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Development and Validation of the Hope for Parenting Scale

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The current project aimed to develop and validate the Hope for Parenting Scale (HFPS), a five-item self-report instrument that addresses hopeful thinking of parents. In Sample 1, 413 fathers of infants completed the HFPS. In Sample 2, 290 mothers and fathers of children age 0–18 completed the HFPS. Exploratory factor analyses were conducted using Sample 1 and the single factor solution suggested by EFA item loadings was examined using confirmatory factor analysis with Sample 2. Convergent validity was established via significant correlations to criterion measures of trait hope and paternal involvement with infants. Discriminant validity was established through significant correlations to a measure of depression, anxiety, and stress. Implications and suggestions for future research are discussed.

Keywords: hope, parenting, paternal involvement

The family systems perspective of positive psychology (Conoley et al., 2015; Seligman, 2002), suggests that all members of the family system must have positive emotions, realized strengths, and meaningful activities and purpose to achieve a "good life." Positive traits such as hope enhance cognitive flexibility, prosocial behaviors, and problem-solving while buffering against depression, anxiety, and stress (Cheavens et al., 2019; Snyder et al., 2018). To date, the majority of positive psychology literature focuses on the benefits experienced by the child through the application of positive psychology principles in parenting. The literature regarding positive functioning of parents is lacking and deserves greater attention. Thus, the purpose of this study was to develop and validate a domain-specific measure of hope for parenting for parents of children ages 0–18.

Hope

Although hope has been conceptualized in numerous ways, Snyder et al. (1991) theory of hope is the most prevalent in the literature (Gallagher, 2018). In this theory, hope is defined as "goal-directed thinking in which people perceive that they can produce routes to desired goals (pathways thinking) and the requisite motivation to use those routes (agency thinking)" (Lopez et al., 2003, p. 94). In other words, hope is the belief that the future can be better than the present and that you have the power to make it happen. Snyder et al. (2018) defined goals as "the targets of mental action sequences" (Snyder et al., 2018, p. 27). Goals are the cognitive foundation for the theory and although they can be short or long term, they must meet several criteria: (a) they must hold some value to the person; (b) they must

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be attainable; and (c) they must possess a degree of uncertainty (i.e., they cannot be a sure thing). People that are high in hope tend to clearly define their goals, whereas people with lower levels of hope are often uncertain about their goals (Snyder, 1994).

Pathways thinking is a person's perceived capability to generate ways to reach their desired goal (i.e., waypower). These pathways are not concrete and may need to be reevaluated in the process should barriers occur. People that are high in hope tend to have less difficulty generating multiple routes to desired goals (Snyder, 1994). Agency thinking is the degree to which a person believes they can use the pathways they have developed to reach their goals (i.e., willpower). It is this motivational thinking that reinforces the creation and selection of alternative pathways to goals when barriers occur (Snyder et al., 2005).

This model of hope consists of cognitive and emotional components. Past experiences interact with current emotions to set the stage for goal pursuit. If a goal is of significant value, pathways and agency thinking begin. These thoughts regarding the will and ways to reach a certain goal interact with each other throughout the journey to goal attainment. Emotions play several roles in this process. They can exist in the form of stressors (barriers) that may require the development of additional pathways and agency. Emotions also exist within a feedback loop that has influence at every stage of the process. Positive momentum toward goal achievement can provide energy going forward into each stage of the process. Negative emotions can lead to decreases in pathways and agency thinking and slow the process. Emotions traveling in this feedback loop can also impact future goal pursuit (Snyder, 2002). In addition to altering mood, positive and negative emotion can alter the schemas for hope by changing our knowledge of what does and does not work (i.e., specific pathways and agency techniques; Lopez et al., 2003).

