

Measuring Children's Church-Based Social Support: Development and Initial Validation of the Kids' Church Survey

Robert G. Crosby III and Erin I. Smith, *California Baptist University*

Abstract

Given the importance of considering context in development, the goal of the present study was to develop and provide initial validity evidence for the Kids' Church Survey (KCS), a new measure of children's church-based social support. Data were collected from 1253 children ages 6–14 attending mainline Protestant, evangelical Protestant, and Catholic churches. Parallel and exploratory factor analyses supported a three-factor solution: received (emotional) church support, perceived church support from peers, and perceived church support from adults. Confirmatory models conducted with independent samples provided an excellent fit for the data. All three scales evidenced acceptable internal (.78–.92) and test–retest (.88–.95) reliability. Measurement invariance was demonstrated across genders and age groups, with the exception of the perceived peer support scale, which was not invariant across ages. The KCS was sensitive to between-church differences in children's programs and incrementally predicted self-esteem, prosocial behavior, and spirituality. Applications for researchers, mental health practitioners, and clergy are discussed.

Keywords: social support; religion; self-esteem; prosocial behavior

Despite the methodological difficulties of considering context in development, it is increasingly important for researchers to understand and articulate how development is informed by various social institutions (e.g., family, school, religious communities). Such contexts influence development in a number of ways, including pathways related to social support (i.e., support provided to individuals by their friends, family, or other important people in their lives; Haluska, Jessee, & Nagy, 2002). Social support encompasses both perceived support and received support (Wills & Shinar, 2000). Perceived support is the belief that someone else cares and would be willing to help if needed. Received support is when help is actually provided. Perceived and received social support can take different forms, including emotional support (attachment, reassurance of worth), informational support (guidance), instrumental support (tangible support), and companionship support (social integration).

Correspondence should be addressed to Robert G. Crosby III, California Baptist University, Online and Professional Studies, 10370 Hemet Street, Suite 200, Riverside, CA 92503, USA.
Email: rcrosby@calbaptist.edu

Social support offers a variety of benefits across the lifespan, though a preponderance of research indicates that social support is crucial to the well-being of children (Boyce, 1985; Malecki & Demaray, 2002). One of the most important benefits of social support to children is the buffering effect it can have in the presence of stressful life events (Cohen, Gottlieb, & Underwood, 2000). Social support has been shown to alleviate distress among children experiencing highly traumatic events, such as the diagnosis and treatment of cancer (Goodall, King, Ewing, Smith, & Kenny, 2012), as well as normative transitions, such as going from elementary school to junior high (Wills, Blechman, & McNamara, 1996). When children perceive that support is available, challenging situations do not seem as threatening (Wills & Shinar, 2000). Additionally, the actual receipt of support reduces the impact of stress by providing a solution to the problem or by offering a distraction from the problem (Cohen et al., 2000).

Although social support is important when children are experiencing traumatic or stressful life events (Cohen et al., 2000), it also benefits non-stressed populations. For example, children report higher levels of self-esteem after receiving social support from the significant adults in their lives (Reddy, Rhodes, & Mulhall, 2003; Sterrett, Jones, McKee, & Kincaid, 2011). The link between social support and self-esteem is explained by social cognition theory, which maintains that the experience of the 'self' is largely a reflection of how one is viewed by others (Lakey & Cohen, 2000). Children are more inclined to view themselves in a positive light when they perceive the approval of others, whereas negative thoughts regarding social relationships kindle negative thoughts regarding the self (Baldwin, Carrell, & Lopez, 1990). When children receive emotional support, they perceive that others approve of them, care for them, and accept them, which in turn elevates their own self-perceptions (Wills & Shinar, 2000).

Social support also promotes prosocial behavior in non-stressed populations. Research shows that children are more likely to behave in caring and prosocial ways when they are accepted by their peers (Parkhurst & Asher, 1992; Schonert-Reichl, 1999) and receive social support from parents and adults outside the family (Cochran & Bo, 1989; Zelkowitz, 1987). The experience of warmth and attachment elevates mood and promotes a positive worldview and social outlook, leading to increased prosocial behavior (Tai, Zheng, & Narayanan, 2011). Social rejection, on the other hand, inhibits emotional responses and makes children less sensitive, and thus less responsive, to the needs of others (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). Children who lack adequate social support view the world as hostile and respond accordingly.

Children's social support research generally focuses on support experienced at home and in school, as these are considered to be the most significant social environments for children (Bronfenbrenner, 1986). Unfortunately, many homes are stricken by poverty, illness, or divorce, which can inhibit parents from providing nurturance and emotional support to their children (Zelkowitz, 1987), and schools are typically not designed to facilitate intimate, supportive relationships (Osterman, 2000). Thus, given the enduring presence of religion in the USA, with one in five people attending church weekly in the states with the *lowest* rates of church participation (Newport, 2015), we believe the church should be considered as a potential social support source for children. In fact, churches may be *especially* effective at providing certain types of support due to their unique organizational structure,

strongly prosocial worldview, and spiritual functions (Larson, Hansen, & Moneta, 2006).

