

Evaluating the Parentification Questionnaire: Psychometric Properties and Psychopathology Correlates

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Abstract The Parentification questionnaire (PQ; Jurkovic and Thirkield in Parentification questionnaire, University Plaza, Atlanta, GA, 1998), developed to assess various levels of parentification retrospectively, is one of the most widely used instruments in the clinical and research literature base. Yet, despite its frequent use, no studies of which we are aware have examined the psychometric properties of this instrument. Thus, this study fills a gap in the literature by examining the psychometric properties of the PQ with a sample of 143 racially diverse college students. The data were subjected to exploratory analysis using principal component analysis. Varimax orthogonal rotations were applied to the analyses. The final results supported a three-component solution (although with fewer items), consistent with Jurkovic's three-factor multidimensional clinical framework for understanding parentification. We also examined the relations between the resultant scores of the PQ and scores from the Brief Symptom Inventory (BSI; Derogatis in Derogatis Brief symptom inventory: Administration, scoring, and procedures manual, National Computer Systems, Inc., Minneapolis, MN, 1993), which captures mental health symptomatology. These results reflected significant correlations in theoretically expected directions. However, taken together, the three PQ factors significantly accounted for the variance in psychopathology scores in only two of the four regression models. The preliminary results from this study support the reliability and multidimensional nature of the PQ scores. Implications for family therapy and suggestions for future family systems research are discussed.

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Introduction

Parentification is a type of role reversal between parents and children in which children assume developmentally inappropriate levels of responsibility in the family. The term *parentification* was introduced by family systems theorists Minuchin et al. (1967), who stated that in parentification, “the parent(s) relinquishes executive functions by delegation of instrumental roles to a parental child or by total abandonment of the family psychologically and/or physically” (p. 223). Alternate terms for parentification include *adultification* (Burton 2008), *spousification* (Sroufe and Ward 1980), *role reversal* (Macfie et al. 2005), *adultoids* (Greenberger and Steinberg 1986), *little parent* (Byng-Hall 2008), and *young caregivers* (Aldridge and Becker 1993; Siskowski 2006).

Jurkovic and colleagues (Jurkovic 1997, 1998; Jurkovic and Thirkield 1998; Jurkovic et al. 2001b) have expanded the definition of parentification by incorporating contextual factors and emphasizing ethical factors already explicated by others (e.g., Boszormenyi-Nagy and Spark 1973). They suggest that to best understand, operationalize, and measure parentification—above and beyond the critical individual, parent–child, and familial factors that Boszormenyi-Nagy and Spark (1973) and Minuchin (1974) postulated—sociocultural and ethical factors need to be considered and emphasized. Extrapolating from family systems theory and Bronfenbrenner’s (1979) ecological model, Jurkovic’s ecological-ethical framework argues for the consideration of associated ethics, context, and perceived fairness of the interaction between and among systems in which parentification is embedded (e.g., family, parental, social, peer, sibling, community, political). Jurkovic contends that these factors, taken together, create the best framework to approach and *measure* different prototypes of parentification and different outcomes—negative and positive—associated with parentification. The most widely used measure of parentification is the Parentification questionnaire (PQ), a retrospective measure developed by Jurkovic and Thirkield (1998). Although the PQ has been used extensively in the clinical literature, no studies of which we are aware have examined its psychometric properties.

The primary purpose of the current study was to examine the psychometric properties of the PQ using a convenience sample of college students. Specifically, we examined the factor structure of the PQ and determined the reliability of the PQ scores produced by the factor analysis. A secondary purpose of the study was to examine the extent to which the scores of the PQ were associated with and predictive of mental health symptoms, as measured by the BSI (Derogatis 1993), in theoretically expected ways. Although discussed in the clinical literature base (Hooper 2007; Jurkovic 1997, 1998), the current study does not measure the possible positive associations with parentification.

In this article we first review the literature on parentification, including family systems theory, the effect of family functioning on parentification outcomes, and the PQ. We conclude with a description and summary of the design and results of the current study.

Background Literature

The literature on parentification has shown that this process and the associated roles and responsibilities adversely affect many children and that later it can be linked to psychopathology and poor adult functioning (see Chase 1999). Moreover, parentification in childhood may lead to negative consequences in adulthood, including a fear of having children and/or the transmission of parentification across many generations (Boszormenyi-Nagy and Spark 1973; Bowen 1978; Chase et al. 1998).