Hopeful thinking is associated with a number of important areas of functioning. For example, past studies have determined that high hope is associated with improved physical health (e.g., adherence to medical advice, adjustment to pain, and coping with chronic illness; see Rasmussen et al., 2018 for review), mental health (e.g., less depression, less avoidant coping, and less rumination; Ritschel & Sheppard, 2018), academic achievement (e.g., higher test scores, retention, and cumulative grade point average; see Pedrotti, 2018 for review), and psychological help-seeking (McDermott et al., 2017). People with high hope also report healthier attachment styles, more positive relationships, higher levels of empathy for others, and more likelihood of engaging in prosocial behaviors (Blake & Norton, 2014; Cheavens et al., 2019; Howell & Buro, 2017; Shorey et al., 2003).

Domain-Specific Hope

Rose and Sieben (2018) suggested that domain-specific measures of hope may be more sensitive measures of change resulting from hope-based interventions and encouraged additional research into their utility. Sympson's (1999) Domain-Specific Hope Scale was developed to examine hope within a variety of interpersonal and achievement-oriented contexts including relationships, work, and academics. Although research on the unique predictive validity of domain-specific measures is limited, Robinson and Rose (2010) found that domain-specific hope scales were stronger predictors of academic achievement than a general measure of hope. Further, Bartholomew et al. (2015) examined the benefits of utilizing a domain-specific hope scale for therapy. Results demonstrated that a domain-specific measure predicted significantly more variance in client reports of working alliance, hopelessness, and symptom distress than a measure of trait hope (Bartholomew et al., 2015).

Hope and Parenting

Although parenting provides opportunities for numerous positive emotional experiences, it is also a time of stress that comes with a variety of transitions, role changes, and changes to routines (Cooklin et al., 2016). When conceptualizing parenting through the lens of Snyder et al. (1991) hope theory, hopeful parents are able to set meaningful goals, identify strategies to reach their goals, and find ways to stay motivated to use these strategies when they encounter challenges and barriers in their approach to parenting. Furthermore, hope may act as a buffer against negative cognitive and emotional states related to parenting (Kashdan et al., 2002). Hopeful parents reported more psychological adjustment during parenting, specifically when presented with stressful situations including having a child diagnosed with a serious illness (Horton & Wallander, 2001;

Venning et al., 2007), having an infant born with a low birthweight (Nordheim et al., 2018), navigating the adoption process (Levanon-Simyoni, 2009), and caring for children with intellectual disabilities (Lloyd & Hastings, 2009).

Perhaps one of the most promising findings is that hope can be taught and increased. For example, Sotoudeh Navroodi et al. (2018) found that participation in an eight-session positive parenting intervention increased levels of trait hope among mothers of children with autism. This finding is consistent with research suggesting that hope can be enhanced through intervention (e.g., Berg et al., 2008; Cheavens et al., 2006; Feldman & Dreher, 2012; Marques et al., 2011). Although the literature on hope and parenting is nascent, literature on the benefits of hope especially for populations facing challenges indicates that assessing hope can provide practitioners and interventionists with the tools to enhance hope and the benefits of hope including mental health, anxiety, and coping. However, the primary limitation of the literature on hope and parenting is the reliance on trait hope measures. Given that past studies demonstrate that domain-specific measures of hope are more sensitive to change and have stronger relations to outcomes of interest, the study of hope and parenting would be enhanced by the development of a scale that measures hope as it relates to parenting.

The Current Study

In this study, we develop a psychometrically sound self-report measure of hope for parenting based upon Snyder et al. (1991) hope theory: The Hope for Parenting Scale (HFPS). The HFPS is a brief measure of goals, pathways, and agency thinking related to parenting. To our knowledge, the current study is the first to develop a theoretically informed, self-report instrument measuring the domain of parental hope. Convergent and divergent validity of the HFPS with measures of mental health concerns, trait hope, and paternal involvement were examined.

Method

Participants and Procedures

This study utilizes two samples. The first (Sample 1) explored the factor structure of a new scale assessing parenting hope, estimated internal consistency, and provided concurrent validity evidence (both convergent and divergent) for the hope for parenting scale. The second sample (Sample 2) provided confirmatory analyses of the hope for parenting's factor structure using a sample with a broader array of demographic characteristics (e.g., parents of children of all ages, multiple genders). Relatedly, this sample afforded the opportunity to conduct invariance testing between genders to expand generalizability of the scale. The two samples are described below.

