# VALIDATION OF RELIGIOUS AND SPIRITUAL STRUGGLES SCALES FOR ADOLESCENTS

by

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Submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Clinical Psychology Program Department of Psychological Sciences

## CASE WESTERN RESERVE UNIVERSITY

August, 2017



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I am incredibly grateful to the numerous individuals who have helped make this study and my childhood dreams of becoming a clinical child psychologist possible.

## Dr. Julie Exline,

You are not simply my research advisor but an incredible source of wisdom, encouragement, and professional mentorship, a model I can only dream of emulating one day. I cannot thank you enough for investing in me and my work. Thank you.

## To my family,

Your sacrificial heart for others, your curiosity, and your determination to flourish and succeed have inspired my career dreams since I was in 8<sup>th</sup> grade. Thank you for believing in me and supporting me throughout this process.

To my fellow lab mates, postdocs, research assistants and graduate student colleagues, You were key to not only my graduate school survival, but you helped me thrive, learn, and grow more than you will ever know. Thank you so much for your support, knowledge, training, hard work, feedback, and camaraderie.

To all the people who gave me a chance, who mentored and believed in me, and who invested in me, thank you for helping me make this dream possible.



# TABLE OF CONTENTS

LIST OF TABLES vii
LIST OF FIGURES ix
LIST OF APPENDICESx
ACKNOWLEDGEMENT xii
Abstractxiii
Literature Review
R/S Links to Positive Well-Being
R/S as a Protective Factor
Adults' Well-Being and R/S Struggles
Adolescent Development and R/S7
R/S Struggles within Prior Youth Studies11
Pilot Retrospective Studies of Adolescent R/S Struggle
Hypotheses 19
Method
Participants
Procedures
Measures
Demographics
Religious/spiritual struggles: general25



New religious/spiritual struggle items specific to youth (RSS-A)
Religiosity
Anxiety
Depressive symptoms
Bullying
Anger
Daily stress
Self-esteem
Disordered eating and body image
Insomnia
Positive and negative affect
Attachment
esults
Participants
Hypothesis 1: Confirmatory Factor Analysis of the RSS
Hypothesis 2: Predictive Validity of the RSS
Hypothesis 3: Confirmatory Factor Analysis and Item Refinement of the New
Parents/Family and Peers R/S Struggle Subscales for Adolescents (RSS-A) 38



Hypothesis 4: Predictive Validity of the RSS Interpersonal and Brief RSS-A
Parents/Family and Peers Subscales and their Structure in Relation to the RSS
Hypothesis 5: Correlations between the RSS and the Brief RSS-A Subscales 42
Hypothesis 6: The Brief RSS-A's Correlations with Indicators of Distress,
Academics, and R/S
Discussion
Discriminant, Convergent, and Divergent Validity
Implications and Future Directions 46
Limitations
Conclusion
Tables
Figures71
Appendices76
References



# LIST OF TABLES

Table 1. Retrospective Pilot Study 3: Correlations Between RSS Struggles Types within
Adolescence and Childhood
Table 2. Retrospective Pilot Study 3: Correlations Between Childhood and Adolescent
RSS Struggles
Table 3. Retrospective Pilot Study 3: Paired Sample t Tests of RSS Struggles between
Childhood and Adolescence
Table 4. Retrospective Pilot Study 3: Exploratory Factor Analysis of the RSS-A
Parents/Family and Peers Subscales (Maximum Likelihood Extraction with Direct
Oblimin Rotation)
Table 5. Retrospective Pilot Study 3: Exploratory Factor Analysis of RSS-A
Parents/Family and Peer Subscales Without Items with a Loading Less than .500 56
Table 6. Descriptive Statistics for Each Variable    57
Table 7. Demographic Means and Frequencies by School and Total
Table 8. Hypothesis 2: RSS Pearson Correlations (r) with Mental and Physical Health,
R/S, and Academics
Table 9. Hypothesis 2: Simultaneous Regressions of the RSS subscales and Religiosity
Predicting Indicators of Distress (Poor Mental and Physical Health), Academics, and R/S
Table 10. Hypothesis 4: Simultaneous Regressions of RSS Interpersonal Subscale and the
RSS-A Peers and Parents/Family R/S Struggle Subscales Predicting Indicators of Distress
(Poor Mental and Physical Health), Academics, and R/S



Table 11. Hypothesis 5: RSS Correlations with New Brief RSS-A Parents/Family and	
Peers R/S Struggle Subscales	67
Table 12. Hypothesis 6: New RSS-A Parents/Family and Peers Subscales' Pearson	
Correlations with Mental and Physical Health, R/S, and Academics	58
Table 13. RSS and RSS-A Items and Corresponding Abbreviations within Figures	59



# LIST OF FIGURES

Figure 1. Hypothesis 1: Confirmatory Factor Analysis of the 6-Factor Religious/Spiritual
Struggle Scale
Figure 2. Hypothesis 3: New RSS-A Adolescent R/S Struggle Subscales-All Items 72
Figure 3. Hypothesis 3: Confirmatory Factor Analysis for Item Refinement of the New
RSS-A Subscales with Items Removed73
Figure 4. Hypothesis 4: 6-Factor Confirmatory Factory Analysis of the RSS with a
Higher-Order Interpersonal Struggle Scale Composed of the Brief RSS-A Subscales and
the RSS Interpersonal Subscale
Figure 5. Hypothesis 4: 8-Factor Model of the RSS and Brief RSS-A



# LIST OF APPENDICES

Appendix A: New Adolescent R/S Struggle Items Regarding Parents/Family and Peers 76
Appendix B. Parent Informed Consent Form
Appendix C. Adolescent Assent Form
Appendix D. Study Recruitment E-mail for Schools
Appendix E. Sample In-Depth Description of Proposed Study that was Emailed to
Schools
Appendix F. Sample Letter of Cooperation
Appendix G. Introductory E-mail Sent to Parents/Caregivers by the Schools
Appendix H. Email of Consent Form Link Sent to Parents by Schools
Appendix I. Reminder Email Sent to Parents from Schools
Appendix J. Script to Administer the Survey to Participants
Appendix K. Demographics Questions
Appendix L. Modified Religious and Spiritual Struggle Scale
Appendix M. New Adolescent R/S Struggle Items Regarding Parents/Family and Peers
Appendix N. Religious Commitment Inventory for Adolescents
Appendix O. Religious Comfort subscale of the Religious Comfort and Strain Scale 108
Appendix P. Patient Reported Outcomes Measurement Information System (PROMIS)
Pediatric Anxiety Short Form



Appendix Q. The Center for Epidemiological Studies Depression Scale-Revised 10-Item
Version for Adolescents
Appendix R. Adolescent Peer Relations Instrument (Parada, 2000) and Two
Cyberbullying Items
Appendix S. Patient Reported Outcomes Measurement Information System (PROMIS)
Pediatric Anger Scale
Appendix T. Brief Daily Hassles Scale for Adolescents 115
Appendix U. Rosenberg Self-Esteem Inventory 116
Appendix V. Eating Disorder Diagnostic Scale 117
Appendix W. Pittsburgh Insomnia Rating Scale 119
Appendix X. 10-item Positive and Negative Affect Scale for Children
Appendix Y. Parent Form Items and Experiences in Close Relationships-Relationship
Structures Questionnaire



## ACKNOWLEDGEMENT

I would like to gratefully acknowledge the support of the John Templeton Foundation (Grant # 36094) in funding this project.



## Validation of Religious and Spiritual Struggles Scales for Adolescents

Abstract

by

## STEFFANY J. HOMOLKA, M.A.

A considerable amount of psychological research has investigated the positive correlates and protective influences of religiosity and spirituality (r/s) among adolescents. R/S has been linked to better mental and physical health, greater health-promoting and less risky behaviors, and indicators of personal thriving such as positive identity development and personal meaning. However, research on potentially negative aspects of r/s among youth is limited. Negative r/s experiences, beliefs, and practices that can lead to or perpetuate distressing r/s feelings and thoughts are known as r/s struggles. While considerable r/s struggle research has been conducted among adults, direct research on this topic among adolescents is only beginning. Hence, the goals of this study were to evaluate the reliability and validity of the Religious and Spiritual Struggles scale (RSS) with adolescents, to develop additional subscales of struggles more specific to adolescents (RSS-A), and to investigate the mental health correlates of adolescents' r/s struggles. A sample of high school students (N = 319; 78% female, <u>Mage</u> = 15.79), ages 14 to 17, from three schools participated in an online or paper survey. The survey asked participants to indicate the extent to which they experienced various r/s struggles in the past few months as described by the RSS's 26 items. RSS struggle types include divine, demonic, interpersonal, ultimate meaning, moral, and doubt. The survey also contained



21 new items related to peers and parents/family struggles during adolescence (RSS-A subscales) and questions regarding mental and physical health, academics, and overall well-being. Confirmatory factor analysis (CFA) and CFA for item refinement were conducted to specify latent variables and model fit. Results demonstrated that the RSS for adolescents maintained the same structure as that of adults. The RSS-A fit a two-factor parents/family and peer model and functioned as additional RSS struggle subscales. The RSS-A predicted unique variance in many of the distress-related measures above and beyond the RSS interpersonal scale. Significant correlations with indicators of poor mental and physical health, lower religiosity, and insecure parental attachment were found for all struggle subscales. Overall, this study provided preliminary evidence for the validity of the RSS and newly developed RSS-A subscales.



Many studies have demonstrated that religion and spirituality (r/s) are important and common aspects of youths' well-being and general development. A considerable amount of psychological research has investigated the positive correlates and protective influences of religiosity and spirituality among adolescents (for reviews, see Cheung & Yeung, 2011; Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; Donahue & Benson, 1995; Regnerus, 2003; Rew & Wong, 2006; Wong, Rew, & Slaikeu, 2006; Yonker, Schnabelrauch, & DeHaan, 2012), indicating that religion and spirituality play an important role in adolescent well-being. Researchers have demonstrated that r/s practices, beliefs, and participation often serve as protective factors for many youth, guarding them against serious mental and physical health problems (e.g., Jacobs, Miller, Wickramaratne, Gameroff, & Weissman, 2012; Miller, Warner, Wickramaratne, & Weissman, 1997; Rasic, Asbridge, Kisely, & Langille, 2013) and risky behaviors (e.g., Herrenkohl, Tajima, Whitney, & Huang, 2005; Laird, Marks, & Marrero, 2011; Pearce, Jones, Schwab-Stone, & Ruchkin, 2003; Resnick, Ireland, & Borowsky, 2004; Vesely et al., 2004) while promoting resiliency (e.g., McKnight & Loper, 2002), academic success (e.g., Butler-Barnes, Chavous, & Zimmerman, 2011; Regnerus & Elder, 2003), physical and mental health (e.g., Chiswick & Mirtcheva, 2013), and prosocial behaviors and values (e.g., Krauss et al., 2014; Schnitker, Felke, Barrett, & Emmons, 2014).

In contrast to this literature showing positive effects of r/s among youth, research on the potentially distressing aspects of r/s among youth is limited. R/S experiences, beliefs, and practices that can lead to or perpetuate distressing r/s feelings and thoughts are known as r/s struggles (Exline, 2013). While considerable r/s struggle research has been conducted among adults, direct research on this topic among adolescents is only



beginning. Hence, the goals of this study were to evaluate the reliability and validity of the Religious and Spiritual Struggles scale (RSS; Exline, Pargament, Grubbs, & Yali, 2014) with adolescents, develop additional valid subscales of struggles more specific to adolescents, and investigate the mental health correlates of adolescents' r/s struggles.

This next section examines the field's current knowledge on adolescent r/s, namely that it often serves as a positive force and developmental ingredient in adolescents' lives. It will also demonstrate that while much is known about the positive influence of r/s on adolescents' lives, little is known about adolescents' r/s struggles, much less how to assess them.



## **Literature Review**

### **R/S Links to Positive Well-Being**

Most adolescent r/s studies have focused on how r/s can promote personal success and well-being or how it may serve as a protective factor against physical and mental health concerns and risky behaviors. Many of these studies focused on positive correlates of personal, peer, and familial r/s. In fact, a recent meta-analysis (Cheung & Yeung, 2011) concluded that youth r/s involvement is associated with constructive behavior even more than it is linked to an absence of destructive behavior. For instance, numerous studies have linked r/s to greater adolescent general well-being (Barton, Snider, Vazsonyi, & Cox, 2012) and life satisfaction (Kelley & Miller, 2007; Kim, Miles-Mason, Kim, & Esquivel, 2013; Marques, Lopez, & Mitchell, 2013; Mosher & Handal, 1997; Shannon, Oakes, Scheers, Richardson, & Stills, 2013; Terreri & Glenwick, 2013; Van Dyke, Glenwick, Cecero, & Kim, 2009). Moreover, several studies have demonstrated that r/s supports adolescents' academic motivation and achievement (Butler-Barnes et al., 2011; Erickson & Phillips, 2012; Kang & Romo, 2011; Milot & Ludden, 2009; Regnerus & Elder, 2003; Wen, 2013), especially for underprivileged and racial/ethnic minority youth. R/S among adolescents has also been linked to greater self-esteem (Latzer et al., 2014; Spencer, Fegley, & Harpalani, 2003; Sim & Yow, 2011) higher reported personal strengths and virtues (e.g., kindness, equity, leadership, and bravery; Ahmed, 2009; Schnitker et al., 2014), more hope (Ciarrochi & Heaven, 2012), more prosocial behaviors (French et al., 2013; French, Eisenberg, Vaughan, Purwono, & Suryanti, 2008; Huculak & McLennan, 2010; Krauss et al., 2014; Sallquist, Eisenberg, French, Purwono, & Suryanti, 2010; Seol & Lee, 2012) and several indicators of thriving (e.g., future



orientation, gender equality views, and personal values; Dowling, Gestsdóttir, Anderson, von Eye, & Lerner, 2004). Furthermore, youth r/s appears to promote positive parent and family functioning (e.g., Regnerus & Burdette, 2006; Sabatier, Mayer, Friedlmeier, Lubiewska, & Trommsdorff, 2011).