Churches' organizational structure may make them more effective than schools at providing children with long-term, intergenerational relationships (Larson et al., 2006). The relationships children have with adults at school normally terminate with the school year before long-term benefits have the opportunity to accrue (Jose, Ryan, & Pryor, 2012). In contrast, churches can provide sustained social connections when other support sources have been disrupted—across normative developmental transition periods (e.g., going from elementary school to junior high) or in the midst of non-normative events, such as parental divorce (Boyce, 1985). Larson et al. (2006) argued that churches may be 'particularly effective' developmental settings because the peer group is only partly separated from the adult community (p. 860). Children address relevant issues and experience agency with their peers, but the peer group is also interconnected with adults around a shared prosocial worldview.

This strongly prosocial worldview is important because not all supportive relationships predict positive developmental outcomes. For example, social support from peers sometimes predicts *higher* rates of behavior problems when children are negatively influenced by antisocial peer norms (Mounts & Steinberg, 1995). Likewise, children who have relationships with adults who engage in problem behaviors are more likely to exhibit conduct problems themselves (Chen, Greenberger, Farrugia, Bush, & Dong, 2003). In contrast, many churches strategically facilitate relationships between children and trustworthy adults for the expressed purpose of transmitting the group's prosocial norms (Graves, 2006). When children believe the important adults in their lives will disapprove of their behaviors, they are less likely to behave badly (Chen et al., 2003). Similarly, children learn self-regulation by applying peer group standards to their own behavior; the closer the relationships become, the stronger the effect will be (Brissette, Cohen, & Seeman, 2000). Thus, it is important to consider the social support children receive from their faith community rather than solely religious affiliation or attendance, which have actually been negatively associated with children's prosocial behavior (e.g., Decety et al., 2015).

Finally, the developmental impact of church relationships may differ from those of other contexts because the church is constructed around a set of religious tenants and rituals intended for the spiritual formation of its members (Larson et al., 2006). For example, nurturing and supportive relationships within the church community may engender a corresponding concept of God, similar to the way parents' behaviors do in early childhood (Dickie et al., 1997; Krause & Ellison, 2009). The resulting perception of God as loving and responsive is a significant facet of religious support (Pargament, 1997) which has been associated with a number of positive youth outcomes, including life satisfaction, prosocial behavior, and religious coping (Bjorck, Kim, Braese, & Gililand, 2008; Crosby & Smith, 2015; Van Dyke, Glenwick, Cecero, & Kim, 2009).

Given the potential importance of children's church-based social support, we believe that the valid and reliable measurement of this construct stands to make a meaningful contribution toward understanding a religious context of development. However, to our knowledge, there are no such measures currently in existence. The few instruments that exist for adults (e.g., Fiala, Bjorck, & Gorsuch, 2002; Hayward & Krause, 2012) are developmentally inappropriate for use with school-age children

because they contain complex vocabulary, non-literal language, and negatively formulated questions which can make the intended meaning ambiguous to younger readers (de Leeuw, Borgers, & Smits, 2004) and because it is unknown whether survey items designed to reflect adults' relationships in a religious context are relevant to children. Social support scales designed specifically for school-age children (e.g., Harter, 2012; Malecki & Demaray, 2002) are also inadequate for measuring church-based support because they only measure support at home and at school and have only been validated within these contexts.

The Present Study

The goal of the present study is to develop and provide initial validity evidence for a measure of children's church-based social support: the Kids' Church Survey (KCS). First, we present a theoretical framework for the KCS and detail the instrument development process. We then validate the KCS with children attending evangelical Protestant churches (the largest religious group in the USA; Pew Research Center, 2015) and test its sensitivity to between-church differences. Finally, we cross-validate the KCS with children attending evangelical Protestant, mainline Protestant, and Catholic churches and assess test-retest reliability, incremental validity, and measurement invariance. Because these religious groups comprise 60.9% of the US population, we believe that the KCS will be relevant to a wide segment of children and that it will prove to be a useful tool to both researchers and practitioners.

Instrument Development

The Kids' Church Survey (KCS) is a self-report measure of perceived and received social support provided directly to children by adults and peers within a typical church context. The instrument development process involved theory and item development, item pretesting, and a pilot study.

Theory and Item Development

Following Cutrona and Russell (1987) and Fiala et al. (2002), the KCS was constructed using Weiss' (1974) social provision framework because it includes social support domains that we believed would be relevant to children within the church context: attachment (safe, intimate, and loving relationships), reassurance of worth (personal validation and recognition), guidance (emotional and informational help), and social integration (a source of companionship). We defined *perceived* church-based support as a child's perception that he or she is loved, valued, and supported by (non-family member) peers and adults in his or her church community. *Received* church-based support was defined as supportive functions which are actually provided by (non-family member) peers and adults in the child's church community.

