with higher levels of difficulty in establishing "a separate and authentic sense of self in adult relationships and work" (Chase et al., 1998, p. 106). Cree (2003) posited that some caregivers, especially younger children, can experience difficulties because of their young caregiving roles when they transition from adolescence to adulthood. Cree also suggested that certain problems experienced by young caregivers increase in severity as the caregivers grow older. The problems that Cree found to worsen with age in her young caregiving participants included the following: "sleeping difficulties, eating problems, truancy, trouble with the police, substance abuse, self-harm and worries about not having friends" (p. 306). Alarming, the risk of suicide also appears to increase as the caregiving children grow older. In Cree's study, four of the 61 participants between the ages of 10 and 12 years reported having had suicidal ideation, and Cree suggested that the risk of suicide for all young caregivers should be closely monitored.

Parentification can include duties other than emotionally focused caretaking, such as helping to provide financially for one's family. Longest and Shanahan (2007) suggested that adolescents living in families with only one parent may have to work an excessive number of hours to help support their families, which can lead to higher levels of stress and a higher likelihood of substance use. In their study of 3,290 US adolescents, Longest and Shanahan found that adolescent participation in paid work was associated with adolescent use of alcohol and sometimes

marijuana. They found that those adolescents whose parents monitored their activities were significantly less likely to drink alcohol frequently. This buffering effect, though, was only found present for adolescents who worked a moderate number of hours, not for those who worked an excessive number of hours each week. In addition, parental monitoring was not found to affect marijuana use by the working adolescents involved in Longest and Shanahan's study. Another important finding from that study was that younger adolescents were more likely to be protected from substance use because of parent monitoring than were older adolescents.

Some researchers have argued that child parentification can lead to poor parenting skills later in life (Byng-Hall, 2008b)—although Locke and Newcomb (2004), in their longitudinal study of 318 parents (followed since childhood), found that if participants whose parents had abused alcohol or other drugs were indeed parentified, the experience did not seem to negatively affect their development of successful parenting skills. Byng-Hall (2008b) asserted that parentified children often transmit the pattern of responsibility they faced as children to their own children or, conversely, that they overcorrect for their childhood experiences, preventing their children from having the opportunity to develop parenting skills. The latter pattern can lead this next generation of children to have high demands, in turn, for their own children, thereby transmitting parentification, although skipping one generation after the original parentified child. Byng-Hall (2008b) also suggested that adults who were parentified as children often choose spouses looking for someone to take care of them, thereby perpetuating the role of caretaker in those adults' lives. Alexander, Teti, and Anderson (2000) also reported that parenting styles tend to be passed down through families as children become adults and have children of their own.

Wells, Glickauf-Hughes, and Jones (1999) studied the relationship between parentification and codependency in 200 university students, finding that parentified children are more likely than nonparentified children to display codependency in adulthood. They also found that codependency tends to be positively correlated with feelings of shame and inadequacy toward oneself (see also Wells & Jones, 2000). Katz and Nelson (2007) reported that unfairness, or the feeling that one cannot depend on parents to provide for one's needs, is part of parentification. Katz and Nelson, in a study of 98 North American undergraduate college students and their parents, found that student-reported unfairness in the childhood family of origin was significantly correlated with self-criticism later in life.

## THE PRESENT STUDY

In general, self-report questionnaires are commonly used in the conduct of evidence-based clinical practice and empirical research. A careful review of the literature (such as the foregoing section) on parentification reveals that two commonly used instruments are the PQ (Jurkovic & Thirkield, 1998) and the PS (Mika et al., 1987), although little focus has been explicitly placed on their psychometric properties. Taken together, the clinical and research literature confirms that parentification experienced in childhood is an important correlate and predictor of mental health and functioning in adulthood, and such instruments are a vital part of understanding this phenomenon. But the expansion of research on parentification over the past decade, the possibility for bimodal outcomes, and changes in demography and family configurations all warrant the development of additional parentification instruments that are informed by these changes. Additionally, few studies have purposefully and intentionally examined the validity of the PQ and PS. Because construct validation is an ongoing process, the current study adds to the literature in important ways (i.e., examined scale score reliability and validity). This study also examined another parentification instrument, newly developed: the PI.