Studies have also demonstrated positive links between adolescent and parental r/s and the overall physical health of adolescents (e.g., Chiswick & Mirtcheva, 2013; Cotton et al. , 2006; Wen, 2013). R/S is associated with greater health-promoting behaviors and less risky-health behaviors (e.g., Pitel et al., 2012; Regnerus, 2003; Rew, Arheart, Thompson, & Johnson, 2013; Rew & Wong, 2006), including more physical activity and healthier eating (e.g., Pfeiffer et al., 2011; Wallace & Forman, 1998), as well as slower decline in the physical health of ill youth (Reynolds et al., 2014).

## **R/S as a Protective Factor**

Clearly r/s is linked to positive outcomes among youth. However, r/s has also been found within many studies to buffer against negative indicators of externalizing and internalizing problems, risky behaviors, and negative life experiences. For example, researchers have discovered that r/s may buffer the effects that trauma, violence, and high level stress may have on adolescents (e.g., Ahmed, Fowler, & Toro, 2011; Butler-Barnes et al., 2011; Laufer & Solomon, 2011; Laufer, Solomon, & Levine, 2010; Pearce et al., 2003; Walker, Reid, O'Neill, & Brown, 2009; Zehnder, Prchal, Vollrath, & Landolt, 2006). Moreover, r/s helps protect adolescents from developing numerous externalizing problems (e.g., Kim-Spoon, Longo, & McCullough, 2012b), including antisocial behavior (e.g., Baier, 2014; Resnick et al., 2004; Laird et al., 2011; Li, 2013; Molock & Barksdale, 2013; Salas-Wright, Olate, & Vaughn, 2013; Salas-Wright, Vaughn, &



Maynard, 2014) and substance use (e.g., Ford & Hill, 2012; Kim-spoon, Farley, Holmes, & Longo, 2014; Mason, Schmidt, & Mennis, 2012; Viner et al., 2006; Wray-Lake et al., 2012). Several studies (e.g., Burdette & Hill, 2009; Miller & Gur, 2002; Zimmer-Gembeck & Helfand, 2008) also suggest that youth r/s variables can serve as protective factors against a variety of coital and non-coital sexual behaviors and practices, including delayed and less frequent sexual activity (Holder et al., 2000; Manlove, Logan, Moore, & Ikramullah, 2008), lower likelihood of engaging in risky sexual behaviors (e.g., Grossman, Tracy, & Noonan, 2013), and a lower probability of teen pregnancy (Ogland, Bartkowski, Sunil, & Xu, 2010). Additionally, researchers have found negative correlations between r/s and adolescents' suicidal behaviors (Nkansah-Amankra, 2013) and fatalistic atittudes (Jamieson & Romer, 2008).

R/S has been linked to fewer internalizing symptoms among adolescents as well, including depression (e.g., Carpenter, Laney, & Mezulis, 2012; Goeke-Morey, Taylor, Merrilees, Shirlow, & Cummings, 2014; Jacobs, Miller, Wickramaratne, Gameroff, & Weissman, 2012; Kim-Spoon, Longo, & McCullough, 2012a; Pössel et al., 2011) and anxiety (e.g., Davis, Kerr, & Kurpius, 2003; Jacobs et al., 2012). Finally, one study (Carter, Flanagan, & Caballero; 2013) also identified a negative correlation between r/s attendance and bullying victimization.

Altogether, research has well established the fact that r/s not only helps protect adolescents from a wide range of negative variables but also helps promote adolescent well-being. Unfortunately, while much is known about the important positive aspects of r/s, little is known about youths' distressing r/s struggles (e.g., anger toward God, questioning their ultimate meaning, and experiencing r/s conflict with peers or parents)



and the role that these struggles might play in adolescent well-being. For instance, the field's knowledge of what r/s struggle experiences are like for adolescents, the form such struggles take, or how struggles affect youths' daily functioning and long-term development is severely limited. In contrast to the above research, r/s struggles raise the possibility that r/s may have some negative implications for youth. However, without a valid and reliable means to assess adolescent r/s struggles, these implications remain largely unknown—a problem that this study aimed to address. The current state of youth struggle measures and research is unfortunate because adult research indicates that r/s struggles are a common experience for many individuals and carry important implications for well-being, as reviewed next.

### Adults' Well-Being and R/S Struggles

Studies (for a review, see Exline, 2013) have demonstrated that most adults experience at least some r/s struggles (e.g., doubt about beliefs, questioning life's meaning, and anger at God), typically at low levels of intensity. Such struggles have been associated with insecure attachment (Belavich & Pargament, 2002; Hall & Edwards, 2002), indicators of poor mental and physical health, including anxiety and depression (for a review, see Ano & Vasconcelles, 2005), general distress (e.g., Ellison & Lee, 2010), higher mortality rates among the elderly (Pargament, Koenig, Tarakeshwar, & Hahn, 2001), and a variety of physical illness conditions (e.g., Ai, Wink, & Shearer, 2011; Fitchett et al., 2004; Park, Wortmann, & Edmondson, 2011; Sherman, Simonton, Latif, Spohn, & Tricot, 2005). Other adult struggle correlates include eating problems and body-image concerns (Exline, Homolka, & Harriott, 2016), perceived addiction to internet pornography (Grubbs, Exline, Pargament, Volk, & Lindberg, 2015), and



insomnia (Homolka & Exline, 2015b). Adult studies also suggest that struggles may provide opportunities for personal growth and, if responded to in a supportive manner, encourage individuals to maintain or deepen their r/s beliefs (e.g., Ai, Tice, Lemieux, & Huang, 2011).

These findings raise the question of whether r/s struggles might occur in a similar fashion among adolescents and have serious consequences for their health and wellbeing. It should be noted, though, that since most adolescents are still trying to ascertain what their r/s beliefs might be (separate from their parents' and families' r/s identities), adolescents' r/s struggles might take on a slightly different tone within this developmental context in comparison to adults.

#### Adolescent Development and R/S

Youth studies suggest that r/s factors not only play a role in adolescent general development but they also serve as their own developmental domains. Researchers (e.g., King, Carr, & Boitor, 2011) conceptualize positive youth development as the absence of mental health problems, conduct problems, and risky behaviors in addition to the presence or growth of adolescent health, life satisfaction, academic achievement, identity, and purpose or meaning. Research also indicates that r/s development encompasses adolescents' search for meaning, significance, and the divine within themselves and others (for a review, see King & Boyatzis, 2015). Given these definitions, much of the aforementioned research is evidence that r/s development is involved in adolescent development and vice versa. However, research regarding r/s struggles within adolescent or r/s development is severely lacking.



In addition to correlates of well-being, researchers have identified several r/s correlates of adolescent ethnic identity (Chae, Kelly, Brown, & Bolden, 2004; Dubow, Pargament, Boxer, & Tarakeshwar, 2000; Gungor, Bornstein, & Phalet, 2012) LGB identity (Page, Lindahl, & Malik, 2013), overall (ego) identity (Hunsberger, Pratt, & Pancer, 2001, 2002; Puffer et al., 2008), personality (Huuskes, Ciarrochi, & Heaven, 2013; Regnerus & Uecker, 2006), interpersonal identity (Larson, Hansen, & Moneta, 2006), national identity (Tseung-Wong & Verkuyten, 2012), and sense of self (Spencer et al., 2003). These studies demonstrate how closely intertwined personal and r/s development can be. For instance, stronger ethnic identity has been linked to endorsement of greater r/s coping, r/s practices, r/s salience (Dubow et al., 2000) and overall youth r/s identity (Gungor et al., 2012). Furthermore, youth who view their lesbian, gay, or bisexual (LGB) identity development as more difficult or whose LGB identity is more visible to friends and family were more likely to experience greater r/s conflict over LGB identity and less r/s comfort (Page et al., 2013). This finding seems especially important as it reveals an intrapersonal r/s struggle affecting one's personal identity, although the authors did not conceptualize it this way.

Furthermore, it would appear that adolescent general development also predicts adolescent r/s development. For instance, studies investigating overall (ego) identity's ability to predict r/s factors have found differences in current r/s doubting based on identity status two years prior (Hunsberger et al., 2001; Puffer et al., 2008). In one study (Hunsberger et al., 2001), those adolescents classified as experiencing identity moratorium (i.e., limited to no identity commitment but exploring options, possibly in identity crisis) were more likely to report more r/s doubts, no r/s commitment, and



tendencies to avoid consulting sources that might confirm their beliefs, whereas identity achievement was associated both with greater r/s doubts, r/s commitment, and consultation with both belief-confirming and belief-threatening sources. Those in identity foreclosure (i.e., commitment to an identity before exploration of alternatives) seemed to experience less r/s doubting, were likely to have a r/s commitment, and were more likely to seek out belief-confirming sources and avoid belief-threatening sources. Meanwhile, those with a diffuse identity (i.e., no commitment or exploration of their identity) are more likely to report a lack of r/s commitment, more r/s doubting, and avoidance of all belief-confirming and belief-threatening sources. These studies are another important source going forward, as they also highlight a r/s struggle: r/s doubting. Like the previous studies, though, the researchers do not refer to such doubting in terms of distressing r/s struggles.

To expand even further, parental r/s also plays a role in youth general and r/s development. One study (Volling, Mahoney, & Rauer, 2009), for example, demonstrated that parents who engaged in positive socialization were more likely to report that their children experienced affective discomfort for wrongdoing (e.g., guilt) and active moral conduct (e.g., confession, reparation), indicative of moral development, but only if both parents believed in the r/s sacredness of parenting. Here again is an example of a r/s struggle, moral struggle (though not conceptualized by the authors as such), playing a role in youth development.

These studies clearly demonstrate that adolescents are experiencing significant personal and r/s growth and that their general and r/s identities are closely interwoven. However, with few exceptions (e.g., r/s doubts, moral struggle, r/s discomfort), the



current research does not clearly delineate the role that r/s struggles may play in one's general and r/s development. This is curious for two reasons.

First, it would seem that the r/s developmental domain (characterized by youth developing and determining their own personal r/s identity, beliefs, and voluntary practices) would include both positive and negative r/s experiences. Researchers have proposed several theories to explain the process of adolescent r/s development (for a review, see King & Roeser, 2009). Many of these theories include adolescents' search for life answers and explanations in the face of confusing, anxiety-provoking, and contradictory information. Some of these theories also elaborate on the form and role that adolescents' interpersonal interactions may play in their r/s identity development. In combination, these processes may be best understood in the context of r/s struggles, especially those struggles which emphasize adolescent r/s doubts, r/s meaning, and interpersonal r/s conflicts. As King and Boyatzis (2015) acknowledge, though, little is known about the role that challenging aspects of r/s, much less r/s struggles, may play in adolescent development from a research perspective. They acknowledge that r/s experiences may have a negative impact on r/s development. However, most of researchers' discussions remains on the macro-level (e.g., cults, Nazi Germany), overlooking adolescents' individual experiences of distressing r/s thoughts, feelings, and interactions (for examples of such discussions see King & Roeser, 2009; King et al., 2011; King & Boyatzis, 2015).

It is not being denied that negative r/s environments may prompt r/s struggles. However, youth r/s struggles are personally distressing experiences for an individual which may or may not be a result of a positive, neutral, or negative r/s environment. For



instance, researchers (Kim-Spoon et al., 2012a; Longo & Kim-Spoon, 2014) have begun to examine what occurs when youths' r/s identification is incongruent with their parents' r/s. These studies indicate that such youth are at risk for developing significant externalizing and internalizing problems. However, research has not examined what this experience of parent-child r/s incongruity is like for adolescents. It is unclear if such incongruity is distressing, whether it leads to struggle experiences, or whether it is just simply a neutral life event in which the adolescent is navigating their personal r/s identity. Perhaps the relationship between this incongruence and internalizing and externalizing problems is a product of those youth or parents who experience the incongruence as a r/s struggle. However, not only could other youth and parents not experience it as a struggle, but researchers' current ability to discern this is limited without a valid measure of adolescent r/s struggles.