Sample 1

Following approval by the institutional review board, a sample of 413 male fathers were recruited online using the Qualtrics Panels service, which provides researchers a database from which they can conduct convenience sampling for specific groups. Participants matching researcher specifications are contacted by Qualtrics with an invitation to participate in the study. For this study, participants had to be either White (n = 210, 50.8%) or Latino (n = 203, 49.2%) and have a child no older than 12 months of age (M = 6.0, SD = 3.4). Participants tended to be around the age of 30 (M = 29.65, SD = 5.87), identify as heterosexual (n = 347, 84.0%), and be employed full-time (n = 334, 80.9%). All participants lived with both their child and the mother of their child. This datum was collected as a part of a larger study on paternal involvement with infants of Latino and White fathers.

Chi square and independent t test were conducted on key demographic variables across ethnicities and generally support the homogeneity of the sample. There were no differences in the age of the baby, $\chi^2(11) = 5.17$, $p = ns$, sexual orientation of the father, $\chi^2(5) = 7.72$, $p = ns$, employment status, $\chi^2(6) = 9.48$, $p = ns$, or household income, $t(411) = .367$, $p = ns$. Highest level of education, $\chi^2(5) = 36.76$, $p < .001$, and age, $t(411) = 4.779$, $p < .001$, differed slightly by ethnicity. Latino fathers were somewhat more likely to have a high school diploma or equivalent degree (47.8% vs. 28.5%) and less likely to have an associate's degree (10.3% vs. 33.3%). Other educational levels were approximately the same. Latino fathers were slightly younger (M = 28.28, SD = 5.92) than White fathers (M = 30.97, SD = 5.53).

Sample 2

In an effort to establish generalizability for the HFPS, this sample sought to include mothers and parents of children ages 0–18. This sample was recruited using snowball convenience sampling. Following approval by the institutional review board, participants (n = 290) were recruited from a variety of online forums, including parenting communities on Facebook and Reddit. Users of these groups were encouraged to distribute the survey to other parents they may know. Aside from having a child (<18 years old) for whom the parent is legally responsible, there were no exclusion criteria for this sample. In general, participants were slightly more likely to be female (n = 166, 57%) than male (n = 118, 40.7%). They most frequently reported having a bachelor's degree as their highest level of education (n = 103, 35.5%). While the largest portion reported being employed for wages (n = 141, 48.6%) or working in a self-employed capacity (n = 31, 11.0%), a substantial portion of the sample also reported being a homemaker as their career (n = 96, 33.1%).

Measure

Adult Trait Hope Scale

The Adult Trait Hope Scale (ATHS; Snyder et al., 1991) is a 12-item scale that measures goal-directed thinking and attainment. The ATHS is comprised of two four-item subscales: (a) Pathways Thinking (e.g., *I can think of many ways to get the things in life that are most important to me*.) and (b) Agency Thinking (e.g., *I energetically pursue my goals*.). Four distractor items (e.g., *I worry about my health*) were excluded from the current study to reduce item count. Items are endorsed using an 8-point Likert-Type scale ranging from 1 (*definitely false*) to 8 (*definitely true*), with higher scores indicating higher levels of trait hope. Past studies utilizing the ATHS demonstrate acceptable internal consistency reliability for the total score (have shown acceptable internal consistency reliability for the total scale (α = .74–.88), pathways subscale (α = .63–.86), and agency subscale (α = .70–.84; Babyak et al., 1993). Additionally, scores on the ATHS have demonstrated acceptable 10-week test-retest reliability for the total scale (r = .82), as well as convergent validity with measures of optimism and self-esteem and divergent validity with measures of depression and hopelessness (Snyder et al., 1991). In Sample 1, the obtained means were Pathways (M = 25.87, SD = 4.6), Agency, (M = 24.65, SD = 5.14), and Total Hope (M = 50.24, SD = 8.95) and the internal consistency αs were .74, .82, and .88, respectively. In Sample 2, the obtained means were Pathways (M = 26.44, SD = 3.69), Agency, (M = 24.99, SD = 4.6), and Total Hope (M = 51.43, SD = 7.57) and the internal consistency αs were .82, .81, and .87, respectively.