KCS survey items were adapted from existing self-report inventories of related constructs for children, including social support scales (e.g., Harter, 2012; Malecki & Demaray, 2002) and school connectedness measures (e.g., Goodenow, 1993; Jose et al., 2012). We also adapted items from adult social provision scales (Cutrona & Russell, 1984) and measures of church support for adults (Fiala et al., 2002; Hayward & Krause, 2012) and adolescents (Bjorck et al., 2008) and developed original items. We avoided negatively formulated questions, included all of the critical information in every question stem, and limited the number of response options to four

(never, sometimes, most of the time, always) in order to minimize ambiguity and reduce demands on children's working memory (de Leeuw et al., 2004). Next, we met with focus groups consisting of children's ministry leaders and parents. Focus groups discussed and rated the face validity of each proposed item, resulting in a pool of 40 items.

Item Pretesting

To make sure the instrument would be understood by children as young as six, we pretested the 40 items through cognitive interviews with 20 church-going children (50 percent boys) between the ages of 6 and 13. We administered the proposed survey items along with follow-up questions designed to make sure items generated the intended information and to root out ambiguous or irrelevant items (Willis, 2004). Interviews were conducted one-on-one in the child's home and lasted approximately 25 minutes. Children were instructed to read each question aloud (to detect language problems) and to select a corresponding response option. Each question was followed by a verbal probe. For example, an item intended to measure attachment read, 'A friend from church cares about me a lot'. This was followed by the probe, 'What did the friend do that made you feel cared for?' In reference to specific peers, sample responses included 'He never . . . doesn't want to be by me' (proximity-seeking) and 'I'm like her little brother' (perceived intimacy), both reflective of attachment. Ineffective items were reworded or deleted as interviews progressed, resulting in a pool of 24 items.

Pilot Study

Due to ambiguity in the literature regarding the factor structure of children's social support instruments (e.g., Dubow & Ullman, 1989), we conducted a pilot study to explore the factor structure of the KCS items.

Participants and Procedures. The 24 items were administered to a sample of 328 church-going children (51 percent boys, 49 percent girls) between the ages of 6 and 12 ($M = 8.91$, $SD = 1.31$). Individual ethnicity data were not available, but most of the children were White or Hispanic, consistent with the surrounding communities. Two-hundred-sixty-three were sampled from evangelical Protestant churches in Southern California. These churches had participated in the item development process and requested to use the resulting draft of the instrument for their own action research purposes. Church leaders administered the surveys using a standardized protocol, which included obtaining consent from parents and children and administering the surveys anonymously in a classroom-type setting. Third graders and above completed the surveys independently, but the questions were read aloud to children in first and second grade.

The remaining 65 children were sampled from a mid-sized Christian elementary school, also located in Southern California. On the demographic questionnaire, children were given the option of providing the name of their church. Among the 34 children who did so, 18 different area churches were represented. These included a diversity of Christian traditions, including evangelical Protestant (e.g., Baptist, non-denominational), mainline Protestant (e.g., Lutheran, Presbyterian, Methodist), and Catholic. After securing parental and child consent, the first author administered the surveys in the children's classrooms during school hours using a standardized

protocol. As with the church sample, third graders and above completed the surveys independently, but the questions were read aloud to children in first and second grade.

Data Analysis. We first conducted a parallel analysis to determine how many factors to retain (Hayton, Allen, & Scarpello, 2004). Because the raw data were not normally distributed, we conducted the parallel analysis based on permutations of the original raw data set ($N = 500$) utilizing O'Connor's (2000) syntax within SPSS Version 23.0. We used the criterion of the 95th percentile eigenvalue because it is equivalent to a Type I error rate (α) of .05 (Hayton et al., 2004). Three factors superseded their randomly generated counterparts. Thus, we retained three components for exploratory factor analysis (EFA) in *Mplus* Version 6.11 (Muthén & Muthén, 1998–2010) using robust weighted least squares (WLSMV) estimation because the raw data were ordinal. We applied Promax (oblique) rotation because factors were expected to correlate (Costello & Osborne, 2005).

The produced factors included: Factor 1: perceived peer support, Factor 2: perceived adult support, and Factor 3: received support from peers and adults. (Pilot items and factor loadings are available from the first author upon request.) As expected, children differentiated between perceived support and received support and between sources of perceived support. However, they did not differentiate between sources of received support. Looking back at the interview transcripts, this made sense, as many of the received support processes took place in the presence of both adults and peers (e.g., displaying a talent in front of the class). Consequently, we decided to follow Dubow and Ullman (1989) and rewrote the received support items to refer to 'someone' or 'people' at church, rather than specifically to 'adults' or 'kids' at church.