A second issue that makes the lack of r/s struggle and youth development research curious is that r/s participation tends to decrease in adolescence (Good, Willoughby, & Busseri, 2011) and this period of life is often characterized by r/s questioning and doubting (Hunsberger et al., 2002). This suggests that r/s struggles may be a common, albeit poorly understood, developmental experience for many adolescents. While much is known about the important positive aspects of r/s and how they are involved in youth development, the aforementioned studies demonstrate that little is known about the r/s struggles that youth may experience and the role that these struggles might play in youth well-being and development.

**R/S Struggles within Prior Youth Studies** 



A few prior studies have directly investigated struggles among youth.

Unfortunately, these studies are limited by struggle scope, population, and method. For example, Dubow and colleagues (2000) investigated the relationship between the ethnic identity of Jewish youth and their r/s coping and ethnic-related stressors. They created a spiritual struggles subscale as part of their new r/s coping scale, the Brief Jewish Coping Strategies Scale-Children (JCOPE-Children). Their results revealed a moderate to strong positive correlation between youths' ethnic identity (i.e., affirmation and belonging, ethnic identity achievement, and ethnic behaviors and practices subscales combined) and seeking God's direction and getting cultural support to cope with problems. Ethnic identity also had moderate to strong positive correlations with various r/s practices and strong positive correlations with r/s salience. The spiritual struggle subscale, though, exhibited small to no positive correlations with ethnic identity or its components. The implications of this study are limited, though. The JCOPE-Children only assessed divine struggles (e.g., "I get mad at God,") and was developed exclusively with Jewish American youth. The authors also question whether the Spiritual Struggles subscale is best conceptualized as a r/s coping method.

A second study (Cotton et al., 2013) used the negative r/s coping subscale of the often-used adult r/s coping measure, the Brief RCOPE (Pargament, Smith, Koenig, & Perez, 1998), to demonstrate that greater r/s struggles were linked to more depressive symptoms, greater anxiety symptoms, and poorer health-related quality of life. The Brief RCOPE uses four items related to divine struggles (e.g., "Wondered whether God has abandoned me"), one demonic struggle item ("Decided the devil made this happen"), and an interpersonal struggle item ("Wondered whether my church had abandoned me"). The



RCOPE has been used to assess r/s struggle (for a review, see Exline, 2013), but researchers (Exline, Pargament, et al., 2014) have recently highlighted the need for a scale that directly assesses one's subjective r/s struggle experience rather than one's thoughts or behaviors used in an attempt to cope with his or her distress in response to a particular negative event. The Brief RCOPE is also limited in its ability to assess different forms of struggle because it is more of a general measure of struggle with most primarily focusing on divine struggle. Furthermore, the Brief RCOPE was developed for adults, and thus its items may not represent youths' r/s experiences well. In fact, Harris and colleagues (2008) found that of all the subscales incorporated into the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS), the negative Brief RCOPE subscale had one of the lowest internal consistencies ( $\alpha = .54$ ) and the worst test-retest reliability (.29 to .60 by item; .58 overall) for adolescents.

In addition to studies that have attempted to assess youth r/s struggle, a recent review of youth r/s studies (Homolka & Exline, 2014) revealed that several r/s measures used with youth contain items that tap into struggle-related concepts. For example, the BMMRS (Fetzer/NIA, 1999) and the Children's Religious Coping Scale (Ezop, 2002 as in Benore, Pargament, & Pendleton, 2008) contain struggle items that researchers have been using in a number of studies. Findings from these studies (e.g., Benore et al., 2008; Desrosiers & Miller, 2007; Dew, Daniel, Goldston, & Koenig, 2008) suggest that greater struggle is associated with poor mental and physical health. Furthermore, qualitative research (for a review, see Homolka & Exline, 2014), some of which is retrospective, suggests not only that researchers have recorded adolescents' descriptions of r/s struggles (though not referred to as such by the authors), but that adolescent r/s struggle may come



in slightly different forms than are currently studied among adults. These forms include struggles related to parents and family (e.g., confusion over parents' conflicting r/s beliefs; Coles, 1990), peers (e.g., fears of losing r/s peers' friendship; Cornbleth, 2003), and identity development (e.g., deciding one's religious beliefs within an unaccepting r/s context; Cornbleth, 2003; Dahl & Galliher, 2012).

Overall, the above research has revealed that the field does not have a valid r/s struggle measure for youth. Furthermore, prior research showing the potential importance of r/s variables (including struggles) among both adults and youth suggest that there may be a need for a valid r/s struggle measure for youth. Such a measure should (a) assess several forms of r/s struggle, (b) be based on data provided by adolescents, and (c) be an appropriate measure for a diverse range of adolescents. This study was designed to examine this possibility by providing validation data for the Religious and Spiritual Struggles Scale (RSS; Exline, Pargament, et al., 2014) among high school students. The study also assessed several forms of r/s struggle that may be more unique to youth, such as those related to parents, peers, and identity development.

### **Pilot Retrospective Studies of Adolescent R/S Struggle**

In order to begin addressing this problem, a series of three retrospective pilot survey studies (Homolka, Exline, & Pargament, 2015) and a review of both qualitative and quantitative adolescent r/s literature (Homolka & Exline, 2014) were conducted with the goal of developing adolescent r/s struggle subscales. The first two surveys (Homolka et al., 2015) asked undergraduates (study 1: n = 140;  $M_{age} = 19.2$ , SD = 1.2; 54% female, 34% male; study 2: n = 169;  $M_{age} = 19.1$ , SD = 1.5; 62% female, 37% male) from a



public university, a private-religious university, and a private-non-religious university (all in the US) to answer the following three questions:

"Please describe a religious or spiritual struggle experience that you had as an adolescent (i.e., between 13 and 17 years old)."

"Please describe a religious or spiritual struggle experience that you had as a child (i.e., 12 years old or younger)."

"Please briefly list any religious or spiritual struggles you experienced as a child and/or adolescent that you believe are unique to the child/adolescent years; in other words, they are different in some way from the types of religious/spiritual struggle experiences that adults have. Please list your approximate age when these struggles occurred and describe how they are unique from adult struggle experiences."

In order to create struggle subscales particular to youth, participants' responses to the above questions were combined with struggles descriptions found within the literature (Homolka & Exline, 2014) and then examined for commonalities. Struggles that were already represented by items and constructs within the RSS and other adult struggles were removed. A review of the remaining responses revealed that most of the remaining items were related to parents/family (e.g., "I didn't want to be Catholic because it felt like my parents were forcing me,") and peers (e.g., "I think as an adolescent there is a lot of pressure to fit in and identifying yourself with a religion isn't thought of as 'cool' since it is different. Therefore, it can be hard to focus on God and not what other people think of



you"). Many of these same items also appeared to be associated with identity development within the context of parents/family (e.g., "I had to struggle with my parents about what I should believe") and peers (e.g., "When I was an adolescent I first came to terms with the fact that I was an atheist. My friends didn't believe me and thought I was just saying it for attention, or to be cool but I wasn't."). A few participants also described r/s struggles centered on the theme of sexual orientation, sexual behavior, and overall sexuality (e.g., "Struggle with porn made it hard to have a solid relationship with God," "When I came out as a lesbian in an all-girls catholic high school, I was alienated from some of my friends due to their parents' beliefs," "Whether or not to lose my virginity to my boyfriend my senior year of high school. I felt like even dating him was going against everything that the church had taught me in the years leading up to our relationship," and "Coming to terms with my sexual orientation"), as well as attending a religious school (e.g., "I went to a small catholic high school and the Catholic teachings were so drilled into my brain that I automatically decided to rebel against them. I felt that these teachings had no evidence to support them. The kids who went along with the theological teachings were usually favored by teachers and other authority figures in the school. Seeing the favoritism just made my agnostic feelings stronger," and "My Catholic school forced all students to attend mass twice weekly, even though my best friend and I were not Catholic and did not want to go").

Based on the parents/family and peer themes, 20 new struggle items reflecting struggles that may be more common to youth were created (RSS-A items; see Appendix A). All such items not only fall into the parents/family (e.g., "Had conflicts with my parents/family over my religious/spiritual behaviors or beliefs,") and peers categories



(e.g., "Felt bullied by friends/peers because of differences between our religious beliefs,"), but many contain implications for identity development (e.g., "Felt frustrated because my parents/family would not allow me to question or explore my religious/spiritual beliefs." It was anticipated that recruiting schools to participate in the present study would be difficult, given this study's focus on r/s and r/s struggles. R/S struggle items regarding sexuality and attending a religious school might be considered especially taboo topics by school administrators, which could further deter schools from participating. Thus, r/s struggles regarding sexuality and r/s struggles arising from attending a religious school were not included in this study; however, these struggles are clearly relevant to many youth and should be studied in the future.

The new RSS-A Parents/Family and Peer items, along with 15 of the RSS items covering all six original constructs, were then administered to undergraduates at the same three universities ( $N = 609 M_{age} = 18.9$ , SD = 1.3; 59% female, 40% male) in the third survey (Homolka & Exline, 2015c). Using a 5-point scale ranging from "Not at all" to "A great deal", the survey asked participants to endorse the degree to which they had experienced the RSS struggles (both as children and as adolescents) and the new struggle items (as adolescents). Analysis of the results revealed that the brief RSS scales correlated with one another within each age group (see Table 1) and across age groups (see Table 2) as expected (Homolka & Exline, 2015a). Paired sample *t* tests of the RSS struggles between childhood and adolescence also found that participants reported each struggle type as significantly higher in adolescence than in childhood (see Table 3; Homolka, Exline, & Pargament, 2015; Homolka & Exline, 2015c, 2015d).



Exploratory factor analysis using maximum likelihood extraction with direct oblimin rotation was conducted on the new adolescent struggle items. This produced two factors with only a few low loadings and high crossloadings (see Table 4). Removal of all items with a factor loading less than .500 produced a clearly delineated two-factor RSS-A Parents/Family and Peers model (see Table 5). These preliminary findings indicated that the remaining items may provide a good starting point for a scale to assess adolescent r/s struggles.

Given these findings, it is reasonable to suggest that older adolescents will endorse these new items representing adolescent struggles much like the young adults in these pilot studies reported retrospectively. The next step in this process was to further validate the new adolescent r/s struggle items as well as the RSS with adolescents. If the RSS and the new adolescent struggle items performed well among adolescents, they could help to provide the field with a much-needed assessment tool: scales that (a) measure a variety of different r/s struggles, (b) contain struggle items that may be more particular or salient to youth, and (c) are developed and validated based on qualitative and quantitative data from youth.



### Hypotheses

The first goal of this study was to evaluate the validity and reliability of the RSS as a r/s struggle assessment tool for adolescents. The second goal was to evaluate whether adolescents experience r/s struggles that arise from their general and religious identity development, specifically within the context of parents/family and peers. This parent/family and peer context would make such struggles more particular to youth. The following hypotheses were predicted for this study:

- First, given the above research suggesting that adolescents experience similar struggles as adults, as well as this study's goal of evaluating the reliability and validity of the RSS for adolescents, the first hypothesis was that the overall factor structure of the RSS among adolescents (ages 14 to 17) would be similar to the RSS six-factor structure found with adults.
- 2. The second hypothesis is that the RSS and its subscales would correlate positively with and predict indicators of psychological distress and poor health amongst adolescents. The RSS and its subscales would also negatively correlate with indicators of well-being (e.g., academic grades and satisfaction, r/s commitment, religious comfort, self-esteem, and positive mood). These correlations should be relatively similar to those found among young adults (e.g., Exline, Pargament, et al., 2014).
- 3. It was further hypothesized that the newly developed struggle items would fit a twofactor parents/family and peers (RSS-A) model, representing distinct forms of r/s struggle that adolescents experience. Based on preliminary research, it was expected that some items would represent the peer and parent/family struggle constructs better



than others. Given this and the need for concise scales similar to the RSS, the new scales would be refined based on loadings and theoretical reasoning.

- 4. As a result of developmental and social (i.e., parents/family and friends) contexts that are different from the RSS, the parents/family and peers items were expected to function as supplementary subscales to the RSS Interpersonal subscale. These new subscales should predict additional unique variance in the distress-related measures above and beyond the Interpersonal subscale of the RSS.
- 5. Once the new parents/family and peers scales' items were trimmed down to shorter scales, the following correlations between these new scales and the RSS scales were hypothesized:
  - 5.1. High positive correlations were expected with the RSS Interpersonal struggle subscale.
  - 5.2. The RSS Moral, Ultimate Meaning, Doubt, and Divine subscales include language that may be relevant to adolescents trying to decide upon their general and r/s identity (e.g., "Questioned God's love for me", "Worried that my actions were morally or spiritually wrong," "Had concerns about whether there is any ultimate purpose to life or existence," and "Struggled to figure out what I really believe about religion/spirituality"). Given the developmental context of the new parents/family and peers items, the new scales were expected to have moderate to high positive correlations with these RSS subscales.
  - 5.3. Based on previous findings with young adults (Exline, Pargament, et al., 2014), small to no correlations with the RSS Demonic struggle subscale were expected.