DASS-21

The Depression Anxiety Stress Scales (DASS-21; Norton, 2007) is 21-item self-report instrument which contains subscales that assess depression (e.g., *I felt I wasn't worth much as a person*), anxiety (e.g., *I felt I was close to panic*), and stress (e.g., *I found it hard to wind down*). Participants rate the frequency and severity of experiencing negative emotions over the previous week using a 0–3 Likert-type scale (0 = *did not apply to me at all*; 3 = *applied to me very much, or most of the time*), with higher scores reflecting more distress. A variety of studies have shown support for the factor structure of the DASS-21 in clinical and nonclinical samples (Brown et al., 1997; Lovibond & Lovibond, 1995). The internal consistency of the DASS-21 and its subscales has ranged from good to excellent. In this study, the obtained mean score was (M = 39.52, SD = 32.57) with a high internal consistency (α = .96).

The Paternal Involvement With Infants Scale

The Paternal Involvement with Infants Scale (PIWIS; Singley et al., 2018) measures frequency of paternal involvement across five domains using 35-items answered on a 7-point Likert-type scale (1 = *not at all*; 7 = *more than once a day*). The five PIWIS domains are Positive Engagement (hands-on care of the baby), Warmth and Attunement (playful, fun interactions with the baby), Indirect Care (participation in helping the child access medical services), Frustration (negative emotional reactions related to the infant), and Control and Process Responsibility (scheduling and logistical decision-making). The PIWIS subscales have adequate internal consistency (α = .77–.92) and moderate

to strong test–retest reliability (r = .51–.74). In the current study, the obtained means were Positive Engagement (M = 5.5, SD = 1.2, Warmth/Attunement (M = 6.5, SD = 0.9), Indirect Care (M = 3.5, SD = 1.8), Frustration (M = 4.7, SD = 1.8), and Control & Process Responsibility (M = 6.0, SD = 1.1) and the internal consistency αs were .87, .96, .80, .82, and .88, respectively.

Data Analysis

Analysis Plan

A total of 26 potential items were generated by the authors, using existing domain-specific hope scales (e.g., Bartholomew et al., 2015; Juntunen & Wettersten, 2006; Shorey & Snyder, 2004; Sympson, 1999) as content models and stems from existing trait and domain-specific hope scales. For example, "I can think of many ways to reach my goals" was reworded to "I can think of many ways to reach my parenting goals." Relatedly, "I am motivated to do well in school" was reworded to "I am motivated to spend time with my children." Thus, potential items explored goals, pathways, and agency thinking related to parenting consistent with hope theory.

Participants were given the prompt *Please take a moment to think about your experience as a parent* and asked to rate items on an 8-point Likert-type scale ranging from *Definitely False* to *Definitely True*. In Sample 1, SPSS (Version 24.0) was utilized to conduct a Maximum Likelihood Exploratory Factor Analyses (EFA) with a Promax (Oblique) rotation to identify the factor structure of the instrument. Use of an oblique rotation allows the identification of correlated factors. Factor structure was determined based on rotated item loadings, comparison of extracted eigenvalues to those generated in simulated data, and visual inspection of the Scree plot. Items were required to have loadings greater than or equal to .70 in order to be retained during EFA. Correlations between the identified scale structure and extratest variables were then calculated along with an estimate of internal consistency.