Structural Family Systems Theory: The Effects of Family Functioning on Parentification

Structural family systems theory further clarifies the potential for the negative aspects of parentification. For the dysfunctional family, parentification is usually a destructive process. The family structure may be described as having unclear and inconsistent boundaries, hierarchies, roles, and responsibilities. Thus, the family system may engender an inappropriate overlap in subsystems, with some members participating in roles that traditionally are reserved for other members. Further, in these families, boundaries often can be seen as distorted, rigid, or nonexistent. Minuchin et al. (1967) labeled this type of family an *enmeshed family*, that is, a family in which one member becomes overly involved with or even exploitative of members of a system at different hierarchical levels. Parentification, in this context, is a role that the child or children take on indefinitely. Children's parent-like behaviors go unnoticed and unrewarded and are carried out at the expense of such children, who are unable to participate in or are deprived of age-appropriate behaviors and activities.

Dysfunctional families manifest and exist as a result of the family's inability to maintain an appropriate structure, boundaries, and subsystems, in addition to the family's maladaptive reaction to the necessary changes in the environment or developmental needs of the individuals and the family unit. Pathology may exist if family members maintain rigid boundaries and rigid transactional patterns rather than change to adapt to stressful events. Thomas (1992) suggests that dysfunctional families often struggle with the inability to restructure appropriately during developmental changes, and/or they demonstrate a lack of awareness or skills to handle unexpected or major environmental changes, which often results in conflict in the parental relationship.

Structural family systems theory also further clarifies the potential for the positive aspects of parentification. For example, healthy families usually have a flexible structure that changes and shifts as the family moves through and from different life stages. These life stages, according to Minuchin (1974), include couple formation, families with young children, school-age or adolescent children, and families with grown children. As the family moves through these different stages, the structure, boundaries, and subsystems likewise change. At each stage, the healthy family renegotiates the family structure, fostering the redistribution of roles, responsibilities, and family rules.

For the healthy family, constructive parentification may be described as serving a temporary purpose for the family after a stressor or unexpected shift in the family structure has been experienced (Jurkovic 1997; Lamorey 1999). A child or children often take on increased duties and responsibilities during this time. The family, in turn, explicitly rewards the child or children for the added responsibilities and roles taken on during the change in the family structure (Hooper 2007). Often, constructive parentification is experienced when a parent or sibling gets sick or a parent takes an additional job for a limited time (Jurkovic 1997; Lamorey 1999). Implicit in its constructive nature is the

reciprocal nature of the transactions between the parent and child. That is, the child is not exploited, but instead receives some sense of accomplishment and contribution to the family during the family's time of need. Importantly, the child receives praise, acknowledgment, and reward. One can reason that this type of parentification may foster resilience and independence and encourage differentiation of self, among other positive outcomes (Bowen 1978).

Measurement of Parentification: The PQ

Based on a family systems theoretical framework, Jurkovic and Thirkield (1998) developed a 30-item, retrospective, self-report measure of parentification, the PQ. This retrospective instrument was developed to measure clinically three dimensions of parentification experienced in one's family of origin: instrumental, emotional, and perceived fairness. The first two factors are *types* of parentification, as the PQ allows for the differentiation between emotional and instrumental parentification. Parentification is emotional when the child is accountable for helping the parent and siblings modulate affectivity, and it is instrumental when the child is accountable for grocery shopping, cooking, house cleaning, and performance of daily duties that involve caring for parents and siblings (Jurkovic 1997, 1998; Minuchin et al. 1967). The degree to which the person perceives the parentification process to be "fair" is in part a reflection of the degree to which parentification is culturally sanctioned or expected.

A strength of this multidimensional conceptualization and measurement of parentification is that it allows for greater specificity and differentiation among different roles and responsibilities often evidenced in children who are parentified. The importance of differentiating between types of parentification (i.e., instrumental and emotional) as well as the unique processes, roles, and responsibilities often experienced with those types of parentification, has been established in the literature (Chase 2001; Hooper 2003; Jurkovic et al. 2001b; Thirkield 2002).

Originally developed with a college student population, the PQ has continued to be used with primarily American (Carroll and Robinson 2000; Castro et al. 2004; Chase et al. 1998; Jones and Wells 1996; Wells et al. 1999) and international (DiCaccavo 2002) students and children (Godsall et al. 2004) populations.

Studies using the PQ have found ample evidence regarding the relationship between parentification and negative outcomes in adulthood. Researchers have considered the nature of the relations between parentification and various types of psychopathology and sequelae. Specifically, researchers have found linkages from early adversity such as parentification to child and parent factors such as divorce (Wallerstein 1985), substance abuse (Chase et al. 1998), serious mental illness (Jones and Wells 1996), poor relationship functioning, disruption in attachment (Zeanah and Zeanah 1989), family discord, low socioeconomic status (Boszormenyi-Nagy and Spark 1973; Minuchin et al. 1967), depression (Carroll and Robinson 2000), and attachment and relational difficulties (Jones and Wells).