- 6. Consistent with young adult struggle findings, the important role that family/parents and peers play in adolescents' lives, and the aforementioned findings demonstrating that positive r/s is associated with greater well-being, the following correlations were expected between the new family/parent and peer subscales and measures of academic achievement, r/s, and mental and physical health.
  - 6.1. Small negative correlations were expected between student participants' grades and their satisfaction with their grades and school.
  - 6.2. Small to moderate negative correlations would be found between the new struggle subscales and measures of r/s commitment and religious comfort.
  - 6.3. Small to moderate negative correlations would exist between the new struggle subscales and both self-esteem and positive mood.
  - 6.4. Moderate positive correlations would exist between the new struggle subscales and indicators of distress involving interpersonal interactions, including depression, state anxiety, state anger, daily hassles, bullying/victimization, daily hassles with peers and family, negative mood, and insecure attachment (or low scores for secure attachment).
  - 6.5. The new struggle subscales would also be associated with small to moderate correlations with poor physical health (i.e., insomnia, eating disorder concerns, and general health).



### Method

## **Participants**

Approximately 70 local public and private high schools, school districts, and youth groups were contacted in order to recruit adolescent participants, ages 14 to 17 years old. The following schools submitted letters of cooperation and participated in the study: a Catholic, preparatory, all-girls school (school 1), a Catholic, preparatory, co-educational school (school 2), and a private non-sectarian, preparatory, co-educational school (school 3). It should be noted that two other religious schools initially agreed to participate in the study. However, these schools voluntarily dropped out of the study, citing concerns that the survey would cause students to experience r/s struggles or give students the impression that religion was "bad." School 1 chose to collect consent (see Appendix B) and assents (see Appendix C) and administer the survey completely online. School 3 chose to collect parental consent online and use hardcopies for student assent and the survey. School 2 collected parent consent online and offered both online and hardcopy versions of the survey to participants.

Using the statistical program G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang & Buchner, 2007), post hoc analyses revealed that the sample size met sufficient power (power  $\ge$  .80; Cohen, 1992) to detect relatively small effect sizes in both hypothesized correlations (r = .14; power = .81) and regression analyses ( $f^2 = .05$ ) with up to 6 predictor variables (power = .86; i.e., RSS subscales).

### Procedures

Each school was contacted via phone and email (see Appendix D for email) and asked if they would consider participating in the study. Schools that expressed interest



were offered a longer description of the study (see Appendix E) and a sample letter of cooperation (see Appendix F). It should be noted here that minor edits were made to some measures and that religiosity, attachment, anxiety, anger, and bullying measures were replaced by equivalent measures that closely approximated those included in the longer description of the study. Schools were informed of these changes prior to initiating the study and could opt out of the study if they wanted to do so. Meetings were held with those schools that requested it. While given the option, all participating schools chose to not offer their students incentive or compensation for their participation.

Once IRB approval was obtained, each school emailed an introductory message regarding the study (Appendix G), followed shortly afterward by an emailed link (Appendix H to a parent/guardian consent form (see Appendix B) to the parents. Each school allowed 1-2 weeks for parents to provide consent, sending parents reminder emails to do so (see Appendix I). After this, students whose parents provided consent were gathered in a room on a date and time determined by the school. A researcher or school staff member trained by the researchers explained the study to the students, following a script (see Appendix J), and asked them to sign a hardcopy assent form or indicate their assent on an online assent form if they agreed to participate(see Appendix J). It was made clear to students that participation was voluntary, and that they could skip any questions or refuse to participate at any time at no consequence to themselves. Students were reminded not to write their names on the survey. Those who gave their assent then received a questionnaire packet with the study's measures in random order or were directed to an online survey, depending on the school's preferences for assent collection and survey administration.



Items within the online survey were randomized wherever possible. All online and hardcopy surveys started with demographic questions (see Appendix K). The Modified Religious/Spiritual Struggle scale (Appendix L) and the 21 new RSS-A Parents/Family and Peers (Appendix M) items were then administered, their items and presentation order randomized. General r/s was then assessed and presentation order of these r/s measures was randomized. Next, all well-being and mental health variables were administered in random order. The survey ended with the ECR-9.

Completed hardcopy surveys were stored separately from the assent and consent forms. Any identifying information was removed from the surveys (e.g., if a student wrote their name on the survey) by the primary investigator before paper copies were stored and later input into SPSS statistical software by research assistants. To ensure accuracy, the data were input twice and checked for consistency. A report for each school's aggregate data was also provided to each school and a presentation on these results offered.

### Measures

As mentioned, this study used a number of mental and physical health constructs to validate the RSS and the new RSS-A items. These included anxiety, depression, bullying and being a victim of bullying (i.e., victimization), self-esteem, positive and negative mood, negative body image and disordered eating, sleep difficulties, daily stressors, religiosity, and academic performance and satisfaction. Descriptive statistics for all measures can be found in Table 6.

**Demographics.** A number of demographic variables were assessed (see Appendix H), including age, personal and family religion, race/ethnicity, gender, sexual orientation,



nationality, and primary language. Participants were also asked to rate their satisfaction with their grades and school and to provide their approximate grades for the most common high school courses. In order to control for level of personal religious belief and parental religious socialization, two forced-choice questions along these lines were also added. Participants were asked about their general health, as well, in this section.

**Religious/spiritual struggles: general.** The study used the 26-item Religious and Spiritual Struggles scale (RSS; Exline, Pargament, et al., 2014; see Appendix L) as well as the 20 new RSS-A items pertaining to struggles that may be particular to adolescents (see Appendix M) that were used in the aforementioned retrospective study with young adults (see Table 4). An additional item was added to the RSS-A Parents/Family subscale as well: "Felt frustrated that my parents did not trust me to make my own decisions about religion." The RSS items assess 6 struggle constructs among adults using a 5-point scale ranging from "Not at all" to "A great deal". These constructs include divine (e.g., "questioned God's love for me"), demonic (e.g., "felt attacked by the devil or by evil spirits"), interpersonal (e.g., "had conflicts with other people about religious/spiritual matters"), moral (e.g., "felt guilty for not living up to my moral standards"), ultimate meaning (e.g., "had concerns about whether there is any ultimate purpose to life or existence"), and doubt (e.g., "struggled to figure out what I really believe about religion/spirituality"). In adult samples, the RSS has demonstrated good internal consistency (divine  $\alpha = .93$ ; demonic  $\alpha = .93$ ; interpersonal  $\alpha = .85$ ; moral  $\alpha = .88$ ; ultimate meaning  $\alpha = .89$ ; doubt  $\alpha = .90$ ; Exline et al., 2014). Exline, Pargament, and colleagues (2014) also found evidence for good convergent and discriminant validity. For instance, all struggle scales positively correlated with depressive symptoms, generalized



anxiety, state anger, and loneliness, while most scales also negatively correlated with life satisfaction and presence of life meaning. Positive correlations were also found between the RSS and other measures of struggle as well as with religiousness, religious belief salience, and religious participation. Wording of some of the RSS items was modified (in consultation with the scale's authors) to reduce the reading level for a younger audience. For instance, the term "moral standards" was replaced by references to right and wrong.

New religious/spiritual struggle items specific to youth (RSS-A). The new adolescent struggle items were generated in three retrospective survey pilot studies (Homolka et al., 2015) and a review of adolescent r/s literature (Homolka & Exline, 2014), as described in the above Pilot Studies section of the Introduction. All items were retained for the present validation study. See Appendix M for a list of the items included in the RSS-A Parents/Family and Peers subscales.

**Religiosity.** Given that greater religiosity has been linked to lower levels of r/s struggles among adults (e.g., Wood et al., 2010), this study also assessed whether the two constructs were related among adolescents. The eleven-item Religious Commitment Inventory for Adolescents (RCI-A; Miller, Shepperd, & McCullough, 2013; see Appendix N) was used to assess adolescents' r/s behaviors and sentiments. The RCI-A is based on the Religious Commitment Inventory-10 (Worthington et al., 2003) with wording modified to improve readability for youth. Worthington and colleagues (2003) demonstrated that the RCI-A has strong internal consistency ( $\alpha = .96$ ), test-retest reliability over six months (r = .80), and construct validity among ninth grade students from a variety of religious backgrounds. The measure has a five-point scale ranging from "Not at all true of me," to "Totally true of me." With the internet's increasing popularity



with adolescents, it seemed prudent to add websites to the first statement regarding things youth might use to read about their faith. Furthermore, Miller and colleagues (2013) noted that the scale did not work well for atheist students. Analyses from the current study's RCI-A data revealed a high alpha reliability level for atheist participants ( $\alpha = .93$ ) and an acceptable alpha reliability level for agnostic participants ( $\alpha = .76$ ). However, factor analyses revealed that the measure only functioned as a unidimensional measure for believers, not atheists or agnostics. Agnostic and atheist participants' responses likely reflect a different situation than individuals who believe in God. For instance, atheists and agnostics might endorse "Not at all true of me" for questions like "I try to increase my understanding of my faith" because the question does not apply to them-they have no faith—but they may endorse that "Religious beliefs influence all my dealings in life," because they live in a religious culture. On the other hand, a believer who gives the same answers might be doing so because they do not try to increase their understanding of their personal faith but their religious beliefs influence how they live their life. Given the aforementioned issues, all analyses utilizing the RCI-A excluded students who endorsed "I don't believe in God," and "I don't know whether there is a God, and I don't believe there is any way to find out," when asked about their belief in God. The RCI-A alpha reliability for participants who endorsed anywhere between occasional to unwavering belief in God was .92.

The survey also included the seven-item religious comfort subscale of the Religious Comfort and Strain scale (RCS; Exline, Yali, & Sanderson, 2000; see Appendix O). Four of the items reflect positive feelings toward God (e.g., "Feeling loved by God"). Two items ("Good memories of past experiences with religion or religious



people" and "Feeling like a part of a religious or spiritual community") are more interpersonally oriented. The remaining "Feeling comforted by your faith" is intrapersonal. Overall religious comfort is calculated from the mean of all items. The RCS has been used several times within the literature (e.g., Wood et al., 2010) and demonstrated good reliability ( $\alpha = .83$ -.87) and validity amongst majority Judeo-Christian populations, including undergraduate students. Although the RCS has not been used extensively with adolescents, its items have good face validity and are written at an appropriate reading level for adolescents.

Like the RCI-A, the reasoning behind endorsement of the RCS items may be completely different between religious participants and those who identify with agnostic and atheistic beliefs. For instance, atheist and agnostic participants may choose "Not at all" for the item "Feeling loved by God," simply because they do not believe in God, whereas a believer may not feel loved by God and thus choose the same answer option. In fact, the data from this study reveals poor alpha reliability for the RCS among atheist participants ( $\alpha = .45$ ). While an acceptable alpha reliability was demonstrated for agnostics ( $\alpha = .83$ ), when factor analyzed, the RCS performed as a two-factor measure rather than the unidimensional measure it functions as among believers ( $\alpha = .93$ ).

Anxiety. Anxiety is known to be higher amongst those with greater r/s struggles. Hence, this study utilized the 8-item Patient Reported Outcomes Measurement Information System (PROMIS) Pediatric Anxiety – Short Form (v.1.1., 8b), otherwise referred to here as PROMIS Anxiety scale (see Appendix P). Developed with the funding and guidance of the National Institute of Health, the PROMIS Anxiety scale has demonstrated consistent reliability and validity with pediatric populations and has been



normed for youth ages eight to seventeen (Irwin et al., 2010a, 2010b). The scale measures the degree to which the youth have experienced anxiety in the previous seven days on the following five-point scale: "Never," "Almost Never," Somewhat," "Often," and "Almost Always." Sample items include "I felt like something awful might happen," "I felt nervous," and "I felt scared." Overall state anxiety is reflected as T-scores derived from the sum of all items. Regarding missing items, youth can miss up to 4 items on the PROMIS Pediatric Anxiety short-form. In such cases, the authors recommend calculating a pro-rated score using the following formula: (raw sum x number of items on the short form) / number of items that were actually answered. The PROMIS Anxiety scale demonstrated good alpha reliability ( $\alpha = .92$ ) and functioned as a unidimensional construct.

**Depressive symptoms.** R/S struggles have been consistently shown to positively correlate with depressive symptoms in adult studies (Ano & Vasconcelles, 2005). Hence, the Center for Epidemiological Studies Depression Scale-revised ten-item version for adolescents (CESDR-10; Haroz, Ybarra, & Eaton, 2014; see Appendix Q) was used to reveal the degree to which adolescent participants have experienced depressive symptoms during the past week. Using a five-point scale ranging from "Not at all or less than 1 day" to "Nearly every day for 2 weeks," participants rate items such as "My appetite was poor," "My sleep was restless," and "I felt sad." This scale is a brief version of the CES-D (Radloff, 1977) and CESD-R (Eaton, Muntaner, Smith, Tien, & Ybarra, 2004), which have been used multiple times in adolescent studies (e.g., Radloff, 1991; Cartierre, Coulon, & Demerval, 2011). The CESDR-10 has demonstrated good reliability and validity with adolescents ( $\alpha = .90$  to .93; Haroz et al., 2014; Ybarra, Mitchell, Palmer, &



Reisner, 2015). Within the current study, the CESDR-10 demonstrated good alpha reliability ( $\alpha = .92$ ) and functioned as a unidimensional construct.