The primary reason for the development of the PI was to provide a multi-dimensional instrument that is undergirded by an integrative framework informed by existing measures. The PI attempts to incorporate characteristics of the PQ (Jurkovic & Thirkield, 1998) and the PS (Mika et al., 1987) and to add items that may be relevant to 21st-century families (e.g., the growing phenomenon of alternate caretakers present in many families, as well as disparate cultural practices) with whom family and couple therapists work. It is noteworthy that the PQ and PS have been used primarily by researchers and scientists and less by therapists in clinical

settings. Moreover, even though indirect has accumulated for these measures (as described above), no studies have examined their psychometric properties directly.

The purpose of this study was to compare the psychometric properties of the PQ (Jurkovic & Thirkield, 1998), the PS (Mika et al., 1987), and the newly developed PI (Hooper, 2009). Although empirical research has suggested that scores derived from the PQ and PS yield satisfactory psychometric properties, no studies have compared directly the psychometric properties of these two traditional measures. Moreover, no studies have juxtaposed the psychometric properties of the PQ and the PS with those of the newly created instrument, the PI. This study was designed to fill these important gaps.

## AIMS AND HYPOTHESES

Three specific aims motivated this study. Aim 1 sought to examine the convergent validity of the three assessments of parentification: PI, PQ, and PS. Aim 2 sought to examine the internal consistency (Cronbach's alphas) of the PI, PQ, and PS. Finally, aim 3 sought to investigate the divergent and predictive validity of the PI, PQ, and PS by relating the scores from these measures to those from the SF-36 health outcome measure.

Three corresponding hypotheses were, therefore, examined in this study:

*Hypothesis 1.* The PI, PQ, and PS will be strongly positively correlated with one another.

*Hypothesis 2.* Scores from the PI will result in reliability coefficients that (a) are similar to the PQ and PS and (b) are 0.70 or greater.

*Hypothesis 3.* The higher scores on the parentification measures will be correlated with and predictive of scores derived from a measure of psychological and physical health (i.e., SF-36).

## METHOD

### *Survey Procedure*

Following Institutional Review Board approval, participants were recruited to take part in a study investigating the link between childhood roles and responsibilities and adult functioning. The survey was administered online using a web-based methodology. Specifically, participants were sent an electronic invitation to participate in the study. The electronic invitation included a description of the study and a direct link to the electronic survey and the informed consent form. Four instruments and a demographic information sheet were used in the current study. On average, participants took approximately 35–40 min to complete the questionnaires. All instruments were in English. Extra course credit was provided as an incentive for participating in the study. Participants received reminder e-mails 2 weeks after they expressed an interest in the study.

### *Measures*

*Demographic information sheet.* This instrument, created for the study, asked survey participants to respond to background questions. Questions covered the participant's year in school, academic program, age, gender, and racial and ethnic background.

*Parentification Inventory.* The PI (Hooper, 2009) is a retrospective 22-item self-report measure that assesses caregiving roles and responsibilities usually reserved for adults but carried out by children. The PI is also designed to measure the perceived benefits of performing caregiving roles in one's family of origin. Participants respond to the 22 items using a five-point Likert-type scale, ranging from 1 (*never true*) to 5 (*always true*). The PI consists of three subscales: parent-focused parentification, sibling-focused parentification, and perceived benefit finding of parentification. Items associated with parent-focused parentification include, for example, "I was expected to comfort my parents when they were sad or having emotional difficulties" and "My parent(s) often shared secrets with me about other family members." Items associated with sibling-focused parentification include, for example, "I was responsible for making sure that my siblings went to bed every night" and "I was the primary person who disciplined my siblings." Items associated with perceived benefit finding of parentification include "I really enjoyed my role in the family." Scores can fall in the range of 1–5, with higher total and subscale scores reflecting greater perceived levels of parentification or perceived benefits of the parentification process.