Several studies have suggested that parentification is correlated with parental substance misuse (Carroll and Robinson 2000; Chase et al. 1998; Godsall et al. 2004). Chase et al. report that their study of 360 psychology undergraduate students found parentification levels to be higher in the children of alcoholics than in those students whose parents were not alcoholics. In Godsall et al.'s study of 416 children ages 10 through 18, the participants who were children of alcoholics reported high levels of parentification more often than those whose parents were not alcoholics. Carroll and Robinson (2000) conducted a study of

207 undergraduate students in the United States, assessing for parental alcoholism and workaholism and the effects of those addictions on their children. The researchers found that children of alcoholics and workaholics shared similar issues such as depression and parentification. Interestingly, the researchers found higher levels of parentification in those participants identifying themselves as children of workaholics than children of alcoholics (Carroll and Robinson).

As previously mentioned, other aftereffects seen in adulthood may include mental illness in general and depression, anxiety, and personality disorders in particular. Borderline personality and dissociative disorders, although rare, can be evidenced in extreme cases of parentification (Liotti 1992). Liotti contended that early attachment disorganization—that may be seen in family members who are parentified—may render the adults they become vulnerable to later development of dissociative psychopathology. Jones and Wells (1996) found support, in their study of 360 undergraduate college students, for their hypothesis that parentification would be positively correlated with “narcissistic personality characteristics” (p. 147).

In a follow-up project, Wells and Jones (1998) published a study of 124 undergraduate students exploring how dissociation might be related to childhood parentification. Their analyses suggested a positive relationship between parentification in childhood and “defensive splitting” in adulthood, but no relationship between parentification and dissociation (p. 336). Wells and Jones suggest that parentified children may not be able to fully separate and individuate themselves from their parents, possibly contributing to the development of self-defeating and narcissistic characteristics, which may, in turn, make those individuals more likely to use defensive splitting in adulthood as a way of sheltering themselves from anxiety and emotional injury. Byng-Hall (2008) suggests that the dissociation and splitting may be a way to deal with demands pulling them in different directions.

While no studies of which we are aware have explored the factor structure of the PQ, several studies have reported on its internal consistency. Internal consistency estimates using Cronbach’s alpha coefficient have provided evidence that scores derived from the PQ are reliable. In previous studies, the PQ has a reported Spearman-Brown split half reliability of .85 (Burt 1992). Research also has documented validity for the PQ, indicating that scores on the instrument are related to variables such as choice of a caretaking profession, features of depression, and ambivalence about dependency needs (Burt 1992; Wolkin 1984).

Purpose of the Current Study

Study Aims

As mentioned previously, the two purposes of the study were to determine the psychometric properties (factor structure, reliability) of the PQ and to determine the extent to which the scores of the PQ were associated with and predictive of mental health symptoms (discriminant validity). We divided these purposes into three specific aims:

Aim 1: Examine the factor structure of the PQ

Aim 2: Examine the reliability of the scores/coefficients derived from the PQ

Aim 3: Examine the extent to which scores on the PQ are associated with and predictive of scores on the Brief Symptom Inventory in theoretically expected ways

Hypotheses

In agreement with Jurkovic's clinical framework (Jurkovic 1997, 1998), we expected to find three reliable, unique psychometric factors in the PQ: instrumental parentification, emotional parentification, and perceived fairness of the parentification process. The first two proposed factors are types of parentification, and the third proposed factor is the degree to which the individual feels that the parentification roles, responsibilities, and process are "fair."

Consistent with the clinical and research literature base linking childhood parentification and deleterious sequelae in adulthood previously described, we expected to find positive and differential associations between parentification scores (emotional and instrumental) and mental health symptomatology scores (depression, anxiety, and somatization).

Method

Participants

This study used data from a larger study examining outcomes associated with parentification. Participants were 143 college student volunteers recruited from a community college on the East Coast of the United States. Participants were primarily never-married young adult students ($n = 116$; 81%), of whom 69.2% were female ($n = 99$) and 30.8% were male ($n = 44$). Participants ranged in age from 18 to 49 years old, and the mean age was 22.45 ($SD = 6.04$). The self-reported race and ethnicity were diverse: 36% ($n = 52$) were non-Hispanic white; 22% ($n = 32$) were non-Hispanic black; 19% ($n = 27$) were Hispanic/Latino; 13% ($n = 18$) were Asian; 8% ($n = 12$) were other; and 1% ($n = 2$) failed to report their racial background.

Procedures

Institutional Review Board approval was established at both the University and the data collection site. Study recruitment took place during three regularly scheduled undergraduate classes. The researcher was introduced to each class by the course instructor. At that time, researchers distributed a packet containing an informed consent form, a demographic information sheet, and study instruments to a group of volunteer participants. All instruments were in English. No incentive was provided for participating in the study.