**Bullying.** Negative life experiences are known to be associated with r/s struggles among adults (see above). As a common and distressing occurrence among youth, bullying and being a victim of bullying is likely associated with youth r/s struggles. The 36-item Adolescent Peer Relations Instrument (APRI; Parada, 2000; see Appendix R) plus two cyber bullying questions (Wang, Iannotti, & Nansel, 2009; see Appendix R) asked participants to report how often they have bullied or been bullied over the past year. Sample items include "I was called names I didn't like," and "Made fun of a student by calling them names." The six-point scale ranges from having not happened at all ("Never") to "Every day." The APRI has six subscales: verbal, social, and physical bullying and verbal, social, and physical victimization. Within the current study, the APRI functioned as a 6-factor scale and demonstrated mostly acceptable alpha reliabilities (verbal bullying  $\alpha = .83$ , social bullying  $\alpha = .68$ , physical bullying  $\alpha = .80$ , verbal victimization  $\alpha = .86$ , social victimization  $\alpha = .82$ , and physical victimization  $\alpha = .85$ ), as did the cyberbullying ( $\alpha = .80$ ) and cyber victimization subscales ( $\alpha = .85$ ).

Anger. Among adults, greater anger is associated with greater r/s struggle (e.g., Exline, Park, Smyth, & Carey, 2011). To assess current anger, this study used the National Institute of Health's 5-item Patient Reported Outcomes Measurement Information System (PROMIS) Pediatric Anger Scale (v.1.1., 5b; Irwin et al., 2010a, 2010b; see Appendix S). It utilizes the same prompt and five-point scale as the PROMIS Anxiety Short Form and includes items like "I felt fed up." Within the current study, the



scale demonstrated acceptable alpha reliability ( $\alpha = .89$ ) and functioned as a unidimensional construct.

**Daily stress.** Another form of distressing experiences that may be associated with r/s struggles among youth are everyday annoyances. The Brief Daily Hassles Scale for Adolescents (Wright, Creed, & Zimmer-Gembeck, 2010; see Appendix T) investigate daily stress, with a particular focuses on stressors associated with families (e.g., "Parents not trusting me") and peers/others (e.g., " Not being accepted by other people my age"). This focus may be especially relevant to the new parent/family and peer-related r/s struggle items, as stressful situations with these individuals could be associated with r/s struggles related to these same people. The measure uses a five-point scale: "Never," "At least once per month," "At least once per week," "Almost daily," and "Daily." In developing the scale, Wright and colleagues (2010) found that both the family and peer/other subscales demonstrated good reliability ( $\alpha = .86-.88$  and  $\alpha = .82-.83$  respectively) and construct validity. Within the current study, the measure demonstrated acceptable alpha reliability (parent hassles  $\alpha = .88$ ; peers and others hassles  $\alpha = .74$ ) and performed as a 2-factor model of hassles.

**Self-esteem.** A recent study (Grubbs, Wilt, Stauner, Exline, & Pargament, in press) revealed an association between low self-esteem and struggles. Hence, the ten-item Rosenberg Self Esteem Inventory (Rosenberg, 1965; see Appendix U) was used to assess adolescent self-esteem. Items are rated on a four-point scale from "Strongly Agree," Agree," "Disagree," and "Strongly Disagree" with a higher summed score indicating higher self-esteem. This measure has been used extensively in youth literature. A review of studies (Myers & Winters, 2002) revealed acceptable reliability ( $\alpha = .75-.92$ ), test-



retest reliability (.85-.88), and concurrent validity (.60-.72). Within the current study, the scale demonstrated good alpha reliability ( $\alpha = .91$ ) and functioned as a unidimensional construct. Sample items include, "I feel that I have a number of good qualities," and "I am able to do things as well as most other people."

**Disordered eating and body image.** A recent study (Exline, Homolka, et al., 2016) using the Eating Disorder Diagnostic Scale (EDDS; Stice, Telch, & Rivzi, 2000; see Appendix V) revealed that undergraduate r/s struggles were positively associated with body image concerns, compensatory eating behaviors, and (less consistently) binge eating. It is reasonable, then, to also assess for a similar link among youth. Hence, the current study used the EDDS, which assesses symptoms of anorexia nervosa, bulimia nervosa, and binge-eating disorder (according to DSM-IV criteria) and overall body image concerns. Used in multiple studies (e.g., Stice et al., 2000; Stice, Fisher, & Martinez, 2002), the EDDS has demonstrated good internal consistency, test-retest reliability, criterion validity, convergent validity, and predictive validity among adults. Within the current study, the scale's negative body image and negative compensatory eating behaviors subscales were utilized. The negative body image subscale demonstrated good alpha reliability ( $\alpha = .93$ ). The reliability of the negative compensatory eating behaviors subscale was low ( $\alpha = .53$ ). However, this is not surprising, given that individuals who engage in negative compensatory eating behaviors may not engage in all of the different types of compensatory eating behaviors (i.e., vomiting, laxatives, diuretics, fasting, and excessive exercise). The sum of this subscale was used.

**Insomnia.** Recent research (Homolka & Exline, 2015b) conducted with adults has also found positive correlations between r/s struggle and insomnia using the 20-item



Pittsburgh Insomnia Rating Scale (PIRS; Moul, Pilkonis, Miewald, Carey, & Buysse, 2002; see Appendix W). Thus, this study used the calculated sum of the PIRS to assess insomnia among adolescents. Questions vary in form from asking about being bothered by symptoms of insomnia (e.g., "difficulty keeping your thoughts focused"), how many hours one slept versus battled insomnia (e.g., "If you woke up during the night, how long did it take to fall back to sleep on **most** nights?"), to the quality, satisfaction, regularity and soundness of one's recent sleep. Within the current study, the scale demonstrated good alpha reliability ( $\alpha = .93$ ).

**Positive and negative affect.** The ten-item Positive and Negative Affect Schedule for Children (PANAS-C-10; Ebustani, Regan, Smith, Reise, Higa-McMillan, & Chorpita, 2012; see Appendix X) was employed to assess general positive and negative mood. The scale's positive subscale and negative subscale each consist of five adjectives that participants rate on a five-point scale ("Very Slightly or Not at all" at 0 to "Extremely" at 4) according to the extent they felt that way over the past week. Items include adjectives like "joyful," "cheerful," and "happy" for positive affect, and "miserable," "mad," and "afraid" for negative affect. The PANAS-C-10 is a recently developed brief version of the 20-item Positive and Negative Affect Schedule for Children (PANAS-C; Laurent et al. 1999), based on item response theory methodologies. The PANAS-C-10 has demonstrated good reliability ( $\alpha = .82-.86$ ) and discriminant validity (Ebustani et al. 2012). Within the current study, the scale demonstrated acceptable to good alpha reliability (positive affect  $\alpha = .90$ ; negative affect  $\alpha = .81$ ) and functioned well within a two-factor model.



Attachment. Fraley, Heffernan, Vicary, and Brumbaugh's (2011) Experiences in Close Relationships—Relationship Structure Questionnaire (ECR-RS; 1991; see Appendix Y) is a 9-item scale based on an attachment measure by Fraley, Waller, and Brennan (2000). The scale allows for anxious and avoidant attachment dimensions to be assessed in multiple relationship contexts. In this study, the items were parent-focused. Sample items for the 6-item avoidant subscale include "I talk things over with my parents," and "I find it easy to depend on my parents." The anxiety items are "I'm afraid that my parents may abandon me," "I worry that my parents won't care about me as much as I care about them," and "I often worry that my parents don't really care for me." Participants were asked to rate how much they agree or disagree with the items using a 7point scale ("strongly disagree" at 1 and "disagree" at 7). The ECR-RS has been used in several studies to assess attachment to parents, including r/s studies (Schnitker, Porter, Emmons, & Barrett, 2012), and has demonstrated acceptable reliability and validity with adolescents ( $\alpha = .81$ -.86; Donbaek & Elklit, 2014). Within the current study, the scale demonstrated acceptable alpha reliability (avoidant attachment  $\alpha = .84$ ; anxious attachment  $\alpha = .80$ ) and functioned well within a two-factor model.



### Results

### **Participants**

A total of 350 students participated in the survey. After three students younger than 14 and twenty-four students older than 17 years of age were removed from the sample, a total sample size of 319 students remained. These students completed 234 online surveys and 85 paper surveys, 49.5% of which came from school 1 (n = 158; 46.5% of their student population), 28.5% from school 2 (n = 91; 13.4% of their student population), and 21.9% from school 3 (n = 70; 39.5% of their student population). Prior to analysis, the dataset was cleaned, removing participants who did not answer questions beyond basic demographics. Overall demographics of the sample can be found in Table 7. Of note, the sample was largely female (79%), heterosexual (86%), Christian (73%), and White (76%), as well as most likely middle to high socioeconomic status, given the cost of enrolling a student at one of the participating schools.

A majority of measures had relatively complete data, ranging from 0.01% missing responses (Health and Satisfaction with Grades items) to 23.32% (GPA), with the RSS and new subscales exhibiting 1.07% to 1.41% and 0.21% to 0.43% missing data, respectively. As seen in Table 6, student's GPAs had the most missing data at 23.32%, followed by the attachment subscales. Student's GPAs were calculated from all possible grades given for eight different classes (math, English, science, history, gym, art, music, and an "other" course option). Most students do not take all eight courses and students did not report a grade for at least one class. Thus, calculating students' GPAs based on the grades student provided likely produced more accurate results than if multiple imputation were used to impute scores for courses that the student was not actually



taking. Furthermore, the attachment measure was the last measure in the survey. This was done intentionally, as it was unclear how well this scale would function in these samples. Just over 8% of students were unable to complete this measure. See Table 6 for additional descriptive statistics for each measure. Since listwise deletion is the R statistical software's (R Development Core Team, 2016) default method for handling missing data, this resulted in a small amount of cases being excluded during some statistical analyses. Since very little data was missing, means and sums for each measure were simply calculated using the item responses participants provided, unless otherwise noted differently within the measures section, before conducting correlations and regressions on these data. The following data analytic plan was employed to test each hypothesis.

#### Hypothesis 1: Confirmatory Factor Analysis of the RSS

In order to evaluate the first hypothesis that the RSS maintained the same overall structure as that found among adults, a confirmatory factor analysis (CFA) with polychoric correlations and diagonally weighted least squares (WLSMV; the most accurate and least biased method when using ordinal data to estimate model parameters; Li, 2015) for the same six-factor model of the RSS was conducted using the lavaan (Rosseel, 2012) and psych (Revelle, 2016) packages of the R statistical software (R Development Core Team, 2016) to specify latent variables and their model fit. Results revealed that a six-factor model of the RSS was an acceptable fit ( $\chi^2$  (*df* = 284, *N* = 297) = 450.06, p = .00; RMSEA = .04; CFI = .98, TLI = .98; see Figure 1). It should be noted that significant chi-squares are common in large samples. (e.g., Bentler & Bonett, 1980) and, when other fit indices suggest a good fit, a significant chi-square may not be a good indicator of poor fit.



### Hypothesis 2: Predictive Validity of the RSS

To test the second hypothesis' proposed links between the RSS subscales and relevant psychosocial health indicators, Pearson correlations were evaluated between the calculated means of the RSS and the calculated scores for indicators of psychological distress, poor health, and well-being. As expected, positive correlations were found between RSS struggle subscales and indicators of psychological distress among participants, including depression, anxiety, anger, eating concerns, anger, hassles with parents, hassles with peers and others, negative affect, bullying, and victimization (see Table 8). Such correlations ranged from small (e.g., bullying and victimization, hassles with friends and others, negative compensatory eating behaviors for self-perceived overeating, insecure attachment to parents) to large (e.g., depression, anxiety, anger, and negative mood), similar to results found among young adults (e.g., Exline et al., 2014). Subscale means with skews above 2, including the Divine and Demonic RSS subscales, were transformed into their natural logarithmic values and additional correlations were conducted. Any major differences in statistical significance, effect size, or betas are noted in Table 8.

The correlations, especially regarding Ultimate Meaning, are also consistent with the aforementioned research suggesting that adolescence is a significant period in an individual's identity development. For instance, the more that youth are struggling with Ultimate Meaning in their lives, the more likely they are to be experiencing depression, anxiety, anger, and negative affect, among other indicators of distress. While this holds true for several of the other struggles as well, these relationships are not nearly as strong



as the relationship with Ultimate Meaning, indicating that Ultimate Meaning might play a particularly important role in adolescents' lives at this time.

Furthermore, significant negative correlations were found between RSS subscales and indicators of well-being and physical health, including positive affect, academic grades, satisfaction with grades, satisfaction with one's school, religious commitment and comfort, insomnia, general perception of personal health, and especially self-esteem (see Table 8). These correlations ranged from small (e.g., grades and satisfaction with grades and school) to large (e.g., insomnia and self-esteem) and were similar to results found among young adults (e.g., Exline et al., 2014). Simultaneous regressions predicting each indicator of distress while controlling for religious commitment were conducted. Results revealed that each RSS subscale was predictive of several indicators of distress (see Table 9). Subscales whose means had skews above 2 were transformed into their natural logarithmic values and simultaneous regressions were conducted. Most results were similar to regressions conducted with the original means. Any major differences in statistical significance, effect size, or betas are noted in Table 9. These findings are another indication that the individual subscales are different from one another, representing different types of r/s struggles and the various roles they play in the participants' lives.