The initial phase of the development and item generation of the PI was informed by the survey development literature base (Worthington & Whitaker, 2006), by a comprehensive review of family system theory, and by other instruments that have captured elements of childhood parentification retrospectively (Jurkovic & Thirkield, 1998; Mika et al., 1987). In the original research, exploratory and confirmatory factor analysis resulted in a three-factor solution for the PI items. Internal consistency coefficients evinced in the confirmatory factor analysis ranged from 0.79 to 0.84. Further details of the factor analysis can be obtained from the first author of this paper.

*Parentification Questionnaire.* The PQ (Jurkovic & Thirkield, 1998) is a widely used 30-item self-report instrument that retrospectively measures three dimensions of perceived parentification: instrumental parentification, emotional parentification, and perceived fairness of the parentification process. Of the 30 items, 10 pertain to instrumental parentification, 10 pertain to emotional parentification, and 10 pertain to perceived fairness. Participants rate how true the statements are on a five-point Likert scale, where 1 is *strongly disagree* and 5 is *strongly agree*. The overall score for parentification, therefore, falls in the range of 30–150. Subscales—instrumental parentification, emotional parentification, and perceived fairness—can yield a score in the range of 10–50. For both the overall score and the subscale scores, higher scores reflect greater parentification and/or perceived fairness. Cronbach's alphas for the PQ subscale scores have been reported to be in the range of 0.82–0.92 (Burnett, Jones, Bliwise, & Ross, 2006; Hooper & Wallace, 2010; Jurkovic, Thirkield, & Morrell, 2001; Kelley et al., 2007).

*Parentification Scale.* The PS (Mika et al., 1987) is the second most widely used instrument that captures parentification. Designed to assess four types of parentification (child parenting parent[s], child acting as spouse to parent, child parenting siblings, and child taking on other roles generally taken by adults), this self-report assessment includes 30 items asking adults to indicate how often they fulfilled a particular adult responsibility as a child. Items are summed and computed to create subscale scores according to responsibilities. Cronbach's alphas for the PS subscale scores have been reported to be in the range of 0.76–0.86 (Fitzgerald et al., 2008). All subscales were used in the current study.

*SF-36 Health Outcome Survey.* The SF-36 (Ware & Sherbourne, 1992) assesses a range of health-related conditions and constructs (e.g., physical functioning, general mental health, social functioning, and bodily pain). The 36-item self-report survey generates eight subscale scores that are combined to create two aggregate summary scores of health functioning—mental health and physical health. The two summary scores, which were used in the current study, assess respondents' overall level of physical functioning and overall level of mental functioning.

The psychometric properties of the SF-36 survey are reported to be excellent. This instrument has a long history of being both highly reliable and valid. Cronbach's alpha coefficient has yielded scores on the eight subscale and two summary scores in the range of 0.82–0.92 (Ware, Kosinski, & Keller, 1994). Test–retest reliability has yielded 0.69–0.91 for the eight subscale scores and 0.80–0.90 for the summary scores (Ware et al., 1994).

## RESULTS

### *Sample Characteristics*

The convenience study sample consisted of 787 student volunteers recruited from undergraduate classes in a southeastern university. Participants' ages ranged from 19 to 48 years ( $M = 20.86$ ,  $SD = 3.55$ ). The sample primarily consisted of White Americans (82.5%,  $n = 649$ ) and females (76%,  $n = 598$ ). Self-reported races of the remaining participants were American Indian (0.05%,  $n = 4$ ), Asian American (1.0%,  $n = 8$ ), African American (12.5%,  $n = 98$ ), Hispanic–Latino (0.04%,  $n = 3$ ), mixed race (3.0%,  $n = 21$ ), and those who failed to report a race (0.05%,  $n = 4$ ).