Measures

Demographic Information Sheet

This instrument, created for the study, asked for information regarding race and ethnicity, current age, marital status, program of study, and years of education.

Parentification Instrument (Jurkovic and Thirkield 1998)

The PQ is a 30-item, self-report instrument that measures retrospectively three dimensions of perceived parentification: instrumental parentification, emotional parentification, and

perceived fairness. Of the 30 items, 10 statements pertain to instrumental parentification, 10 pertain to emotional parentification, and 10 pertain to perceived fairness.

Items associated with instrumental parentification include, for example, “I did a lot of shopping,” “I helped my brothers or sisters a lot with their homework,” and “I was frequently responsible for the physical care of some member of my family.” Items associated with emotional parentification include “My parents often tried to get me to take their side in conflicts” and “I often felt more like an adult than a child in my family.” Items associated with the perceived fairness scale include “In my family I often made sacrifices that went unnoticed” and “In my family I often gave more than I received.”

Participants rate how true the statements are on a five-point Likert scale, where a one is “strongly disagree” and a five is “strongly agree.” An overall score for parentification can yield a score in the range of 30–150. Factors—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.

Brief Symptom Inventory (Derogatis 1993)

The BSI is a 53-item, self-report instrument designed to reflect the psychological symptom patterns of psychiatric and general community populations. Similar to, and derived from, the Symptom Checklist-90-R (SCL-90-R; Derogatis 1994), the BSI reports nine symptom scores and three broad scores measuring distress (Derogatis 1993). The three broad scores (or “global indices”) include global severity index, positive symptom distress index, and positive symptom total.

The specific symptom scores used in this study include (a) somatization, (b) depression, and (c) anxiety. The global severity index also was used in this study to identify the magnitude of distress or psychopathology among the participants. Higher scores reflect greater levels of distress.

The psychometric properties of the BSI (Derogatis and Spencer 1982) 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 nine symptom categories in the range of .71–.85. Test–retest reliability yielded .69–.91 for the nine subscales and .80–.90 for the global indices (Derogatis and Spencer). Convergent and discriminant validity have been established using correlations with the Minnesota Multiphasic Personality Inventory (Derogatis and Spencer).

Data Analytic Plan

Using Statistical Package for Social Sciences software version 15.0 (SPSS; Chicago, IL), we used a principal component factor analysis with a varimax rotation (we also considered oblimin rotation) to determine the factor structure and construct validity of the PQ. To examine factor reliability, we considered Cronbach’s alpha coefficient. We also examined the relations between scores of the BSI subscale (somatic symptomatology, depression, and anxiety symptomatology), and BSI global severity index and subscale scores of the PQ.

Several factors influenced our rationale for the data analytic plan. First, we used an exploratory approach because few, if any, studies have examined the psychometric properties of the PQ. Second, we selected principal component analysis because we were interested in identifying a few coherent constructs that best reflected the various aspects of parentification (i.e., instrumental parentification, emotional parentification, and perceived

fairness). With regard to extraction of components, we used several methods (e.g., scree plot, eigenvalue of one, and an a priori hypothesized number of factors [3; instrumental, emotional, and perceived fairness]). With regard to rotation, we used principal component analysis followed by varimax rotation. We first considered oblimin rotation because we expected the factors to be correlated. However, the results between varimax rotation (orthogonal) and oblimin rotation (oblique) were similar, and so for ease of interpretability we report the results from the varimax rotation (Fabrigar et al. 1999). Finally, we reviewed the results of the Bartlett's test of sphericity (Bartlett 1954) to clarify the factorability of the data, and Kaiser–Meyer–Okin (Kaiser 1970, 1974) to measure the sampling adequacy, which was favorable at a level of .89.

Results

Means, standard deviations, and other descriptive information for the PQ factors are illustrated in Table 1. Obtained scores on the PQ were consistent with other studies composed of nonclinical samples.

Study Aim 1 Results: Factor Structure

Preliminary Analysis

Using SPSS statistical software, a series of principal component analyses with varimax orthogonal rotation were performed on self-reported responses from the study participants to the 30 items on the PQ. Kaiser's (1970, 1974) measure of sampling adequacy was favorable at a level of .88, suggesting that the items were appropriate for principal component analysis. Additionally, the Bartlett test of sphericity was significant, suggesting sampling adequacy for the planned analyses. As previously mentioned, we selected principal component analysis because we were interested in identifying a few coherent constructs that best reflected the various dimensions of parentification.