# Hypothesis 3: Confirmatory Factor Analysis and Item Refinement of the New Parents/Family and Peers R/S Struggle Subscales for Adolescents (RSS-A)

To test and refine the structure of the hypothesized Parents/Family and Peers RSS-A subscales and its associations to the RSS, a model using the two proposed Parents/Family and Peers factors was first generated through a CFA with polychoric



correlations and WLSMV (see Figure 2), indicating that the two-factor all-items RSS-A model was a good fit (RMSEA = .05; CFI = .97; TLI = .97;  $\chi^2$  (df = 188, N = 314) = 339.05, p = .00). Seven items showed relatively poor fit with standardized parameter values ranging between .43 and .68: Parents/Family items four, five, six and eight (i.e., "Felt concerned because my parents or family members disagreed with each other about religious/spiritual beliefs, practices, or behaviors," "Felt guilty that I was not interested in my parents' or family's religion/spirituality," "Had negative experiences in my family (like divorce or abuse) that made me question my religious/spiritual beliefs or behaviors," and "Felt uncomfortable to be known as part of my parents' or family's religious/spiritual group (for example, to be known as Catholic, Jewish, atheist, Christian, Muslim, etc.)") and the Peers items one, six, and nine (i.e., "Felt bullied by friend(s) or peer(s) because of differences between our religious/spiritual beliefs or behaviors," Had conflicts with my friend(s) or peer(s) over religious/spiritual beliefs or behaviors," and "Worried about whether it is right or wrong to date someone who has different religious/spiritual beliefs or behaviors") (see Figure 2 for details). From a theoretical stance, these aforementioned items do not fit well with the other items. For instance, the parent/family items with stronger paths focus on distress arising from direct conflict between the youth and parents/family, and they also tend to be centered on the adolescent's r/s identity development, whereas those with weaker pathways are more about indirect r/s conflict with parent/family r/s. The Peers items with high loadings were associated with the distress caused by a conflict between the youth's personal r/s identity development and the youth's peers. However, the items with low loadings described struggles that were distressing because of differences in beliefs but those differences in themselves were not



being questioned, challenged, or altered in any way. Thus, these items were eliminated and a new CFA with polychoric correlations and WLSMV was run to optimize model fit. The new more brief two-factor RSS-A subscales demonstrated good fit (RMSEA = .04; CFI = .99; TLI = .99;  $\chi^2$  (*df* = 76, *N* = 314) = 111.80, *p* = .00; see Figure 3).

# Hypothesis 4: Predictive Validity of the RSS Interpersonal and Brief RSS-A Parents/Family and Peers Subscales and their Structure in Relation to the RSS

Once the new brief two-factor RSS-A model was deemed satisfactory (see Figure 3), a three-factor model of interpersonal struggles predicting unique variance in measures of distress was tested using simultaneous regressions with the calculated means for the RSS Interpersonal subscale, Peers r/s struggle scale, and Parents/Family r/s struggle scale, demonstrating that all three scales contributed unique variance in their prediction of psychological distress (poor mental and physical health), academics, and r/s (see Table 10). Subscales whose means had skews above 2, including both brief RSS-A subscales, were transformed into their natural logarithmic values and simultaneous regressions were conducted. Results were similar to regressions conducted with the original means. Any major differences in statistical significance, effect size, or betas are noted in Table 10.

The general Interpersonal RSS scale significantly predicted several of the distress indicators (e.g., depression; anxiety; anger; verbal bullying; verbal, social, physical and cyber victimization; hassles with friends and others; negative body image; negative compensatory behaviors for self-perceived overeating; negative mood; insomnia; health; low positive mood; self-esteem; and GPA), and in at least 5 cases subsumed the contributions of both brief RSS-A subscales (e.g., satisfaction with school, verbal bullying, negative body image, negative compensatory behaviors for self-perceived



overeating, and negative mood). However, the brief RSS-A subscales not only simultaneously contributed unique variance beyond general interpersonal r/s struggles within the predictions of many of the distress indicators (e.g., depression; anxiety; physical, verbal, social, and cyber victimization; hassles with friends and others; insomnia; low positive affect; self-esteem; and GPA; see Table 10), but in some cases they subsumed the contributions of the RSS Interpersonal subscale. For instance, within the three-factor interpersonal model's prediction of anxious attachment to parents, the general RSS Interpersonal and Peers struggle pathways were insignificant while the Parents/Family struggle subscale was a significant predictor, as would be expected given the parents/family nature of attachment. The RSS-A Parents/Family subscale also overshadowed the predictive ability of the RSS-A Peers and RSS Interpersonal subscales for hassles with parents as well, emphasizing the role that parents/family struggles may play when experiencing daily difficulties with one's parents. The RSS-A Peers subscale overshadowed the contributions of the other two subscales in relation to social bullying and health. Based on these patterns, it would seem that the two new subscales not only represent some aspects of adolescents' general interpersonal r/s struggles, but they could also serve as supplementary subscales to the RSS Interpersonal subscale, as they predict unique variance above and beyond the Interpersonal RSS subscale.

Given this set of findings, the two brief RSS-A latent struggle factors along with the RSS Interpersonal latent factor were added as subsets of a higher-order interpersonal struggle scale. This new higher order interpersonal scale was then inserted as the interpersonal struggle scale within the 6-factor RSS model. The fit of this proposed 6factor model was tested to evaluate whether the inclusion of the new subscales produced



a strong model for adolescent r/s struggle types, which it did (RMSEA = .03; CFI = .99; TLI = .98;  $\chi^2$  (*df* = 722, *N* = 294) = 908.35, *p* = .00; polychoric correlations and WLSMV were utilized; see Figure 4). To avoid biasing the data by attempting to confirm only one model, an alternative model was also tested: an eight-factor model where the new Parents/Family and Peer scales were not subsumed under a higher-order interpersonal subscale (RMSEA = .03; CFI = .99; TLI = .98;  $\chi^2$  (*df* = 712, *N* = 294) = 901.37, *p* = .00; polychoric correlations and WLSMV methods were utilized; see Figure 5). It was determined that the original 6-factor model with a higher order interpersonal scale was just as good a fit as the eight-factor model, indicating that the new RSS-A Parents/Family and Peers subscales can be viewed as supplementary subscales to the RSS Interpersonal subscale or as their own struggle subscales of the RSS.

### Hypothesis 5: Correlations between the RSS and the Brief RSS-A Subscales

Once the six-factor model from the fourth hypothesis was revealed, the correlations predicted by the fifth hypothesis between the means of the RSS-A Parents/Family and Peers subscales and the calculated scores of the RSS was tested (see Table 11). Subscales whose means had skews above 2, including both RSS-A subscales, were transformed into their natural logarithmic values and correlations were conducted. Results were similar to correlations conducted with the original means. Any major differences in statistical significance or effect size are noted in Table 11. Close to expected, the RSS-A Parents/Family and Peers r/s struggle subscales had moderate rather than high positive correlations with the RSS Interpersonal struggle scale (r = .49 and r = .42 respectively). Moderate to high positive correlations were predicted with the RSS Moral, Ultimate Meaning, Doubt, and Divine struggle subscales because of the



developmental context of these subscales and the RSS-A Parents/Family and Peer subscales. This held true for Doubt with Parents/Family and Peers. However, the correlations between Divine, Moral, and Ultimate Meaning struggles with both Parents/Family and Peers fell in the low range. While not drastically low, these correlations suggest that there are more nuanced differences between these struggles that might not be attributable to shared r/s development processes. Consistent with hypotheses, small positive to no correlations were found between Demonic struggle and Parents/Family and Peers.

# Hypothesis 6: The Brief RSS-A's Correlations with Indicators of Distress, Academics, and R/S

For the sixth hypothesis, correlations between the calculated means of the new parents/family and peers scales and the participants' academic achievement, and physical and mental health were evaluated (see Table 12). Overall, the pattern of results were similar to the hypotheses. Small negative correlations were found with student participants' grades and their satisfaction with their grades and school. Small negative correlations were found between the new struggle subscales and r/s comfort as a small negative correlation between Parents/Family and religious commitment (excluding atheist and agnostic participants). Small negative correlations existed between the new struggle subscales and both self-esteem and positive mood. A moderate positive correlations was demonstrated between the new Parents/Family struggle subscale and hassles with parents. However, unlike the proposed moderate correlations, most of the remaining indicators of distress involving interpersonal interactions fell in the low range (e.g., depression, anxiety, anger, verbal bullying, all forms of victimization except cyber, hassles with



friends, negative body image, negative compensatory behaviors for self-perceived overeating, negative mood, and insecure attachment to parents). The brief RSS-A subscales were also associated with small relationships to poor physical health (i.e., insomnia and poor general health).



### Discussion

Overall, this study's findings demonstrate that the RSS functions similarly among adolescents as it does among adults. Furthermore, the new RSS-A Parents/Family and Peers subscales for adolescents capture an aspect of r/s struggles that the original RSS does not, suggesting that these two new subscales may reflect struggles that are in some way different from other struggles studied to date, possibly even struggles that are more particular to youths' social context (i.e., parents/family and peers). These two new scales function well as both supplementary interpersonal subscales as well as their own brief RSS subscales.

### **Discriminant, Convergent, and Divergent Validity**

While more research is needed to fully test their validity, this study demonstrated that all of the r/s struggle subscales correlate with one another and these correlations tended to be small to moderate. The RSS-A subscales' correlations with the RSS Interpersonal scale were some of the highest. Yet, the RSS-A subscales still predicted unique variance beyond the Interpersonal subscale. Therefore, it would seem that all three are assessing interpersonal experiences but within different contexts. Confirmatory factor analyses also indicate that the RSS and RSS-A items fit well in the same model but as separate latent factors within that model. Simultaneous regressions also suggest that the struggles vary in the roles they play in adolescent distress and well-being.

The RSS with adults has been linked to depressive symptoms, anxiety, anger, life satisfaction, and life meaning (Exline et al., 2014). Similarly, this study found that adolescents' RSS struggles were linked to depressive symptoms, anxiety, anger, and lower levels of self-esteem and positive affect. Struggles were also associated with



additional indicators of distress, including insomnia, poor general health, poor body image and negative compensatory eating behaviors for perceived overeating, insecure attachment to parents, and low satisfaction with school and grades. The new RSS-A scales performed similarly in their predictions of indicators of distress.

Moreover, consistent with adult research, adolescents in this study tended to experience all of the struggles at low levels. They also tended to experience slightly more Moral and Ultimate Meaning struggles and Doubt struggles, similar to the RSS struggle means for various groups in an adult RSS study (Exline et al., 2014). This is interesting because adolescence is theorized to be a key period for personal r/s development. People at this age are trying to discern what they personally believe and how those beliefs translate to their everyday lives. Thus it would make sense that they are experiencing more doubts around r/s beliefs (Doubt struggles) and trying to discern their life meaning (Ultimate Meaning struggles) and, as a result, struggling to determine how to live out their beliefs and life purpose in a consistent manner (i.e., Moral struggles). However, it is unclear if this is what is occurring for these adolescents or, given that adults tend to report higher means for these struggles as well, whether this is a normal phenomenon for adolescents and adults. Regardless, the findings suggest that r/s struggles are a normal experience for most adolescents, much like they are for adults.

### **Implications and Future Directions**

Altogether this study provides preliminary evidence supporting the reliability and validity of the RSS and RSS-A among adolescent participants. As a result, this study also carries significant implications for adolescent r/s research. Although research has focused primarily on the positive and protective r/s correlates among youth, these findings



demonstrate the importance of recognizing the role that r/s struggles play in adolescents' lives. This study demonstrates that not only do many adolescents experience r/s struggles (albeit at low levels, as with most adults), but these struggles might also carry important implications for adolescent well-being and possibly even development.

This study also offers a new assessment tool for researchers examining r/s among adolescents. Researchers may now be able to use the RSS and RSS-A to study struggles among adolescents in earnest. A more complete picture of adolescent r/s development can be obtained in doing so. For example, the RSS and RSS-A may allow researchers to demonstrate the degree to which r/s struggles are common among youth, what types of struggles are more unique to youth versus those that are similar to adult struggles, and how such r/s struggles are linked to well-being among youth. The RSS and RSS-A can also be easily incorporated into schools' and mental health professionals' needs assessments, allowing for a better understanding of high school students' lives and needs. Moreover, the (further) validation of the RSS and RSS-A with adolescents may also allow researchers to study r/s development over the lifespan from adolescence through adulthood, since the RSS can be used with both populations. In sum, subsequent use of the RSS and RSS-A subscales may increase our knowledge about the role that r/s struggles play in adolescents' general and r/s identity development.