Next, in Sample 2, confirmatory factor analyses (CFA) with a Diagonally Weighted Least Squares (WLSMV) estimator using Mplus 7.0 (Muthén & Muthén, 2017) was conducted. Invariance testing is a critical step to an instrument's psychometric validation and assesses if the findings related to the construct measured on the instrument differ meaningfully between groups and if findings may be generalized between the compared groups (Brown, 2015). Given the substantial role of gender on parenting roles and perceptions, multigroup invariance testing was also conducted to evaluate if the observed scale could be interpreted in the same manner across gender groups within this sample. Invariance testing is conducted in stages, with higher level comparisons assuming lower level equivalence between the compared groups. Thus, invariance was examined for configural invariance (if latent construct is measured by the same indicators/items), metric invariance (if factor loadings are the same and items provide the same amount of information to the overall construct; sometimes called weak invariance), and scalar invariance (if the observed factor means is the same across groups; strong invariance), in the order described.

Model fit during CFA was determined by examining χ^2 (a nonsignificant p value is desirable for good fit), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). To indicate excellent fit, Hu and Bentler (1999) recommended an RMSEA of close to .06 or below as well as a CFI and TLI of .95 or greater. Acceptable model fit is frequently described as around .08 for RMSEA and a CFI/TLI of .90 or above (Little, 2013). Modification indices, which reflect prospective change in χ^2, were considered for possible model misfit when values were greater than 10. The change in CFI (with a ΔCFI > .01 indicating meaningful change) and in χ^2 (with a significant chi-square value indicating meaningful change) were utilized to determine invariance between groups.

Results

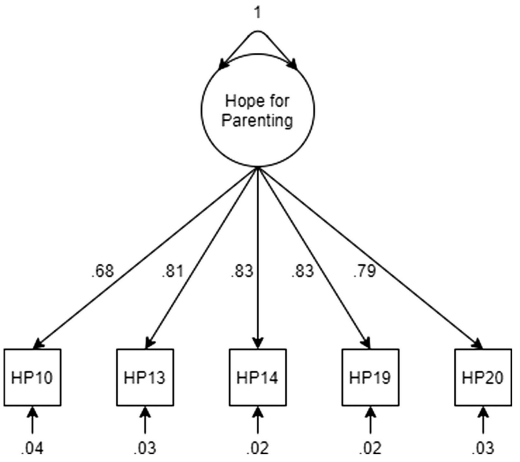
During EFA, the correlational matrix demonstrated adequate acceptability: Kaiser–Meyer–Olkin = .962; Bartlett's test of sphericity $\chi^2(325) = 8134.74$, $p < .001$. Based on generated eigenvalues, visual inspection of the scree plot, and item loading patterns, a one-factor solution which accounted for 52.8% of the variance emerged as the most likely scale structure. Based on the information obtained during the EFA, several approaches to item reduction were then conducted. First, items were removed from consideration if their loading fell below a minimal

acceptability of .4 (Hair et al., 2006). One item met this criterion for removal. Given the large pool of potential scale content, items were then identified for retention based on superior loadings (≥.7). Ten items were removed based on this criterion. Final scale items were determined based on item content reflecting a balance of theoretical content measuring agency, goals, and pathways. The resulting eight-item scale had a high internal consistency (α = .93).

Following completion of the EFA and establishment of concurrent validity for the proposed scale structure, CFA analyses were conducted using Sample 2. Fit for this eight-item model varied somewhat across the indexes but was poor overall, $\chi^2(14) = 145.886$, $p < .001$, CFI = .92, TLI = .89, SRMR = .05, RMSEA = .15 (.13–.17). Internal consistency (a more rudimentary measure of reliability) was consistent with that observed in Sample 1 (α = .92). RMSEA (which indicates badness of fit) in the eight-item version was particularly bad and indicated substantial misspecification, potentially due to item overlap and residual relationships. Indeed, modification indices suggested substantial residual correlations existed for three items (Items 18, 22, and 26). These items were removed, and the revised five-item model (Figure 1) demonstrated good fit, $\chi^2(14) = 14.99$, $p = .01$, CFI = .99, TLI = .98, SRMR = .02, RMSEA = .08 (.04–.13). All items were significant and standardized loadings suggest strong associations with the latent construct of parenting hope (.68–.83; $M = .79$). Internal consistency estimates for the five-item measure remained high (Sample 1 α = .92, Sample 2 α = .92).