The present study resulted in the extraction and loading of six components. The six-factor solution was problematic in that five of the six components had several overly complex factors (i.e., the same items loading on several components), and one component included a singleton. Additionally, a review of the scree plot demonstrated a clear bend at three factors; this finding suggested that the Kaiser (1958) method produced an overextraction of components. Therefore, our initial interpretation based on the scree plot and the other criteria was that the PQ is measuring approximately three components with this racially diverse adult population, not six components. Next, to test this outcome, and to see if we could increase the clarity between and among the components, data were reanalyzed specifying a three-factor solution.

Table 1 Means, standard deviations, potential range, and skewness and kurtosis of the components of the parentification questionnaire

Factors	Alpha	<i>N</i>	<i>M</i>	SD	Potential range	Skewness	Kurtosis
Instrumental parentification	.81	142	23.86	8.10	10–50	.230	–.646
Emotional parentification	.82	141	26.92	7.93	10–50	.474	–.039
Perceived fairness	.88	144	24.65	9.09	10–50	.281	–.829

Secondary Analysis

We ran a second principal component analysis and varimax rotation with a criterion set for the extraction of three factors instead of eigenvalues at one. These analyses produced a clearer, more interpretable solution. In this case, we had six complex factors, as compared with many complex factors, and no factors that produced an insufficient number of salient items (i.e., no singletons).

The results and a review of the scree plot also supported a three-component solution. However, because the second analysis produced six complex factors, we conducted a third and final principal component analysis, which excluded seven items that were overly complex, cross-loading, or nonsalient (i.e., items that failed to load .40 or greater) (Tabachnick and Fidell 2001).

Final Analysis

Three criteria were used to evaluate and retain the most meaningful and parsimonious components in the final analysis: (1) assess the percentage of total variance explained by the factors; (2) review Cattell's (1966) scree plot of the factor variances; and (3) retain items loading .40 or higher on only *one* factor. All 23 item loadings were estimated above .40, demonstrating good factor saturation. Additionally, we used Cronbach's alpha coefficient to examine the internal consistency of these three factors; alpha equal to or greater than .70 was considered satisfactory.

An interpretation of this analysis reveals a three-factor solution as the most parsimonious description and visual presentation of the data. Moreover, the three salient factors represent distinct constructs of parentification, with only one item (item PQ9: "I often felt like a referee in my family") loading on more than one factor. This item was retained based on systems theory. Thus, this final analysis extracted three salient components, which showed that each subscale is homogeneous and distinct from the other subscales (Campbell and Fiske 1959). These three interpretable components (comprised of 23 items), taken together, explained 49% of the total variance, and the original labels put forward by Jurkovic and Thirkield (1998) seemed appropriate for this structure: factor 1, "perceived fairness," contained 9 items and explained 29% of the variance; factor 2, "emotional parentification," explained 13.4% of the variance and contained seven items; factor 3, "instrumental parentification," explained 6.5% of the variance and contained five items. Additional details about the final rotated component loadings are presented in Table 2.

Study Aim 2 Results: Score Reliability

A review of Table 1 reveals sound reliability among the study factors (i.e., the 23 items that produced the three factors) in the context of the current racially diverse sample. Cronbach's alpha coefficients were .81 for Instrumental Parentification, .82 for Emotional Parentification, and .88 for Perceived Fairness. Table 3 presents the correlations among the three factors, which were all moderate to high. These correlation scores are consistent with other studies that described correlations among the three factors ranging from .30 to .70, and correlations between the three factors ranging from .81 to .89. Test-retest reliability was not assessed in the current study.

Table 2 Final rotated component factor analysis, factor loadings, and communalities for the 23-item parentification questionnaire ($n = 143$)

Item #	Text	Factor loadings			h^2
		I	II	III	
Factor I: Perceived fairness (28.83% of variance)					
PQ21	Members of my family understood me pretty well	.816			.69
PQ15	My parents were very helpful when I had a problem	.807			.72
PQ25	For some reason it was hard for me to trust my parents	.777			.68
PQ7	It often seemed that my feelings weren't taken into account in my family	.712			.72
PQ10	I often felt let down by members of my family	.669			.57
PQ26	I often felt caught in the middle of my parents' conflicts	.657			.64
PQ4	Even though my parents meant well, I could not really depend on them to meet my needs	.646			.63
PQ17	My parents often tried to get me to take their sides in conflicts	.562			.54
PQ23	My parents often criticized my efforts to help out at home	.559			.70
Factor II: Emotional parentification (13.40 of variance)					
PQ12	It seemed like family members were always bringing me their problems		.734		.64
PQ11	In my family I often made sacrifices that went unnoticed		.607		.71
PQ9	I often felt like a referee in my family	.414	.602		.62
PQ2	At times I felt I was the only one my mother or father could turn to		.597		.43
PQ1	I did a lot of the shopping (e.g., for groceries or clothes) for my family		.589		.65
PQ24	I often felt that my family could not get along without me		.527		.71
PQ27	I helped manage my family's financial affairs (e.g., making decisions about purchases or paying bills)		.492		.62
Factor III: Instrumental parentification (6.49% of variance)					
PQ19	I was rarely asked to look after my siblings			.804	.78
PQ3	I helped my brothers or sisters a lot with their homework			.738	.75
PQ6	I was frequently responsible for the physical care of some member of my family (e.g., washing, feeding, or dressing him or her)			.649	.70
PQ22	My parents expected me to help discipline my siblings			.602	.68
PQ13	I often did the family's laundry			.502	.62
Eigenvalues		6.83	3.08	1.49	