Within the two perceived support factors, we retained one item from each domain—social integration, attachment, reassurance of worth, and guidance—based on factor loadings and item variability. Because factor loadings tended to be lower among received support items than among perceived support items, we retained two items from each domain (rather than one) in order to maintain higher internal reliability within the received support scale. Interestingly, the received social integration items (e.g., 'People at church invite me to do things with them') had especially low factor loadings, suggesting that social integration was less relevant to these children's church experiences. Because these items did not add to the variability or reliability of the scale, they were removed. This resulted in a six-item received support scale measuring attachment, reassurance of worth, and guidance, all falling conceptually under the broader umbrella of emotional support (Wills & Shinar, 2000). In total, the revised instrument had 14 items (six received support, four perceived peer support, and four perceived adult support).

Instrument Validation

We validated the KCS using a sample of children drawn from evangelical Protestant churches ($n = 505$) and cross-validated it with an independent sample of children from a variety of Christian traditions ($n = 400$).

Validation Analyses

We validated the KCS using confirmatory factor analysis (CFA), a multivariate statistical procedure used for validating the factor structure of psychological assessment scales (Brown, 2006), reliability tests, and a test of sensitivity to group differences.

Participants and Procedure. Participants were 505 children (51 percent girls, 49 percent boys) ages 6 through 12 ($M = 8.58$, $SD = 1.73$) in Grades 1 through 6 ($M = 3.13$, $SD = 1.64$) attending evangelical Protestant Christian churches in Southern California and Oklahoma. Evangelical churches were chosen for the initial validation study because they are the largest church segment, comprising 25.4 percent of the US population (Pew Research Center, 2015). As with the pilot study, leaders of the respective churches requested to use the instrument for their own action research purposes, administered the surveys using a standardized protocol, and shared the data with us for secondary analysis.

Confirmatory Factor Analysis. We subjected the revised instrument to a CFA using robust weighted least squares estimation to account for ordinal level data and occasional missing data. Perceived peer support and perceived adult support were set as indicators of a perceived support secondary factor. The received support items were set as indicators of a single received support factor. Perceived support and received support were allowed to correlate. The model estimation terminated normally. Fit indices and factor loadings are provided in Table 1. The model provided an excellent fit to the data, $CFI = .97$, $TLI = .97$, $RMSEA = .05$, 95 percent CI [.04, .06]. The perceived support secondary factor was significantly indicated by perceived peer support ($\lambda = .88$) and perceived adult support ($\lambda = .94$). Perceived support and received support were correlated at .54. All of the items loaded significantly onto their theorized factors with standardized factor loadings ranging from .44 to .84. An inspection of the modification indices revealed no substantial cross-loadings or correlated error terms, thus confirming the factor structure of the revised instrument.

Internal Reliability. Imposing equality constraints on the factor loadings within each scale resulted in a significant deterioration of model fit, indicating that the assumption of Tau equivalency was not met (Yang & Green, 2011). Therefore, internal reliability estimates were calculated using McDonald's (1999) ω (rather than Chronbach's α) using the formula for cases in which there are no correlations between error terms but where factor loadings are unequal across items (Hancock & Muller, 2001). In the validation sample, adequate to good internal reliability coefficients were found for the perceived peer support ($\omega = .79$), perceived adult support ($\omega = .86$), and received support ($\omega = .78$) scales.

Sensitivity to Group Differences. Education research shows that children experience greater connectedness when they attend smaller schools (Leithwood & Jantzi, 2009) and when schools maintain intact classes and student-faculty relationships over time (Bulau, 2007). We hypothesized an analogous effect for churches. That is, we expected children in smaller churches and churches which maintain intact small groups to experience greater social support. In order to assess the sensitivity of the KCS to between-church differences, we compared fourth and fifth grade children

Table 1. Standardized CFA Item Factor Loadings and Internal Reliability Estimates (McDonald's ω) for the Kids' Church Survey Scales

Survey items	Cross-validation sample					
	Validation sample (<i>n</i> = 505)	Combined (<i>n</i> = 400)	Girls only (<i>n</i> = 207)	Boys only (<i>n</i> = 180)	Grade 1–4 (<i>n</i> = 209)	Grade 58 (<i>n</i> = 191)
<u>Received Support</u>						
I tell people at church about what's going on in my life. (A)	.55	.70	.65	.77	.59	.78
I get to show people at church what I'm good at. (RW)	.44	.63	.66	.64	.62	.61
I get to tell people at church my ideas. (RW)	.55	.73	.79	.67	.70	.75
I talk to people at church about my problems. (G)	.71	.75	.74	.77	.72	.74
People at church help me with my problems. (G)	.68	.78	.80	.75	.79	.77
I tell someone from church about my feelings. (A)	.74	.66	.61	.71	.64	.69
Internal Reliability (McDonald's ω)	(.78)	(.86)	(.86)	(.86)	(.84)	(.87)
<u>Perceived Peer Support</u>						
The kids at church are friendly to me. (S1)	.66	.61	.66	.58	.60	.69
A kid from church cares about me a lot. (A)	.66	.78	.81	.75	.76	.80