Next, measurement invariance was conducted across parental gender. Because of the sampling response distribution for gender identity, invariance was assessed between males ($n = 118$) and females ($n = 166$). The latent constructs (configural invariance) were the same across gender, $\chi^2(18) = 23.33$, $p < .01$, CFI = .98, TLI = .97, SRMR = .02, RMSEA = .10 (.05–.15), as were the item loadings (metric invariance), $\chi^2(14) = 24.31$, $p = .04$, $\chi^2\Delta(4) = .098$, $p = ns$, CFI = .99, ΔCFI = <.01, TLI = .97, SRMR = .03, RMSEA = .07 (.01–.12), and the scale means (scalar invariance), $\chi^2(18) = 29.08$, $p = .05$, $\chi^2\Delta(4) = 4.762$, $p = ns$, CFI = .99, ΔCFI = <.01, TLI = .98, SRMR = .05, RMSEA = .07 (.01–.11). In general, measurement invariance testing indicates that gender differences are not significant and, thus, that the hope for parenting scale performs similarly in men and women. This is consistent with past research demonstrating that men and women have similar levels of trait hope (Snyder, 2002).

Figure 1
Standardized Loadings for the Confirmatory Factor Analysis of the Hope for Parenting (HFP) Scale



Note. Factor loading was based upon the original pool of 26 items. Item order here reflects the order in which they are presented in Appendix.

Correlations between the Hope for Parenting scale and available extratest measures were then conducted across both samples. Results demonstrate similar correlation estimates, which support the Hope for Parenting scale's convergent and divergent validity (Tables 1 and 2). In general, HFP has moderate positive correlations with the trait hope (.45–.49) as well as small negative correlations with measures of anxiety, depression, and stress (−.23 to −.35). In the sample of fathers with infants recruited through Qualtrics Panels, the HFP scale had positive moderate correlations with most domains of the PIWIS with the exceptions of Indirect Care ($r = <.01$, $p = ns$) and Frustration ($r = -.19$, $p < .001$).

Discussion

This study developed and validated a brief measure of domain-specific hope related to parenting behaviors using separate developmental and validation samples. In general, the HFP scale developed within this study demonstrates evidence of a reliable and valid brief, single-factor measure of parenting hope which performs similarly in both men and women. Its convergent validity includes moderately strong relationships with both parenting engagement behaviors, as well as hope constructs. Likewise, it discriminates as expected when compared to a measure of stress and symptom distress (DASS-21). Accordingly, this study expands the availability of hope and parenting measures by creating the first such domain-specific measure. Findings from this study are discussed below and implications for parenting and hope research and practice.

Discriminant Validity

Mental Health Concerns

Discriminant validity was examined by exploring correlations between scores on the HFPS and scores on the Depression, Anxiety, and Stress subscales of the DASS-21 among participants in Sample 1. Hope for parenting had small negative correlations to endorsement of depression, anxiety, and stress on the DASS-21 among fathers of infants. This finding mirrors past research indicating that individuals that are high in hope report lower rates of depression and anxiety and better ability to cope with stress (Arnau, 2018; Ong et al., 2018; Ritschel & Sheppard, 2018). A recent meta-analysis found that approximately 12.8% of fathers in the United States experience perinatal depression (Cameron et al., 2016). Fathers with depression report less parent-child interaction, lower infant care self-efficacy, engagement in coparenting, and parenting satisfaction (Isacco et al., 2010; Singley et al., 2018). Thus, promotion of hope for parenting may be a promising avenue for the mental health of new fathers.

Convergent Validity

Convergent validity was examined by exploring correlations between scores on the HFPS and scores on the Adult Trait Hope Scale and the five subscales of the Paternal Involvement With Infants Scale among participants in Sample 1 as well as the Adult Trait Hope Scale in Sample 2.