$N = 143$; I, perceived fairness; II, emotional parentification; III, instrumental parentification; h^2 , communality estimates

Study Aim 3 Results: Score Validity

We examined the validity of the PQ factors by exploring the extent to which scores on the PQ are associated with and predictive of scores on the BSI (Derogatis 1993) in theoretically expected ways. Evidence of validity is often established when scores of a scale or instrument are a good predictor of an outcome or criterion they are *expected* to predict (Campbell and Fiske 1959). We first examined correlations between the BSI subscale scores and the PQ subscale scores. The correlation matrix (see Table 3) reveals the anticipated relationships for most of the study variables; emotional parentification was significantly related to all of the hypothesized correlates—DEP, ANX, and GSI—in the expected direction; perceived fairness was related to all of the hypothesized correlates—

Table 3 Intercorrelations of PQ full-scale and subscale factor scores and hypothesized correlates

Variables	1	2	3	4	5	6	7	8
1. Instrumental parentification	–							
2. Emotional parentification	.67**	–						
3. Perceived fairness	.40**	.59**	–					
4. Overall PQ score	.81**	.89**	.81**	–				
5. SOM	.16	.19*	.21*	.24**	–			
6. DEP	.08	.17*	.20*	.19*	.51**	–		
7. ANX	.09	.18*	.20*	.20*	.66**	.73**	–	
8. GSI	.18*	.25**	.26**	.27**	.73**	.84**	.90**	–

SOM somatic symptomatology, DEP depression, ANX anxiety, GSI global severity index

$n = 143$

* All correlations significant at the .05 level (2-tailed)

** All correlations significant at the .01 level (2-tailed)

SOM, DEP, ANX, and GSI—in the expected direction. However, instrumental parentification was not associated with most of the proposed variables. See Table 3 for additional details about the relations between the hypothesized correlates with instrumental parentification, emotional parentification, and perceived fairness.

Table 3 shows the extent to which the PQ factors would yield differential relations between subscale scores and psychopathology scores. The table suggests differences in the relations between emotional and instrumental parentification subscale scores and psychopathology: instrumental parentification scores were not related to SOM ($r = .16$; ns), DEP ($r = .08$; ns), ANX ($r = .09$; ns) but were associated with GSI ($r = .18$; $p = .05$). Conversely, emotional parentification scores were significantly, positively associated with all the measured domains of psychopathology: SOM ($r = .19$; $p = .05$) DEP ($r = .17$; $p = .05$), ANX ($r = .18$; $p = .05$) and GSI ($r = .25$; $p = .01$). These findings are consistent with the clinical literature base—emotional parentification has long been considered to be more deleterious and associated with negative outcomes to a greater extent than instrumental parentification (Byng-Hall 2002, 2008; Hooper 2003; Jurkovic 1997).

Finally, we evaluated validity by examining the predictive ability of the scores of the PQ to symptom scores derived from the BSI (SOM, DEP, ANX, GSI). Table 4 shows the results of four separate regression analyses. As can be seen in Table 4, only two of the regression models (i.e., Model 1 [SOM] and Model 4 [GSI]) established the existence of a significant relationship between the three PQ factors and the symptom-measuring variables; specifically, overall Model 1 established the existence of a significant relationship between the three PQ factors and SOM ($F [3, 134] = 3.31$, $p < .022$). The R value ($r = .263$) for this model meets the criterion for a small effect size, as defined by Cohen (1992) and Cohen and Cohen (1983). The R^2 value reveals that 7% of the variance observed in the criterion variable of SOM was explained by the model. Examination of the t -tests on each beta weight showed that perceived fairness made a significant, unique contribution above and beyond the other variables, $\beta = .217$, $t (1, 136) = 2.060$, $p < .041$. Additionally, overall Model 4 established the existence of a significant relationship between the three PQ factors and GSI ($F [3, 134] = 3.79$, $p < .012$). The R value ($r = .289$) for this model meets the criterion for a small effect size, as defined by Cohen (1992) and Cohen and Cohen (1983). The R^2 value reveals that 8% of the variance