### *Correlations Among Scales*

The Pearson correlation  $r$  was used to measure effect size, representing the correlation between the parentification measures. Table 1 shows the bivariate correlations between the measures (PI, PQ, and PS). As expected, there were significant positive correlations between the subscale scores on the PI, PQ, and PS. The magnitude of these relations varied from small

Table 1  
*Bivariate Correlation Matrix for Parentification Measures (PI, PQ, and PS; Hypothesis 1; N = 787)*

Variables	1	2	3	4	5	6	7	8	9	10
1. PI (PFP)	–									
2. PI (SFP)	0.421**	–								
3. PI (PBP)	0.264**	0.147**	–							
4. PQ (IM)	0.540**	0.538**	0.352**	–						
5. PQ (EM)	0.683**	0.310**	0.455**	0.617**	–					
6. PQ (PF)	0.466**	0.259**	0.688**	0.637**	0.694**	–				
7. PS (SR)	0.561**	0.244**	0.352**	0.440**	0.632**	0.479**	–			
8. PS (PR-P)	0.580**	0.248**	0.298**	0.430**	0.631**	0.449**	0.841**	–		
9. PS (PR-S)	0.375**	0.564**	0.260**	0.538**	0.382**	0.371**	0.521**	0.537**	–	
10. PS (NS)	0.394**	0.387**	0.272**	0.567**	0.409**	0.394**	0.447**	0.460**	0.503**	–

*Note.* PI = Parentification Inventory (PFP = parent-focused parentification; SFP = sibling-focused parentification; PBP = perceived benefits of parentification); PQ = Parentification Questionnaire (IM = instrumental parentification; EM = emotional parentification; PF = perceived fairness); PS = Parentification Scale (SR = spousal role; PR-P = parental role with parent; PR-S = parental role with sibling; NS = nonspecific).  
 \*\**p* < .01.

to high, with associations ranging from 0.26 to 0.84. Therefore, support was found for Hypothesis 1.

### *Scale Score Reliability*

The reliability of all instruments' scores was determined by calculating Cronbach's alpha coefficients. The subscale scores of the parentification measures were uniformly high and consistent across all measures in the current study sample. Hypothesis 2 suggested that the measures' scores would meet the conventional standard for adequate reliability (i.e., Cronbach's alpha of .70 or greater) in the current study sample. As seen in Table 2, the results support this hypothesis: Cronbach's alphas for the subscale scores for all three scales were reported to be in the range of 0.76–0.91. Therefore, support was found for Hypothesis 2.

### *Scale Score Validity*

The extent to which PI scores measure the intended construct—parentification—was also assessed by examining the extent to which PI scores related to other constructs (i.e., psychological and physical health outcomes) in similar and theorized ways compared with the PQ and the PS. As shown in Table 2, the results derived from all three parentification measures are fairly consistent and similar. In general, and as expected, the relations between all PSs and subscales and the SF-36 subscales indicated that participants with higher levels of parentification also reported poorer health outcomes; in other words, the higher the level of parentification, the lower the level of positive psychological and physical health. Additionally, divergent validity was established, in that the association between the parentification measures was greater than the associations evinced between the parentification measures and the SF-36 subscales. Thus, these findings—in conjunction with scale score predictability described elsewhere—provide support for Hypothesis 3.

### *Scale Score Predictability*

Six separate regression analyses were performed to examine the ability of the parentification measures to predict health outcomes. The SF-36 criterion scores were regressed on the PI subscale scores, the PQ subscale scores, and the PS subscale scores. Because of the exploratory nature of this study, all variables were entered simultaneously. The multiple correlation squared ( $R^2$ ) and standardized regression coefficients were used to measure effect size.

*Parentification Inventory.* In two separate regression tests, the SF-36 mental health (test 1) and physical health (test 2) outcome scores were regressed on the three PI predictor variables (see Table 3). The first overall regression model established the existence of a significant relationship between the three predictor variables and the criterion variable of psychological health:  $F(3, 787) = 59.50, p < .0001$ . The  $R$  value ( $r = .431$ ) for this model meets the criterion for a medium effect size, as defined by Cohen (1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 19% of the variance observed in the criterion variable of psychological health was explained by the model. Examination of the  $t$  tests on each beta weight showed that parent-focused parentification subscale scores and perceived benefits of parentification subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .114, t(1, 787) = 3.12, p < .01$  and  $b = .390, t(1, 787) = 11.65, p < .0001$ , respectively.