Table 1. Continued

Survey items	Cross-validation sample					
	Validation sample (n = 505)	Combined (n = 400)	Girls only (n = 207)	Boys only (n = 180)	Grade 1-4 (n = 209)	Grade 58 (n = 191)
Kids at church say nice things about me. (RW)	.75	.79	.78	.82	.77	.80
Kids from church would help me if I had a problem. (G)	.71	.83	.85	.79	.85	.74
Internal Reliability (McDonald's ω)	(.79)	(.84)	(.86)	(.82)	(.84)	(.85)
Perceived Adult Support						
Adults at church care about me. (SI)	.70	.80	.71	.86	.81	.78
An adult from church would try to help if I were sad or upset. (G)	.82	.81	.87	.76	.77	.84
An adult from church makes me feel loved. (A)	.84	.89	.88	.73	.85	.95
Adults at church make me feel special. (RW)	.77	.89	.89	.87	.90	.91
Internal Reliability (McDonald's ω)	(.86)	(.91)	(.90)	(.92)	(.90)	(.92)
CFI	.97	.97	.96	.96	.97	.97
TLI	.97	.96	.96	.95	.97	.96
RMSEA [95% CI]	05 [.04, .06]	07 [.06, .08]	07 [.06, .09]	08 [.06, .10]	.06 [.04, .08]	.07 [.05, .09]

Note: A = attachment, RW = reassurance of worth, G = guidance, SI = social integration.

Table 2. Means and Standard Deviations for Kids' Church Survey (KCS) Scales (Standardized PCA Regression Scores) by Church Size in a Subsample of 4th and 5th Grade Children ($n = 137$)

KCS Scale	Small church			Large church			
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>d</i>
Received Support	0.73	1.17	25	-0.16	0.88	112	0.89
Perceived Peer Support	0.78	0.66	25	-0.17	0.98	112	0.96
Perceived Adult Support	0.54	0.74	25	-0.12	1.01	112	0.66

from two dissimilar churches in the validation sample. Twenty-five children in the smaller church attended the same small group (from six to eight children per group) with the same adult leader for two years. In contrast, 112 children in the larger church attended a different small group (12–24 children per group) with a different adult leader each week. We expected the children in the smaller church to score higher on all three KCS scales.

Standardized scores for each scale were created in SPSS using regression weights from a principal components analysis (PCA). Table 2 presents the means, standard deviations, and effect sizes (Cohen's d) for the three KCS scales. After reducing the threshold of significance to .016 to control for Type I error and adjusting for unequal variance in the perceived support comparisons, independent samples t -tests identified significant group differences in perceived peer support, $t(50.64) = 5.92$, $p < .001$; $d = .96$, perceived adult support, $t(46.52) = 3.77$, $p < .001$; $d = .66$, and received support, $t(135) = 4.27$, $p < .001$; $d = .89$, all in the hypothesized direction, thus supporting the sensitivity of the KCS scales.

Cross-Validation Analyses

We cross-validated the KCS in an independent sample using CFA, along with tests of the three scales' internal reliability, test-retest reliability, and incremental validity.

Participants and Procedures. Participants were an independent sample of 400 church-going children (52 percent female, 48 percent male) ages 6 through 14 ($M = 9.92$, $SD = 2.09$) in Grades 1 through 8 ($M = 4.53$, $SD = 2.15$) attending three different private Christian schools in Southern California. Of the 68 children for whom ethnicity data were available, 66 percent were non-Hispanic White, 19 percent were Hispanic or Latino, 9 percent were African-American, and 6 percent were Asian. Among the 128 children who identified their church, 47 different churches were represented, including evangelical Protestant, mainline Protestant, and Catholic. These schools were selected in order to cross-validate the KCS in a diverse sample that was representative of the broader Christian population, ensuring that the findings would not reflect the idiosyncrasies of a particular church community or theological tradition. Surveys were group-administered within classrooms during

school hours. Third graders and above completed the surveys independently, but the questions were read aloud to first and second graders.

Confirmatory Factor Analysis. We conducted a CFA using the same method and model as before. Fit indices and factor loadings are provided in Table 1. The model provided a very good fit to the data, CFI = .97, TLI = .96, RMSEA = .07, 95 percent CI [.06, .08]. Perceived church support was significantly indicated by perceived peer support ($\lambda = .91$) and perceived adult support ($\lambda = .82$). Perceived support and received support correlated at .68. All of the items had high significant loadings on their theorized factors, with loadings ranging from .61 to .89. An inspection of the modification indices revealed no substantial cross-loadings or correlated error terms, thus confirming the factor structure of the instrument in a heterogeneous sample.