Table 4 Regression analysis summary for PQ factors and psychopathology

Factor scores	<i>B</i>	SE <i>B</i>	<i>B</i>
Outcome variable: <i>SOM</i> ^a			
Instrumental parentification	.056	.070	.090
Emotional parentification	.005	.081	.007
Perceived fairness	.119	.058	.217*
Outcome variable: <i>DEP</i> ^b			
Instrumental parentification	.018	.081	.026
Emotional parentification	.065	.097	.09
Perceived fairness	.099	.067	.160
Outcome variable: <i>ANX</i> ^c			
Instrumental parentification	.023	.073	.037
Emotional parentification	.066	.084	.104
Perceived fairness	.097	.061	.177
Outcome variable: <i>GSI</i> ^d			
Instrumental parentification	.020	.500	.005
Emotional parentification	.659	.604	.150
Perceived fairness	.633	.416	.167

SOM somatic symptomatology,
DEP depression, *ANX* anxiety,
GSI global severity index

* $p < .05$

^a Model 1: $R^2 = .07$ ($n = 134$,
 $p < .022$)

^b Model 2: $R^2 = .05$ ($n = 134$,
 $p < .104$)

^c Model 3: $R^2 = .05$ ($n = 137$,
 $p < .069$)

^d Model 4: $R^2 = .08$ ($n = 134$,
 $p < .012$)

observed in the criterion variable of GSI was explained by the model. Examination of the *t*-tests on each beta revealed that none of the three PQ factors made a unique contribution to the explained variance in the model.

Limitations

Before considering the meaning of the results of our research, it is important to note the preliminary nature of our findings and the limitations of the study. First, one ought to be somewhat cautious about the results of our principal component analysis due to our sample size. There were 143 participants in this study, raising the possibility that the obtained factor structure may not be stable. Relative to the number of items that were used in this study, some researchers (Costello and Osborne 2005; Nunnally and Bernstein 1994) have argued for 10 participants per item to yield a stable factor solution, whereas others have contended that only 5 participants per item would be indicated (e.g., Tabachnick and Fidell 2001).

Second, the data in the present study were all derived from a single-source information design. It is assumed that the participants accurately reported their childhood experiences related to parentification. However, we cannot be sure of whether childhood roles and responsibilities experienced in the family of origin were underreported, overreported, minimized, or denied; thus, self-report is a limitation of the current study.

Third, data were cross-sectional and retrospective in nature. Thus, we cannot unequivocally link the relations evidenced in the current study regarding a childhood history of parentification.

Fourth, the current study delimited the examination of mental health correlates to psychopathology. Future studies would greatly benefit from explorations that included measures of both psychopathology and wellness. Jurkovic (1997, 1998) has long discussed the importance of exploring both the positive and negative outcomes that may be

associated with childhood parentification and adult psychological functioning. Future studies could provide evidence of the differential effects of parentification.

Finally, the study sample represents a limitation of the study. Specifically, the sample was primarily female, and thus the results could be biased by gender. Additionally, this racially diverse college sample of students may not be representative of the general population. Therefore, the generalizability of the study's findings is restricted given the above-mentioned sampling limitations in conjunction with the fact that results are derived from a small convenience sample.

It would have been optimal to have a larger sample with similar racial diversity but in greater numbers per racial and cultural groups so that examinations related to how the study constructs vary by race, gender, and socioeconomic status could be explored. In future research, the described limitations should be considered in the design and sampling strategy of the study.

Discussion and Applications to Theory and Practice

The primary aim of our study was to evaluate the psychometric properties of the PQ. Our study's findings suggest that the factors derived from the PQ yield valid and reliable assessments for college student populations. Although our study had fewer items (23 vs. 30) and produced some items that loaded on factors other than those proposed by Jurkovic, our findings among college student participants showed a factor structure (three components) comparable to Jurkovic and colleagues' study among a sample of divorced young adults (Jurkovic et al. 2001b). Factor reliability was assessed by internal consistency of the inventory's reporting Cronbach's alpha coefficient, which produced satisfactory results that were consistent with other studies. Additionally, the PQ factors generally were correlated with and predictive of the BSI in the expected directions.