In the second regression model, the data established the existence of a significant relationship between the three predictor variables and the criterion variable of physical health:  $F(3, 787) = 32.43, p < .0001$ . The  $R$  value ( $r = .332$ ) for this model meets the criterion for a medium effect size, as defined by Cohen (1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 11% of the variance observed in the criterion variable of growth was explained by the model. Examination of the  $t$  tests on each beta weight showed that parent-focused parentification subscale scores and perceived benefits of parentification subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .173, t(1, 787) = 4.52, p < .0001$  and  $b = .231, t(1, 787) = 6.61, p < .0001$ , respectively.

*Parentification Questionnaire.* In two separate regression tests, the SF-36 mental health and physical health outcome scores were regressed on the three PQ predictor variables (i.e.,

Table 2  
Descriptive Statistics and Correlation Matrix for Parentification Measures and Theorized Mental and Physical Health Correlates (Hypothesis 2;  $N = 787$ )

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. PI (PFP)	—											
2. PI (SFP)	0.421**	—										
3. PI (PBP)	0.264**	0.147**	—									
4. PQ (IM)	0.540**	0.538**	0.352**	—								
5. PQ (EM)	0.683**	0.310**	0.455**	0.617**	—							
6. PQ (PF)	0.466**	0.259**	0.688**	0.637**	0.694**	—						
7. PS (SR)	0.561**	0.244**	0.352**	0.440**	0.632**	0.479**	—					
8. PS (PR-P)	0.580**	0.248**	0.298**	0.430**	0.631**	0.449**	0.841**	—				
9. PS (PR-S)	0.375**	0.564**	0.260**	0.538**	0.382**	0.371**	0.521**	0.537**	—			
10. PS (NS)	0.394**	0.387**	0.272**	0.567**	0.409**	0.394**	0.447**	0.460**	0.503**	—		
11. SF-36 MENT	0.210**	0.091*	0.418**	0.186**	0.281**	0.399**	0.256**	0.225**	0.148**	0.163**	—	
12. SF-35 PHYS	0.244**	0.133**	0.280**	0.253**	0.206**	0.294**	0.288**	0.240**	0.217**	0.128**	0.447**	—
M	1.90	1.545	4.10	17.81	22.57	17.87	32.67	24.83	51.38	15.04	975.67	1794.00
SD	0.585	0.560	0.840	6.59	7.15	7.56	6.40	4.73	8.41	3.52	238.77	293.76
Cronbach's Alpha	0.85	0.82	0.76	0.83	0.85	0.90	0.88	0.81	0.91	0.83	0.80	0.90

Note. PI = Parentification Inventory (PFP = parent-focused parentification; SFP = sibling-focused parentification; PBP = perceived benefits of parentification); PQ = Parentification Questionnaire (IM = instrumental parentification; EM = emotional parentification; PF = perceived fairness); PS = Parentification Scale (SR = spousal role; PR-P = parental role with parent; PR-S = parental role with sibling; NS = nonspecific).  
\* $p < .05$ . \*\* $p < .01$ .

Table 3

*Regression Analysis Summary for Parentification Measures (PI, PQ, and PS) and Mental and Physical Health Measures (Hypothesis 3)*