Trait Hope

Examination of bivariate correlations revealed moderate positive correlations between scores on the Adult Trait Hope Scale and HFPS, suggesting that trait hope and hope for parenting are related, but distinct constructs. This finding mirrors past studies on domain-specific hope (e.g., Bartholomew et al., 2015; Hong et al., 2012; Robinson & Rose, 2010, Sympson, 1999).

Paternal Involvement

While the examination of hope in parenting is limited, previous research has indicated a sense of hope in parenting has been associated with improving the well-being and parenting skills of parents (Nordheim et al., 2018). Our findings revealed that having a higher level of hope for parenting was correlated with several dimensions of father involvement with their infants. Fathers' warmth and attunement, control and process responsibility, and positive engagement behaviors increased when they had higher scores of hope for parenting. In addition, fathers' ratings of frustration with parenting decreased when they had higher hope for parenting. These results suggest that hope for parenting can predict father involvement with infants and decrease feelings of frustration that can occur while parenting an infant. In a study of Norwegian parents of low birth weight infants, hope was found to be the factor that decreased parenting stress and

Table 1

Scale Descriptives and Correlations With Extra Test-Criterion Measures for the Qualtrics Panels of Fathers of Infants (n = 413)

Scale	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
Hope for parenting	33.5	6.8***	.49***	.45***	.46***	−.21***	−.26***	−.19***	−.23***	.37***	.38***	−.19**	<.01	.30***
Trait for Hope Scale														
1. Agency	24.4	5.4	—											
2. Pathways	25	5.1	.70***	—										
3. Total score	49.4	9.7	.93***	.92***										
DASS-21														
4. Anxiety	12.2	11.4	−.23***	−.24***	−.25***	—								
5. Depression	12	11.8	−.35***	−.33***	−.36***	.85***	—							
6. Stress	15.4	11.3	−.31***	−.27***	−.31***	.84***	.84***	—						
7. Total score	39.5	32.6	−.31***	−.29***	−.33***	.95***	.95***	.94***	—					
PIWIS														
8. Warmth/attunement	6.5	0.9	.22***	.29***	.28***	−.31***	−.27***	−.22***	−.28***	—				
9. Control process	6	1.1	.33***	.34***	.36***	−.16**	−.21***	−.16**	−.19***	.60***	—			
10. Frustration	3.3	1.8	−.14***	−.25***	−.21***	.46***	.45***	.39***	.46***	−.163**	.01	—		
11. Indirect care	3.5	1.8	.05	−.03	.01	.32***	.25***	.21***	.27***	−.06	.21***	−.44***	—	
12. Positive engagement	5.5	1.2	.19***	.25***	.24***	−.03	−.06	−.06	−.06	.43***	.49***	−.01	.37***	—

** $p < .01$. *** $p < .001$.

Table 2
Scale Descriptives and Correlations With Extratest Criterion Measures for the Snowball Sampling of Mothers and Fathers of Children Under Age 18 (n = 287)

Scale	*M*	*SD*	1	2	3
Hope for Parenting	35.2	5.8	.43***	.34***	.43***
Trait Hope Scale					
1. Agency	25.0	4.6	—		
2. Pathways	26.4	3.7	.66***	—	
3. Total score	51.4	7.6	.93***	.89***	—

*** $p < .001$.

increased parents' quality of life (Nordheim et al., 2018). When assessing hope 42 months after birth, both mothers and fathers of low birth weight infants had higher reporting of hope than a general population of parents. Parents who are high in hope may experience positive outcomes such as positive mental health as well as contribute to their child's positive development through developing secure attachments with their infant, which has been found to contribute to their child's later feelings of hope in young adulthood (Shorey et al., 2003).