Reliability Analyses. Results are provided in Table 1. Internal reliability coefficients were good (ω 's = .84–.91) in the combined cross-validation sample. We also estimated reliability coefficients separately for girls, boys, Grades 1–4, and Grades 5–8. Coefficients were good for all scales across subgroups (ω 's = .82–.92), although reliability coefficients tended to be slightly higher among older children.

To assess test-retest reliability, 74 children in the cross-validation sample completed the same survey again 2 weeks later. Test-retest stability was estimated by correlating factor scores at Time 1 and Time 2 within a structural equation modeling (SEM) framework, which means that the reliability coefficients were not attenuated by measurement error (Gignac, 2009). Test-retest reliability was .88 for the peer support scale, .95 for the adult support scale, and .88 for the received support scale. Additionally, uncorrected paired-samples *t*-tests conducted in SPSS revealed no significant differences between scores at Time 1 and Time 2 (all *p*'s > .05). These findings suggest that the KCS scales are stable over time.

Incremental Validity. Next, we sought to determine whether the KCS scales would predict theoretically-related outcomes (self-esteem, prosocial behavior, and spirituality) controlling for demographics, parent support, family religious practices, school support, and church participation. These additional measures were completed by a subsample of 50 children (40 percent boys, 60 percent girls) ages 8–14 ($M = 10.94$, $SD = 1.58$) and their parents. The private school from which these children were sampled requires parents to sign a statement of Christian faith and verify regular church attendance as conditions of enrollment. We selected this sample and these control variables in order to examine the extent to which church-based social support is distinct from more general facets of religiousness (religious affiliation, attendance, and education), as well as more commonly regarded sources of social support (home and school).

Control Variables. *Parent support* was measured using the six-item parent subscale of the self-report Social Support Scale for Children (Harter, 2012). *Family religious practices* was measured using a three-item parent-report measure adapted by Crosby and Smith (2015) from existing inventories of adult and family religious practices. *School support* was measured using the five-item peer support subscale and the four-item teacher support subscale of the self-report Psychological Sense of School Membership survey (Goodenow, 1993; Ye & Wallace, 2014). In the present sample, internal reliability was acceptable for parent support ($\alpha = .60$), family religious

practices ($\alpha = .74$), and the peer ($\alpha = .75$) and teacher ($\alpha = .64$) school support subscales. *Church participation* was assessed with two self-report items indicating duration ('How long have you been going to your church?') and frequency ('How often do you go to church?') of attendance.

Criterion Variables. *Self-esteem* was measured using a brief four-item self-report scale adapted from existing measures of children's global self-worth (Harter, 1985; Pope, McHale, & Craighead, 1988). Participants responded to items (e.g., 'I like the kind of person I am') on a three-point scale from 1 (*No Not True*) to 3 (*Yes True*). *Prosocial behavior* was assessed using the five-item self-report prosocial behavior subscale of the Strengths and Difficulties Questionnaire (Goodman, Meltzer, & Bailey, 1998). *Spirituality* was measured using a three-item parent-report scale adapted from the daily spiritual experiences scale of the Multidimensional Measurement of Religiousness/Spirituality survey (Fetzer Institute/National Institute on Aging Working Group, 1999). Parents responded to indicators of their children's spirituality (e.g., 'My child turns to God when facing problems and fears') on a scale of 1 (*Never*) to 5 (*Always*). In the present sample, internal reliability was acceptable for self-esteem ($\alpha = .89$), prosocial behavior ($\alpha = .64$), and spirituality ($\alpha = .82$). Standardized scores for each scale were created in SPSS using regression weights from a PCA.

Data Analysis. Incremental validity was tested using hierarchical regression analysis (HRA; Cohen & Cohen, 1983). In an HRA, effect size (Cohen's f^2) is defined as additional explained variance proportionate to unexplained variance (Aiken & West, 1991) and is interpreted as small (.02), medium (.15), or large (.35). Using SPSS, we conducted three HRAs to test whether the KCS scales would incrementally predict self-esteem, prosocial behavior, and spirituality. The assumptions of independence, linearity, homogeneity of variance, and normally distributed residuals were supported. One extreme residual ($z > 2.5$) was removed in two of the analyses, but this did not substantively affect the results. Results are provided in Table 3.