PI scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 mental health <sup>a</sup>			
PI (PFP)	3.87	1.24	.114**
PI (SFP)	1.37	3.28	.015
PI (PBP)	36.94	3.16	.390***
PI scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 physical health <sup>b</sup>			
PI (PFP)	7.21	1.59	.173***
PI (SFP)	2.93	4.22	.026
PI (PBP)	26.95	4.07	.231***
PQ scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 mental health <sup>c</sup>			
PQ (IM)	4.68	1.61	.129**
PQ (EM)	1.68	1.59	.051
PQ (PF)	14.11	1.53	.447***
PQ scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 physical health <sup>d</sup>			
PQ (IM)	5.41	2.07	.122**
PQ (EM)	1.53	2.04	.037
PQ (PF)	9.42	1.97	.243***
PS scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 mental health <sup>e</sup>			
PS (SR)	8.11	2.41	.218***
PS (PR-P)	.86	3.31	.017
PS (PR-S)	.10	1.24	.004
PS (NS)	4.01	2.81	.059
PS scale scores	<i>B</i>	<i>SE B</i>	$\beta$
Outcome variable: SF-36 physical health <sup>f</sup>			
PS (SR)	12.76	2.93	.278***
PS (PR-P)	2.33	4.03	.038
PS (PR-S)	3.84	1.51	.110**
PS (NS)	2.83	3.41	.034

*Note.* PI = Parentification Inventory (PFP = parent-focused parentification; SFP = sibling-focused parentification; PBP = perceived benefits of parentification); PQ = Parentification Questionnaire (EM = emotional parentification; IM = instrumental parentification; PF = perceived fairness); PS = Parentification Scale (SR = spousal role; PR-P = parental role with parent; PR-S = parental role with sibling; NS = nonspecific).  
<sup>a</sup>Model 1:  $R^2 = .185$  ( $n = 787$ ,  $p < .0001$ ). <sup>b</sup>Model 2:  $R^2 = .111$  ( $n = 787$ ,  $p < .0001$ ).  
<sup>c</sup>Model 3:  $R^2 = .168$  ( $n = 787$ ,  $p < .0001$ ). <sup>d</sup>Model 4:  $R^2 = .094$  ( $n = 787$ ,  $p < .0001$ ).  
<sup>e</sup>Model 5:  $R^2 = .068$  ( $n = 787$ ,  $p < .0001$ ). <sup>f</sup>Model 6:  $R^2 = .091$  ( $n = 787$ ,  $p < .0001$ ).  
 $*p < .05$ .  $**p < .01$ .  $***p < .001$ .

subscale scores). Once again, because of the exploratory nature of this study, all variables were entered simultaneously. As shown in Table 3, the first overall regression model (test 1) established the existence of a significant relationship between the three predictor variables and the criterion variable of psychological health:  $F(3, 787) = 52.93$ ,  $p < .0001$ . The  $R$  value ( $r = .411$ ) for this model meets the criterion for a medium effect size, as defined by Cohen

(1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 17% of the variance observed in the criterion variable of psychological health was explained by the model. Examination of the  $t$  tests on each beta weight showed that instrumental parentification subscale scores and perceived fairness of parentification subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .129$ ,  $t(1, 787) = 2.90$ ,  $p < .01$  and  $b = .447$ ,  $t(1, 787) = 9.17$ ,  $p < .0001$ , respectively.

The second regression model (test 2) established the existence of a significant relationship between the four predictor variables and the criterion variable of physical health:  $F(3, 787) = 27.27$ ,  $p < .0001$ . The  $R$  value ( $r = .308$ ) for this model meets the criterion for a medium effect size, as defined by Cohen (1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 9% of the variance observed in the criterion variable of growth was explained by the model. Examination of the  $t$  tests on each beta weight showed that instrumental parentification subscale scores and perceived fairness of parentification subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .122$ ,  $t(1, 787) = 2.61$ ,  $p < .01$  and  $b = .243$ ,  $t(1, 787) = 4.77$ ,  $p < .0001$ , respectively.

*Parentification Scale.* In the final two regression tests, the SF-36 mental health and physical health outcome scores were regressed on the four PS predictor subscale scores. The first overall regression model (test 1) established the existence of a significant relationship between the four predictor variables and the criterion variable of psychological health:  $F(4, 787) = 14.44$ ,  $p < .0001$ . The  $R$  value ( $r = .262$ ) for this model meets the criterion for a medium effect size, as defined by Cohen (1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 7% of the variance observed in the criterion variable of psychological health was explained by the model. Examination of the  $t$  tests on each beta weight showed that child-as-parent subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .218$ ,  $t(1, 787) = 3.36$ ,  $p < .0001$ .