Many questions may now be investigated with this new assessment tool. For instance, since the RSS-A functions as separate but related struggle subscales to the RSS among older adolescents, it is likely that that the RSS-A struggles exist among adults to at least some degree and that these adolescent struggle experiences influence how they later experience their personal r/s and adult r/s struggles. Additionally, researchers have



found differences in struggle experiences based on various demographics (e.g., religiosity, sexual orientation; Exline et al., 2014). Participants in the present study tended to be fairly homogeneous in terms of demographics, making it difficult to discern differences between such groups. Thus, further research is needed to determine if certain aspects of adolescents' lives influence how they might experience struggles. This is an especially intriguing question because youth have less control over their r/s lives (e.g., whether to attend a religious school or not or participate in r/s youth activities) in comparison to adults. Their general r/s experiences and struggles may differ substantially from those of adults because of this lack of control. For instance, youth that are forced to attend a religious school may experience struggles differently than youth who freely choose to do so or youth who attend a secular or public school. Such experiences will likely vary based on the similarities between the youth's r/s beliefs and those that are promoted within their immediate social environments. Better understanding of these patterns could help researchers, clinicians, parents/families, and educators understand the impact adults' decisions have on youths' r/s struggles.

Another interesting question that arose during the process of this study was the impact that asking or talking about r/s struggles might have on adolescents. Some individuals expressed concern that doing so would cause adolescents to experience more r/s struggles. Others feared that adolescents might think that r/s was somehow bad if they were asked about r/s struggles. However, findings suggest that r/s struggles are normal and, at least for adults, maintaining a non-judgmental approach to someone expressing r/s struggles is more likely to help them grow within their faith (Exline & Grubbs, 2011). Thus, more research is needed to determine the effects of asking adolescents about r/s



struggles and how adults' beliefs about how to respond to adolescents' struggles impacts adolescents and their r/s lives.

Finally, the process of this study revealed that adolescents' experience r/s struggles related to sexuality and religious education. Future research should investigate these and other possible forms of r/s struggle as well as the context in which these struggles occur (e.g., in environments that do not welcome adolescent's expressions of such struggles). Qualitative research may also help shape the direction of adolescent r/s struggle research, providing nuance to our measures and understanding of adolescent struggles.

### Limitations

This study suffers from a number of limitations. First, the study is geographically limited to an American adolescent population attending private schools in the Great Lakes region. All three of these schools were college preparatory schools, two of which were Catholic. A majority of the students were White, Catholic or otherwise Judeo-Christian youth most likely from middle to upper- class economic backgrounds. Hence, external validity of this study's results (i.e., the RSS and RSS-A) are limited to the population from which such youth were drawn: White, middle- to upper-class, Catholic or Judeo-Christian, well-educated, and likely relatively intelligent adolescents.

Furthermore, research has demonstrated that the (religious) school environment (Barrett, Pearson, Muller, & Frank, 2007), students' perceptions of their teachers, and the school's approach to religious exploration (Cohen-Malayev, Schachter, & Rich, 2014) can shape youths' private and public religiosity. Thus, there is the risk that the religious environments of many of the schools within this study will influence their r/s struggle



49

experiences and how they answer the survey's questions. However, this problem may be more particular to the schools' religious traditions (e.g., Catholic, Protestant) than a distinction between religious versus non-religious. In fact, one study (Uecker, 2009) using data from a national survey found higher levels of r/s among adolescents attending Protestant schools and lower r/s levels for both secular and Catholic schools. Given that the majority of schools within this study are Catholic, it could be that the youth in these schools will provide answers that would be similar to adolescents in public schools. While none of the (many) public schools and school districts that were contacted agreed to participate in this study, one non-sectarian school participated in the study. Further analyses need to be conducted to determine if there are significant differences between these schools. The fact that two of these schools are co-educational while the other was an all-girls school also creates the opportunity to analyze whether such an academic environment contributes differently to r/s struggle experiences. Further investigation is needed.

Finally, the RSS and RSS-A are self-report scales. Not only do self-report methods introduce the opportunity for response bias, but relying on self-report exclusively could inflate correlations due to common-method variance. Research with adults has revealed that some individuals are reticent to report r/s struggles and may even consider it wrong to do so (e.g., Exline, Kaplan, & Grubbs, 2012; Exline & Grubbs, 2011). It is unclear at this point whether this is the case for adolescents in general and how adults in such studies developed a bias towards not disclosing such struggles. It may be important to investigate how such biases may form in adolescence. Furthermore, it is also important to ask adolescents' observers (e.g., parents, other caregivers, teachers,



religious leaders, and mentors) to rate the degree to which they perceive the adolescents to be experiencing struggles. Such information could reveal differences between adolescents' reported struggle experiences and what the adolescents are expressing to others as well as provide greater method variance.

### Conclusion

Overall, this study was able to establish the RSS as a valid measure for the study participants and develop two new struggle subscales for these adolescents. The field's work in this area is sparse, and researchers are in great need of a r/s struggle measure for adolescents. This study represents an important step in the process of developing a youth r/s struggle scale that can be used by researchers, mental health professionals, and schools. The present results suggest that r/s struggles may be a common experience among adolescents and these struggles come in a variety of forms. Furthermore, adolescents likely experience such struggles at low levels and these struggles are associated with their mental health and overall well-being. Going forward, the RSS and RSS-A will hopefully be useful tools to study not only adolescent r/s struggles but further advance our knowledge of adolescents' r/s lives and development.



	Ultimate						
	Divine	Demonic	Interpersonal	Meaning	Moral	Doubt	
Divine	1	.71*	.73*	.73*	.69*	.80*	
Demonic	.56*	1	.66*	.64*	.64*	.64*	
Interpersonal	.50*	.40*	1	.73*	.68*	.74*	
Ultimate Meaning	.53*	.31*	.50*	1	.65*	.76*	
Moral	.50*	.42*	.43*	.46*	1	.66*	
Doubt	.70*	.36*	.58*	.63*	.50*	1	

Table 1. Retrospective Pilot Study 3: Correlations Between RSS Struggles Types within Adolescence and Childhood

*Note.* Data above the diagonal focus on childhood struggles. Data below the diagonal focus on adolescent struggles.

\*  $p \le .001$ 



Adolescence							
Divine	Demonic	Interpersonal	Meaning	Moral	Doubt		
.50*	.43*	.37*	.27*	.24*	.34*		
.42*	.63*	.33*	.21*	.25*	.29*		
.34*	.38*	.52*	.28*	.27*	.32*		
.35*	.34*	.35*	.39*	.23*	.32*		
.38*	.38*	.38*	.26*	.47*	.31*		
.36*	.32*	.40*	.29*	.24*	.39*		
	.50* .42* .34* .35* .38*	.50*.43*.42*.63*.34*.38*.35*.34*.38*.38*	DivineDemonicInterpersonal.50*.43*.37*.42*.63*.33*.34*.38*.52*.35*.34*.35*.38*.38*.38*	DivineDemonicInterpersonalUltimateDivineDemonicInterpersonalMeaning.50*.43*.37*.27*.42*.63*.33*.21*.34*.38*.52*.28*.35*.34*.35*.39*.38*.38*.38*.26*	DivineDemonicInterpersonalUltimate.50*.43*.37*.27*.24*.42*.63*.33*.21*.25*.34*.38*.52*.28*.27*.35*.34*.35*.39*.23*.38*.38*.38*.26*.47*		

Table 2. Retrospective Pilot Study 3: Correlations Between Childhood and Adolescent RSS Struggles

\* *p* ≤ .001



	$\underline{M}$	SD	t	df
Divine				
Childhood	1.66	.97		
Adolescence	1.82	.93	-4.49**	741
Demonic				
Childhood	1.58	.97		
Adolescence	1.66	.94	-2.56*	737
Interpersonal				
Childhood	1.71	.97		
Adolescence	2.08	1.01	-10.51**	740
Ultimate Meaning				
Childhood	1.78	1.08		
Adolescence	2.26	1.17	-10.52**	739
Moral				
Childhood	1.85	1.02		
Adolescence	2.39	1.12	-13.27**	733
Doubt				
Childhood	1.83	.97		
Adolescence	2.18	.98	-8.75**	740

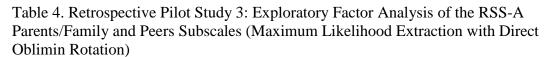
Table 3. Retrospective Pilot Study 3: Paired Sample *t* Tests of RSS Struggles between Childhood and Adolescence

Range: 1 (not at all/does not apply), 2 (a little bit), 3 (somewhat), 4 (quite a bit), 5 (a great deal) \*  $n \in 05$  \*\*  $n \in 01$ 

\*  $p \le .05$ , \*\*  $p \le .01$ 



Factor Loadings from Pattern Matrix	Parents/
	Peers Family
Items	
1.Felt uncomfortable with my friends/peers because of differences in our religious/spiritual beliefs or practices	<b>.890</b> .125
2.Felt guilty that I let my friends/peers think I had the same religious beliefs as them	<b>.808</b> 044
3.Had conflicts with my friends/peers over religious beliefs	<b>.800</b> .067
4.Felt like my friends/peers were forcing their religious beliefs on me	<b>.765</b> 016
5.Felt bullied by friends/peers because of differences between our religious beliefs	<b>.757</b> 018
6.Felt pressured by my friends/peers to go along with their religious beliefs and practices	<b>.700</b> 099
7.Felt like I had to hide my religious beliefs or behaviors from my friends/peers	<b>.690</b> 118
8.Felt that I had to pretend to believe in a certain religion to avoid problems with my friends/peers	<b>.546</b> 272
9.Felt concerned because my parents/family members disagreed with each other about religious/spiritual beliefs	<b>.499</b> 273
10. Worried about whether it is right or wrong to date someone who has different religious/spiritual beliefs	<b>.434</b> 248
11. Had negative experiences in my family (like divorce or abuse) that made me question my religious/spiritual beliefs	.343341
12. Felt pressured by my parents/family to follow their religious/spiritual practices or beliefs	133 <b>966</b>
13. Felt like my parents/family members were forcing their religious beliefs on me	140 <b>946</b>
14. Worried about whether I had to believe in my family's religion or if i was okay to question their beliefs	t .031 <b>802</b>
15. Felt frustrated because my parents/family would not allow me to question or explore my religious/spiritual beliefs	.129 <b>743</b>
16. Worried about what would happen if I chose different religious/spiritual beliefs from my family	.145 <b>703</b>
17. Felt guilty because I was not interested in my family's religion/spirituality	.145 <b>675</b>
<ul><li>18. Had conflicts with my parents/family over my religious/spiritual behaviors or beliefs</li></ul>	.227 <b>637</b>
<ol> <li>Felt frustrated that my parents wouldn't let me do something I wanted to do because it went against their religious/spiritual beliefs</li> </ol>	d .187 <b>616</b>
<ul><li>20. Felt uncomfortable to be known as part of my family's religious group (for example, Catholic, Jew, Atheist, Christian, Muslim)</li></ul>	.316 <b>528</b>
Eigenvalue	1.65 1.40
% of variance	8.3% 7.0%





Factor Loadings from Pattern Matrix	Parents Family	
Items 1. Felt uncomfortable with my friends/peers because of differences in our religious/spiritual beliefs or practices	106	.877
2. Felt guilty that I let my friends/peers think I had the same religious beliefs as them	.058	.798
3. Had conflicts with my friends/peers over religious beliefs	040	.773
4. Felt like my friends/peers were forcing their religious beliefs on me	.022	.768
5. Felt bullied by friends/peers because of differences between our religious beliefs	s .052	.717
6. Felt pressured by my friends/peers to go along with their religious beliefs and practices	s .105	.705
7. Felt like I had to hide my religious beliefs or behaviors from my friends/peers	.135	.678
8. Felt that I had to pretend to believe in a certain religion to avoid problems with my friends/peers	.275	.551
12. Felt pressured by my parents/family to follow their religious/spiritual practices or beliefs	.968	136
13. Felt like my parents/family members were forcing their religious beliefs on me	s <b>.947</b>	145
14. Worried about whether I had to believe in my family's religion or if it was okay to question their beliefs	.806	.028
15. Felt frustrated because my parents/family would not allow me to question or explore my religious/spiritual beliefs	.753	.116
16. Worried about what would happen if I chose different religious/spiritua beliefs from my family	l <b>.711</b>	.140
17. Felt guilty because I was not interested in my family's religion/spirituality	.683	.137
18. Had conflicts with my parents/family over my religious/spiritual behaviors or beliefs	.649	.211
19. Felt frustrated that my parents wouldn't let me do something I wanted to do because it went against their religious/spiritual beliefs	.631	.166
20. Felt uncomfortable to be known as part of my family's religious group (for example, Catholic, Jew, Atheist, Christian, Muslim)	.539	.303
Eigenvalue	10.29	1.39
% of variance	60.5%	8.2%