The only dimension of father involvement with infants that was not significantly correlated with hope for parenting in this study was indirect care, which includes behaviors such as taking your child to medical appointments or arranging childcare. Previous research has shown that a related construct of parenting satisfaction was not correlated with fathers of infants' indirect care (Cole et al., 2020). Limited research on the impact of hope for parenting contributes to a lack of knowledge regarding how hope for parenting is related to parental factors as well as how to support and encourage hope in parents. The findings that hope is associated with increased father involvement and decreased frustration suggest a need for additional research examining the role of hope for parents in infancy and throughout child development.

Implications and Applications

Past research suggests that hope is a protective factor for parents and children and that it promotes healthy coping, mental health, and family functioning (Kashdan et al., 2002; Nordheim et al., 2018; Venning et al., 2007). Furthermore, there is ample research demonstrating that even brief interventions are effective at enhancing hope (e.g., Sotoudeh Navroodi et al., 2018). As such, parenting programs may benefit from integrating training on setting effective goals for parenting, developing, and identifying pathways to reach these goals, and strategies for maintaining motivation when parenting is challenging. The HFPS is a brief, five-item instrument that can be utilized to assess hope for parenting for prevention and intervention programs by measuring goal-directed thinking, pathways thinking, and agency thinking of parents.

Practitioners and program developers continue to pursue evidence regarding factors that can contribute to more desired outcomes for their programs. Research examining the role of hope for responsible fathering programs showed that as father's hopefulness increased during a responsible fathering parent education program, their intentions to comply with child support increased, evidencing the need to consider addressing hope for parenting in programs designed to promote increases in father involvement (Chan & Adler-Baeder, 2019). As the correlations of this study suggest, higher hope is associated with father's involvement in responsible parenting behaviors (i.e., control and process responsibility) as well as caregiving and engagement behaviors (i.e., positive engagement and warmth and attunement). Parenting programs that emphasize increases in father involvement can utilize the HFPS to enhance their programmatic efforts.

The HFPS can assist mental health practitioners by identifying parents that might need therapeutic intervention. Comparison of scores on the HFPS and DASS-21 suggest that hopeful fathers of infants report less depression, anxiety, and stress. This finding is consistent with past research demonstrating an inverse relationship between mood disorders and hope (Cheavens et al., 2006). Given the frequency with which new parents report perinatal anxiety and depression, promotion of hope is a promising avenue for enhancing mental

health and engagement of new parents (Cheavens & Guter, 2018; Isacco et al., 2010).

Limitations and Future Directions

Sample 1 consisted entirely of Latino and White fathers. Although mothers and fathers were included in Sample 2, race and ethnicity were not reported. Future studies of the HFPS may benefit from exploring other contextual factors (e.g., geographic location, marital status, residential, and nonresidential parenting status) and cultural identities (race/ethnicity, religion, and spirituality) which could result in differences in the factor structure and validity evidence. Additional limitations of the study resulted from the use of online sampling and online report, which limits the study participants to parents with internet access. Results may also be subject to self-report bias and social desirability.

Conclusions

Although several studies have demonstrated that trait hope has benefits for parents, domain-specific measures of hope may be more sensitive measures of change resulting from hope-based interventions (Rose & Seiben, 2018). The results of this study provide initial support for the reliability and validity of the HFPS, which measures domain-specific hope for parenting. The HFPS could be a helpful tool for professionals working with parents as well as researchers. Given the complexities of parenting across a variety of contextual factors (e.g., age of children, birth order, residential parenting status, parental mental health), the HFPS will allow a more nuanced approach to exploring goal-directed parenting behaviors and parenting interventions.

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Appendix

Hope for Parenting Scale

Please take a moment to think about your experience as a parent. Read each item and select the number that best fits you.

1. = Definitely False
2. = Mostly False
3. = Somewhat False
4. = Slightly False
5. = Slightly True
6. = Somewhat True
7. = Mostly True
8. = Definitely True

1. I can think of specific ways to be a good parent.
2. I actively pursue spending time with my child/children.
3. I am motivated to be a parent to my child/children.
4. I actively work on being a parent.
5. Even when things are challenging, I know I can find a way to parent my child/children.

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