In the second regression model (test 2), the data established the existence of a significant relationship between the four predictor variables and the criterion variable of physical health:  $F(4, 787) = 19.56$ ,  $p < .0001$ . The  $R$  value ( $r = .302$ ) for this model meets the criterion for a medium effect size, as defined by Cohen (1992; Cohen & Cohen, 1983). The  $R^2$  value reveals that 9% of the variance observed in the criterion variable of growth was explained by the model. Examination of the  $t$  tests on each beta weight showed that child-as-parent subscale scores and sibling-as-parent subscale scores made a significant, unique contribution above and beyond the other variables:  $b = .278$ ,  $t(1, 787) = 4.34$ ,  $p < .0001$  and  $b = .110$ ,  $t(1, 787) = 2.54$ ,  $p < .01$ , respectively.

## DISCUSSION

This study compared the psychometric properties of three measures that assess childhood parentification retrospectively. We found evidence of reliability and validity for all three measures. In addition, the results of the study suggest that scores from the newly created PI have satisfactory reliability and validity. The main results also reveal that the PI generates findings comparable to those of the PQ and PS. The main results of the study can be described as follows: First, all three measures of parentification are capturing a multi-dimensional construct similarly. Second, all three measures' scores are reliable, as measured by Cronbach's alphas. Third, all three measures' scores demonstrate sound predictive, convergent, and divergent validity in theoretically expected ways.

Moreover, although we expected all three measures to reveal similar relations between study variables, we also expected the parentification measures to reveal differences. For example, an important finding from these results is the slight incremental validity (Haynes & Lench, 2003) evinced in the PI scores compared with the PQ and PS scores. The slight difference between the three parentification instruments, as evidenced in these results, may point to an advantage of the PI in comparison with the PQ and PS, although we are cautious in this preliminary finding. Further, because of the conditional nature of incremental validity (Haynes & Lench, 2003), many more studies comprising diverse study samples are needed to fully clarify this tentative assertion.

## IMPLICATIONS FOR COUPLE AND FAMILY THERAPISTS

The prevalence of parentification in childhood has implications for the individuals that children become in adulthood (DiCaccavo, 2006). Moreover, the construct of parentification has relevance to science and practice. Couple and family therapists as well as other mental health care providers would benefit from assessing for parentification. DiCaccavo outlines important issues relevant to the assessment of signs and symptoms in individuals and couples who report a childhood history of parentification. Specifically, she reports there are three areas that should be examined in a comprehensive assessment of a client with a possible history of parentification: (a) the type of role assignment (i.e., instrumental and emotional parentification) and the level of support received when the client performed the parentification role; (b) the age of the client when the parentification process took place and the extent of the parentification-related responsibilities in which the client engaged; and (c) “the consideration of the object of concern and degree of internalization” (DiCaccavo, 2006, p. 472). Clients who have internalized the parentified role and responsibilities may describe issues and concerns about others but not about him or herself. Deparentification based on a comprehensive assessment may include explorations related to issues of shame, splitting, and projective identification, for example (see DiCaccavo, 2006).

Because parentification is a common clinical phenomenon likely to be observed by family therapists as well as other mental health care providers (Byng-Hall, 2008b; Chase, 1999; Hooper, 2007b), it is critical that useful measures with sound psychometric properties be available to assess for parentification. Additionally, a panoply of evidence (summarized earlier in this article) supports the correlation between parentification and psychological health. The current study adds to the clinical literature base by considering the link between parentification and physical health in addition to the link between parentification and psychological health. Thus, these findings are pertinent to both the physical and the psychological health of patients with whom couple and family therapists work. The results also add to the current literature base by describing the psychometric properties of three instruments that produce reliable and valid scores. We hope that these results will engender therapists’ confidence in the measures that capture parentification, such that therapists will use these instruments in their practice.