Controlling for gender, age, parent support, family religious practices, school support, and church attendance, perceived support from *adults* at church significantly predicted children's self-esteem ($\beta = .28, p < .05$). Controlling for the same variables, perceived support from *peers* at church significantly predicted prosocial behavior ($\beta = .38, p < .05$). Finally, controlling for the same variables, received church support significantly predicted children's spirituality ($\beta = .43, p < .01$). Together, the three KCS scales explained an additional 4 percent of the variation in children's self-esteem, corresponding to a medium effect size ($f^2 = .17$); however, the change in R^2 only approached significance, $\Delta F(3, 37) = 2.72, p = .06$. The combined scales explained an additional 13 percent of the variation in prosocial behavior, corresponding to a medium to large effect size ($f^2 = .24$). The change in R^2 was statistically significant, $\Delta F(3, 37) = 2.99, p < .05$. The three KCS scales explained an additional 11 percent of the variation in spirituality, corresponding to a medium to large effect size ($f^2 = .26$). The change in R^2 was statistically significant, $\Delta F(3, 37) = 3.24, p < .05$. Overall, these results supported the incremental validity of the KCS scales.

Table 3. Incremental Validity of the Kids' Church Survey (KCS) Scales (n = 50)

Criterion	Predictor	Step 1		Step 2		Step 3		Step 4		Step 5	
		β	β	β	β	β	β	β	β	β	β
Self-Esteem	Sex (female = 0, male = 1)	.28*	.12	.23*	.23*	.23*	.23*	.23*	.23*	.23*	.24**
	Age	-.49**	-.32*	-.27**	-.27**	-.27**	-.27**	-.27**	-.27**	-.27**	-.36**
	Parent Support		.48**	.17†	.17†	.17†	.17†	.17†	.17†	.17†	.06
	Family Religious Practices		.12	.05	.05	.05	.05	.05	.05	.05	.10
	Classmate Support			.26**	.26**	.26**	.26**	.26**	.26**	.26**	.22*
	Teacher Support			.44**	.44**	.44**	.44**	.44**	.44**	.44**	.31**
	Church Attendance (Duration)			.01	.01	.01	.01	.01	.01	.01	-.02
	Church Attendance (Frequency)			.06	.06	.06	.06	.06	.06	.06	-.03
	KCS—Perceived Peer Support										.08
	KCS—Perceived Adult Support										.28*
KCS—Received Support										-.04	
R^2		.28**	.49**	.75**	.75**	.75**	.75**	.75**	.75**	.75**	.80**
ΔR^2		.28**	.22**	.26**	.26**	.26**	.26**	.26**	.26**	.26**	.04†
Prosocial Behavior	Sex (female = 0, male = 1)	.18	.15	.16	.16	.16	.16	.16	.16	.16	.22†
	Age	-.26†	-.25†	-.19	-.19	-.19	-.19	-.19	-.19	-.19	-.34*
	Parent Support		.33*	.20	.20	.20	.20	.20	.20	.20	.02
	Family Religious Practices		-.04	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.06
	Classmate Support			.25	.25	.25	.25	.25	.25	.25	.27†
	Teacher Support			.14	.14	.14	.14	.14	.14	.14	.01
	Church Attendance (Duration)										.21
	Church Attendance (Frequency)										.14
KCS—Perceived Peer Support										.38*	

Table 3. Continued

Criterion	Predictor	Step 1	Step 2	Step 3	Step 4	Step 5
		β	β	β	β	β
	KCS—Perceived Adult Support					.08
	KCS—Received Support					.10
	R^2	.09	.20*	.29*	.35*	.48**
	ΔR^2	.09	.11 [†]	.09 [†]	.06	.13*
	Sex (female = 0, male = 1)	.08	.00	.04	-.02	.05
	Age	.06	.21	.24	.28 [†]	.27 [†]
	Parent Support		.08	-.05	-.03	-.16
	Family Religious Practices		.42**	.40**	.45**	.39**
	Classmate Support			.01	-.11	-.08
	Teacher Support			.25	.35 [†]	.33 [†]
	Church Attendance (Duration)				-.27 [†]	-.34*
	Church Attendance (Frequency)				-.14	-.33*
	KCS—Perceived Peer Support					-.23
	KCS—Perceived Adult Support					.27
	KCS—Received Support					.43**
	R^2	.01	.18 [†]	.22 [†]	.31*	.45*
	ΔR^2	.01	.17*	.04	.09 [†]	.14*

* $p < .05$; ** $p < .01$; [†] $p < .10$.

Measurement Invariance

Measurement invariance across gender and age groups was established using the procedure recommended by Milfont and Fischer (2010). For each comparison, we began by testing for configural invariance by running individual CFAs in each group (see Table 1) followed by a multi-group CFA. Next, we tested for metric invariance by constraining the factor loadings to be equal across groups and using the DIFFTEST option in *Mplus* to formally test for model fit deterioration. Finally, we tested for scalar (intercept) invariance by constraining thresholds to be equal across groups to see if these constraints resulted in a significant deterioration in model fit.