In terms of a theoretical contribution, this study preliminarily supports Jurkovic's clinical conceptualization of the multidimensional model of parentification. Our negative findings related to the relationship between instrumental parentification and somatization, depression, and anxiety support the notion of differential effects and outcomes of parentification. Likewise, the statistically significant relations between emotional parentification and all of the hypothesized correlates (somatization, depression, anxiety, and the severity of global symptomatology [GSI]) underscore the differential impact of type of parentification. These results, in combination with the studies conducted by Jurkovic and his colleagues (Chase 1999; Jurkovic and Casey 2000; Jurkovic et al. 2001a; Thirkield 2002), confirm that measuring the types of parentification (i.e., instrumental, emotional) separately likely will yield divergent outcomes. Instrumental parentification has been considered by many theoreticians, clinicians, and researchers to be generally less deleterious than emotional parentification (Byng-Hall 2002, 2008; Hooper 2003; Jurkovic 1997). On the other hand, it is important to note the negative findings related to the predictive power of the three PQ factors. In the current study, only one factor (perceived fairness) had a significant and unique contribution to psychopathology symptoms. The regression results show the lack of predictive nature of the PQ scores on symptom measures captured by the BSI. Moreover, for the models that were significant, the R^2 values were weak. Thus, validity needs to be explored in future studies among different and larger samples.

In terms of assessment, these findings support the need to examine the type of parentification and the degree to which the adult has experienced it. Not all parentification-related behaviors lead to the same outcomes. Psychologists, family therapists, and other

mental health care providers should assess for distress related to parentification. For example, adults who were parentified as children may have difficulty being independent and establishing a sense of self separate from caring for others. The outcomes from assessment using the PQ also may serve as a foundation for therapeutic conversations regarding the extent to which the adult may be repeating the parentification process with his or her own children. Other clinical issues such as boundaries, age-appropriate parent-child relationships, and inverted roles and responsibilities may be worth exploring among parents who were parentified as children. Finally, the premise that perceived fairness moderates the outcomes of emotional and instrumental parentification, such as growth and distress, was not tested in this study and should be explored in future longitudinal studies with larger samples and considered in the context of assessment and therapy.

This study was conducted using a racially diverse sample of adults. Although the findings indicate that the PQ may have some utility with various racial and ethnic groups, to evaluate the meaningfulness of the current results, future research is critical and warranted. In addition, cultural factors such as culturally sanctioned behaviors ought to be considered. What may be maladaptive family functioning in one culture may be adaptive family functioning in another culture. Among African American and Latino families, for example, the parentification process may serve as a core part of the culture, values, and beliefs related to family functioning and structure. Also, while the research continues to be mixed on the differential effects of gender on outcomes related to emotional and instrumental parentification, gender should be taken into account when examining outcomes and their effect on the individual and the system. By clarifying and recording the history of the current family and the family of origin during intake interviews, family therapists and mental health practitioners can formulate effective prevention, intervention, and treatment plans.

Directions for Future Research

This study is a first step in exploring the psychometric properties of the PQ. The current preliminary study points to the importance of empirical studies that seek to examine the underlying structure of important family systems constructs, such as parentification. Future studies would benefit from exploring the construct validity of the scores of the PQ. Currently, there are other instruments, although less widely used, that measure the construct of parentification. It would be worthwhile to examine how findings from the PQ compare to findings from other instruments [e.g., Parentification Inventory (Hooper 2009), Parentification Scale (Mika et al. 1987), Relationship with Parents Scale (Alexander 2003)] that assess parentification. In future studies researchers are encouraged to examine the psychometric properties of the PQ using other analytic procedures such as confirmatory factor analysis.

Another important consideration for future research is the examination of theorized wellness and strength-based outcomes evidenced in adulthood after parentification in childhood. The current study was limited to the examination of the relations between psychopathology and symptom-measuring instruments and parentification. Future studies should consider multiple and differential predictors and outcomes associated with parentification (Alexander 2003; Hooper 2007). Finally, an examination of unique pathways and possible moderators and mediators of outcomes associated with parentification could be useful to the research and clinical community. Prior research suggests several factors may play a key role in mediating or buffering the aftereffects of parentification. For example,

Jurkovic (1997, 1998) suggests that the extent to which the individual perceives the roles and responsibilities carried out in childhood to be “fair” may make the outcomes experienced in adulthood less deleterious.

Additionally, studies with larger samples with a range of ethnic, socioeconomic, and family configurations would add to the findings of the current study. Culturally relevant factors such as racial identity and level of acculturation could add to what we think we know about parentification and for whom these various outcomes, both positive and negative, may be more likely to occur.

Conclusion

The preliminary findings from the present study provide some initial evidence that the PQ is a reliable measure of roles and responsibilities usually reserved for adults in the current sample, and that the factor structure of the PQ in the current sample is very similar to that of Jurkovic et al. (2001b) findings. Specifically, for the current study, the final model—which was represented by three factors—generally replicated the multidimensional clinical model proposed by Jurkovic and Thirkield (1998). Researchers and clinicians working with families may find utility in incorporating the PQ in their work given the ubiquity and significance of parentification within family systems. Finally, the results of the current study, while preliminary in nature, may serve as the impetus for future explorations that test the measurement of parentification and the psychometric properties and the multidimensional nature of the PQ.

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