## IMPLICATIONS FOR FUTURE RESEARCH

These findings strengthen the validity and empirical evidence that underpins the construct of parentification. These results suggest some implications for future research. Over the past 30 years, an extensive amount of empirical research on parentification and possible correlates, antecedents, predictors, and outcomes has been conducted. Less work has focused on the measurement of parentification. There remains a lack of information on the test–retest reliability and social desirability of all three instruments included in the current study. Future research should include a measure that examines the extent to which respondents answer questions in a way that they believe is favorable (e.g., Social Desirability Scale; Crowne & Marlowe, 1960). Certainly, the stability and validity of the scores derived from these instruments could be affected if respondents alter answers based on their desire to appear in a positive light.

Additionally, few studies have advanced ideas about how parentification measures may be used in process and outcome research. Additional value—specifically clinical value—could be garnered from establishing the clinical utility of the PI, PQ, and PS instruments. For example, important clinical information could be uncovered if measures of parentification included in randomized trials focused on the efficacy and effectiveness of couple and family system therapies. With regard to process research, it could be that a history of parentification might impede the joining process or building of rapport in therapy. Similar to the link between attachment style and the relationship patients have with important individuals in their life (e.g., significant romantic other, therapist, primary care physician), so too could a history of childhood parentification impinge upon the ability of patients to form therapeutic relationships with their therapist and thereby have an impact therapeutic outcomes. Finally, few studies have investigated potential mediators and moderators between childhood parentification and adult functioning.

Uncovering modifiable or alterable factors regarding outcomes associated with parentification is also an important direction for future research.

## STUDY LIMITATIONS

The single-informant, cross-sectional design of the current study yielded several limitations. First, given that the current sample consisted of undergraduate students, the results may not generalize to other populations. Second, the study sample was homogenous. Because reliability and validity are context dependent (Schmidt & Hunter, 2003), it is important to continue to accumulate evidence related to cultural validity and generalizability in studies of diverse populations. Researchers (e.g., Bravo, 2003) suggest that validity and reliability of an instrument's scores in one culture do not portend validity and reliability in another culture. Researchers should examine the cross-cultural, linguistic, and translational equivalence of the PI, PQ, and PS. Findings from such studies would inform needed changes in measures of parentification. Further replications of the current study's findings are needed to determine the extent to which these findings may be applicable to and clinically meaningful for a range of populations.

The fact that all data in the study were based on self-report measures is another limitation of the study. Future studies should employ multi-method and direct observation strategies to further clarify the validity and reliability of the PI, PQ, and PS. Other considerations and possible limitations related to the measurement of parentification include retrospective recall. Memory or motivational factors may affect accurate reporting of retrospective parentification. For example, the stability of reporting of adverse events, particularly when based on family of origin or lifetime experiences, may be confounded by memory loss, underreporting, overreporting, or minimizing (Baker, 2009; Briere & Conte, 1993; Hooper & Wallace, 2010). Alternately, individuals may be unwilling to report events such as childhood neglect, adversity, or mistreatment (Baker, 2009; Baker & Festinger, 2011; Brewin, Andrews, & Gotlib, 1993). Moreover, studies that include assessments that are cross-situational sources will enhance our understanding of parentification, the process, and the correlates and predictors of parentification (Kuperminc, Jurkovic, & Casey, 2009).

## CONCLUSION

Despite the frequent use of the PQ and the PS in research studies, scant attention has been directed toward the psychometric properties of the scores derived from these measures. The current study was the first to compare the psychometric properties of these two commonly used parentification instruments. This study also examined another parentification instrument, newly developed: the PI. The psychometric properties of the PI were compared comprehensively to those of the PQ and PS. The current study adds to the literature base because, in addition to being often studied, parentification is a ubiquitous clinical phenomenon that most family therapists and other mental health care providers will face (DiCaccavo, 2006). Findings demonstrated that parentification is relevant to adults' psychological and physical health and warrants the attention of practitioner-scientists in clinical settings. Therefore, continued examination of psychometrically sound measures is needed to further our understanding of the parentification process in both clinical and research settings, the outcomes across the life span that are associated with parentification and interventions that are culturally relevant and linguistically appropriate for racially and ethnically diverse populations.

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