First, we compared boys and girls in the cross-validation sample. The entire instrument demonstrated configural, metric, and scalar invariance, indicating that both obtained ratings and latent means can be compared across genders (Milfont & Fischer, 2010). Next, we compared younger participants (Grades 1–4) to older participants (Grades 5–8). The entire instrument demonstrated configural and metric invariance, but not scalar invariance. Therefore, we ran the analysis individually by scale in order to identify the source of the invariance. The adult support scale and the received support scale demonstrated configural, metric, and scalar invariance across grades. However, the peer support scale failed to demonstrate metric invariance, indicating that the strengths of the relations between the scale items and their underlying construct differed by grade. Thus, researchers should exercise caution when using the perceived peer support scale with young and old children simultaneously.

Discussion

The goal of this study was to develop and provide initial validity evidence for the Kids' Church Survey (KCS), a measure of children's church-based social support. Beginning with Weiss' (1974) social provision framework, we generated items drawing from existing inventories and theory and pretested the items using cognitive interviews with children. Subsequent pilot testing suggested a three factor solution: received (emotional) support, perceived peer support, and perceived adult support. This was consistent with Dubow and Ullman (1989), in that children differentiated between sources of perceived support and functions of received support. Additional analyses of independent samples confirmed this solution. Reliability tests supported the internal consistency, and stability of all three scales. The scales demonstrated measurement invariance across genders and ages, with the exception of the perceived peer support scale, which was not invariant across ages. All three scales were sensitive enough to detect substantive between-church differences, consistent with education research which has found higher levels of connectedness in smaller schools (Leithwood & Jantzi, 2009) and schools which maintain intact classes and relationships over time (Bulau, 2007).

The KCS scales explained additional variation in criterion variables of interest above and beyond that which was explained by gender, age, parent support, family religious practices, classmate and teacher support, and church attendance. Although the present study was only intended to provide initial validity evidence for the KCS, substantive findings were consistent with theory and prior literature. Perceived adult support significantly predicted self-reported self-esteem. Although the

incremental change in explained variance only approached significance, this finding was consistent with social cognition theory (Lakey & Cohen, 2000), in that children's notion of 'self' reflected the way they believed they were viewed by others. Perceived peer support explained a significant amount of additional variance in self-reported prosocial behavior, consistent with the theory that emotional support promotes empathy toward others (Tai et al., 2011), as well as the notion that children embrace the behavioral standards of people with whom they share an attachment (Brissette et al., 2000). Finally, received support explained a significant amount of additional variance in parent-reported spirituality, consistent with Krause and Ellison's (2012) view that the quality of one's relationships specifically at church engenders a corresponding concept of God. Children who received emotional support from people at church were more likely to turn to God for comfort when facing problems.

It is important to note that church-based social support was empirically distinct from family religious practices and church attendance. Just because a child belongs to a religious family or attends church frequently (constructs commonly assessed by global measures of religiousness) does not mean that the child experiences supportive relationships at church. Because church-based social support may be a better predictor of positive developmental outcomes than religious affiliation, church attendance, or family religiosity (e.g., Decety et al., 2015), this support should be measured separately. It is also important to note that church-based social support is empirically distinct from the social support children experience at home and at school. Some researchers maintain that perceived social support measures do not provide valid information about a social context but are rather a projection of a child's personality or internal working model of relationships (Cohen, 2004). However, these results suggest that church-based social support is not only distinct from other sources of support, it is also developmentally relevant, even among children who already experience support from parents, peers, and teachers.

It is our hope that the KCS will be a useful tool for researchers, mental health workers, and clergy. First, rather than ignoring the religious context or relying on global measures of religiousness, we encourage researchers to investigate the influence of church-based social support when studying children from religious populations. Second, mental health workers serving church-going populations can use this new instrument to locate previously unidentified support sources so as to incorporate these individuals into the child's holistic treatment plan. Leveraging the church as a natural social network may be more effective than contrived 'support groups' because it offers the potential for ongoing support after the active intervention has ended (Cohen, 2004). This may be especially valuable in the case of at-risk populations, such as African-Americans, who are less likely to receive social support in other contexts, such as school (Ho, Gol-Guven, & Bagnato, 2012), but who are much more likely to attend religious services (Pew Research Religion & Public Life Project, 2009). Finally, clergy are invited to use the KCS to assess how effectively their children's programs provide support to the children in their care, make comparisons across programs, and evaluate their own intervention efforts.

Three key limitations should be noted. First, our received support scale is primarily limited to functions of emotional support to the exclusion of tangible support, informational support, and social integration support. Researchers interested in these other types of received support or their theorized correlates would have to introduce their own survey items. Second, all validity measures were assessed at a

single time point, making causal inferences more difficult. Future validity research should collect data longitudinally over an extended period of time. Third, although children from a variety of Christian traditions were sampled, most of the data were collected in a single geographic region. Future research should seek to a nationally representative sample for the purpose of producing norming data.

Despite these limitations, we believe that the Kids' Church Survey will prove to be a valuable resource for researchers and practitioners alike. Although much has been learned about the role social support plays in children's development, it is essential that we continually seek to understand its particular effects in this important but understudied developmental context.

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