Table 6. Descriptive Statistics for Each Variable

Variables Sc	ale Range	M	SD	Skew	Kurtosis	Alpha	% Missing	
Religious/Spiritual Struggle Scale								
Divine	1-5	1.50	0.80	2.36	5.92	.90	1.07%	
Demonic	1-5	1.21	0.58		18.24	.91	1.10%	
Interpersonal	1-5	1.59			2.57	.79	1.19%	
Moral	1-5	2.06			0.79	.86	1.33%	
Ultimate Meaning	1-5	1.99	1.11	1.12	0.27	.90	1.41%	
Doubt	1-5	1.94	0.98	1.09	0.31	.87	1.25%	
New Religious/Spiritual Strugg	New Religious/Spiritual Struggle Scales for Adolescents							
Parents/Family (All items)	1-5	1.43		2.24	4.99	.91	0.39%	
Parents/Family (8 items)	1-5	1.48	0.82	2.30	4.97	.93	0.43%	
Friends/Peers (All items)	1-5	1.25	0.40	2.92	11.00	.77	0.21%	
Friends/Peers (6-items)	1-5	1.23	0.43	2.99	10.37	.76	0.31%	
R/S Variables								
<b>R/S</b> Commitment	1-5	2.20	0.93	0.59	-0.53	.93	1.23%	
R/S Comfort	1-4	2.57	0.95	-0.21	-1.16	.95	2.11%	
Mental & Physical Health Vari	ables							
Depression	1-5	2.02	0.85	1.07	0.72	.90	2.38%	
Anxiety T-Score	33.5-83.3	53.31	11.90	0.16	-0.49	.92	2.23%	
Anger T-Score	31.5-80.3	53.11	11.19	-0.09	-0.38	.90	3.76%	
Bullying-Physical (Sum)	6-36	6.45			39.25	.80	6.01%	
Bullying-Social (Sum)	6-36	6.89	2.06	2.70	12.50	.64	6.01%	
Bullying-Verbal (Sum)	6-36	8.61	4.05	2.55	7.75	.84	6.22%	
Bullying-Cyber (Sum)	6-12	2.10	0.53	6.75	59.47	.74	5.96%	
Victimization-Physical (Sum)	) 6-36	6.63	1.85	4.22	24.33	.77	4.96%	
Victimization-Social (Sum)	6-36	8.41	3.57	2.00	4.95	.82	5.02%	
Victimization-Verbal (Sum)	6-36	8.86	4.25	2.43	7.80	.87	5.12%	
VictimCyber (Sum)	2-12	2.32	0.91	4.16	21.11	.83	4.70%	
Hassles-Parents	1-5	2.06	0.92	0.96	0.26	.88	3.49%	
Hassles-Friends/Others	1-5	1.43	0.48	1.89	5.30	.74	3.40%	
Negative Body Image	1-7	2.61	1.92	0.20	-1.20	.93	1.25%	
Neg. Comp. Eating (Sum)	5-60	1.76	3.86	3.65	15.76	.56	2.27%	
Negative Mood	1-5	2.20	0.87	0.64	-0.33	.81	3.76%	
Anxious Attach. to Parents	1-7	1.58	0.92	2.00	3.84	.78	8.15%	
Avoidant Attach. to Parents	1-7	3.27	1.37	0.26	-0.66	.85	8.10%	
Insomnia (Sum)	0-60	22.84	12.90	0.34	-0.64	.93	4.26%	
Health	1-5	3.50	0.97	-0.29	-0.36		0.01%	
Positive Mood	1-5	3.23	0.92	-0.02	-0.64	.90	3.57%	
Self-Esteem (Sum)	10-40	29.38	6.17	-0.52	0.31	.91	2.95%	
Academics								
Satisfaction with School	1-7	5.00	1.46	-0.84	-0.13		0.01%	
Satisfaction with Grades	1-7	5.28	1.57	-0.99	0.27		0.01%	
GPA	0-4.3	3.74	0.38	-1.61	3.17	.72	23.32%	

Notes. % Missing refers to percentage of missing data at the item-level. Variables' means were analyzed for the above descriptive statistics unless otherwise noted.



Table 7. Demographic Means a	School 1		School 3	Total
n	158	91	70	319
Mean Age (SD)	15.48 (1.1)	15.88 (1.2)	15.63 ( <i>1</i> .	1) 15.63 (1.1)
14	37	16	13	66
15	40	19	22	81
16	49	16	13	78
17	32	40	22	94
Genders				
Male	0	38	26	64
Female	156	53	43	252
Transgender Male	0	0	0	0
Transgender Female	0	0	0	0
Other	1	0	1	1
Prefer Not to Say	1	0	0	1
Sexual Orientation				
Heterosexual	137	81	55	273
Gay	0	3	2	5
Lesbian	1	0	0	1
Bisexual	8	1	4	13
Asexual	3	0	0	3
Questioning	3	0	1	4
Other	0	0	3	3
Prefer Not to Say	2	3	4	9
School Grade				
9 <sup>th</sup>	43	22	21	86
10 <sup>th</sup>	45	17	17	79
11 <sup>th</sup>	46	19	14	79
12 <sup>th</sup>	24	33	18	75
Races/Ethnicities				
White	117	82	45	244
Biracial	11	4	6	21
African American/Black	18	2	2	22
Asian/Pacific Islander	3	1	10	13
Latino/Hispanic	3	1	2	6
American Indian	0	0	1	1
Middle Eastern	1	0	1	2
English as Primary Language				
Yes	153	89	66	308
No	4	1	4	9
US Born	150	87	65	302
Youth (Y) & Parents (P) R/S <sup>†</sup>	Y P	<u>Y</u> <u>P</u>	<u>Y</u> <u>I</u>	Р ҮР
Christian	$12\overline{8}$ $13\overline{2}$	79 89	26 34	
Jewish	1 0	0 0	2 3	





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Table 7. Demographic Means and Frequencies by School and Total

\*Youth could choose one or more of the below options for their and their parents' r/s. Such r/s may or may not correspond with participants' belief in God.

Note: School 1 = All Girls Catholic Preparatory, School 2 = Co-Ed. Catholic Preparatory, School 3 = Co-Ed, Secular Preparatory.



Divine Demonic Interpersonal Moral Ultimate M	Divine	Demonic	Interpersonal	Moral	Ultimate Meaning	Doubt
Religious Commitment	16**		08	04	22**	20**
Religious Comfort	31**	06	18**	-00	33**	36**
Depression	.45**	.15**	.37**	.41**	**69.	.41**
Anxiety	.35**	.22**	.33**	.40**	.47**	.35**
Anger	.48**	.22**		.49**	.52**	.42**
Bully-Physical	.03	.36** [.17**]	*] .10†	$.10^{+}$	.05	.04
Bully-Social	$.10^{\circ}$	.35**[.23**]		.26**	.22**	$.16^{**}$
Bully-Verbal	00	.22**	.27**	$.19^{**}$	.14*	$.10^{+}[.13^{*}]$
Bully-Cyber	.01	.11†	01	$.16^{**}$	.14*	.03
Victim-Physical	.24**	.30**	.25**	$.17^{**}$	.11†	.08
Victim-Social	.27**	.22**	.21**	.28**	.24**	.22**
Victim-Verbal	.24**	.20**	.30**	.20**	.24**	$.19^{**}$
Victim-Cyber	$.18^{**}$	.19**	.12* [.11]	.26**	.21**	$.17^{**}$
Hassles-Parents	.37**	.22**	.25**	.40**	.43**	.32**
Hassles-Friends & Others	.30**	.11*	.27**	.31**	.38**	$.30^{**}$
Negative Body Image	.24**	.07	.22**	.37**	.41**	.34**
Neg. Compensatory Behaviors	.29**	.06	.28**	.29**	.32**	.33**
Negative Mood	.45**	.25**	.34**	.44**	.60**	.37**
Anxious Attachment to Parents	.38**	.26**	.15*	$.17^{**}$	.25**	$.17^{**}$
Avoidant Attachment to Parents	.32**	.20**	.21**	.27**	.34**	.25**
Insomnia	.33**	.11*[.11†]	.29**	.38**	$.50^{**}$	.36**
Health	21**	10†	24**	28**	40**	34**
Positive Mood	27**	16**	22**	25**	45**	28**
Self-Esteem	41**	17**	31**	39**	63**	34**
Satisfaction with School	29**	07	24**	18**	28**	24**
Satisfaction with Grades	21**	15**	14*	18**	26**	14*
GPA	- 15**	- 11+	03	- 06	- 08	- 02

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60

Note. Scales with skew  $\geq 2$  were transformed into their natural logarithmic values and correlations using these values were run. Any major differences in statistical significance or effect size are noted in brackets within the table. All correlations with Religious Comfort and Commitment were with religious participants only.

(Poor Mental	RCI-A Bs		.67**		05	1		.08	-		03			16**	-		12†	1		13* [08]			07			06	-		05
tors of Distress (	Doubt $\beta s$		19**		15* [13†]	.01		01	05		08	18		01	02		.07			20* [14]	.20		09	16		26**	08		08
edicting Indica	Ult. Meaning $\beta s$		09		1†] .55**			.35**	.33*		.26**	[.32†] .32*		03	31†		.04	.17† [.22*]		01	.02		[.17*] .22**	.16		06	24		60 <sup>.</sup>
Religiosity Pr	Moral $\beta s$		$.14^{**}$		.12** [.11†]	.05		$.16^{*}$	03		-¥-	.34* [.3		.05	.05		.25**	08		.19*	07		.16† [.1			.03	.03		.11
S subscales and	Interpersonal Bs		.01		60.	.17		.11	.29*		.13†	.34**		.43** [.15*]01	.41**		10	.02		.32**	.26		05	16		.33**	[.26†] .38**		.17*
ons of the RSS	Demonic $\beta s$		02		05	11		.06	.06		.04	12		.43** [.	.26†		.19**	.81**		[13†] .24**	.24†		.05	07		.30**	.33* [.		.13†
neous Regressi ss, and R/S	Divine $\beta s$		10†		.22**	10		.08	.15		.25**	.10		09	05		11	.01		16* [	13		13	.02		.25**	.11		60 <sup>.</sup>
: Simultar Academic	$R^2$		.60**		.50**	.58**		.30**	.24**		.40**	.40**		$.18^{**}$	.11†		$.12^{**}$	**69.		$.17^{**}$	.04		.04*	07		.20**	.18*		.11**
Table 9. Hypothesis 2: Simultaneous Regressions of the RSS subscales and Religiosity Predicting Indicators of Distress (Poor Mental and Physical Health), Academics, and R/S	Indicators of Distress	<b>Religious Comfort</b>	Believers	Depression	Believers	Non-Believers	Anxiety	Believers	Non-Believers	Anger	Believers	Non-Believers	<b>Bully-Physical</b>	Believers	Non-Believers	Bully-Social	Believers	Non-Believers	Bully-Verbal	Believers	Non-Believers	Bully-Cyber	Believers	Non-Believers	Victim-Physical	Believers	Non-Believers	Victim-Social	Believers
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62

	(Poor Mental	RCI-A <sub>βs</sub>	:		14* [09]			10			08	-		02			07	-		.02			.02	-		03	-		23**	-
	ators of Distress	Do	.14		20* [12]	.23		†]11			06			03	13		.02	.20		.11	02		-00	22		17†	12		06	.05
:	dicting Indica	Ult. Meaning βs	.02		.03	.10		$.19^{*}[.16^{\dagger}]$	23		.25**	.33* [.30		.29**	.23		$.26^{**}$	.47**		†] .03			.48**	.44**		.10	.14		.10	.41*
- - -	Religiosity Pre	Moral βs	09		.08	25		.10	.51**		$.17^{*}$	.38†		.06	.33†		.23**	.01		$.17^{*}$ [.16 $\dagger$ ]			$.17^{**}$	.18		14†	.23		.14†	22
:	subscales and ]	Interpersonal Bs	60.		2†] .27**			.12	05		.12†	07		.12	.37*		.08	17		.06	.07		.03	.31*		.15†	.23		.10	-00
	of the RSS	3s	.32*		.16* [.12†]			.10	.23†		60.	07		00.	16		10	.07		09	.11		.04	.02		.24**	02		.10	.16
- ,	us Regressions and R/S		.29†[.39*]		.16* [.13]	.04		.01	.11		$.14^{*}$ $[.10]$	.24		.11	11		.01	06		.12	.15		$.19^{**}$	.02		.41**	.03		$.16^{*}$ [.15 $\dagger$ ]	.23
	: Simultaneo Academics,	$R^2$	$.18^{*}$		$.14^{**}$	÷60 <sup>.</sup>		**60.	.23**		.28**	$.17^{*}$	hers	$.18^{**}$	.22**		.21**	.21**	ehaviors	$.11^{**}$	.24**		.45**	.30**	to Parents	.23**	.05	to Parents	.20**	.14*
-	Table 9. Hypothesis 2: Simultaneous Regressions of the RSS subscales and Religiosity Predicting Indicators of Distress (Poor Mental and Physical Health), Academics, and R/S	Indicators of Distress	Non-Believers	Victim-Verbal	Believers	Non-Believers	Victim-Cyber	Believers	Non-Believers	Hassles-Parents	Believers	Non-Believers	Hassles-Friends & Others	Believers	Non-Believers	Negative Body Image	Believers	Non-Believers	Neg. Compensatory Behaviors	Believers	Non-Believers	Negative Affect	Believers	Non-Believers	Anxious Attachment to Parents	Believers	Non-Believers	Avoidant Attachment to Parents	Believers	Non-Believers
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63

Table 9. Hypothesis 2: Simultaneous Regressions of the RSS subscales and Religiosity Predicting Indicators of Distress (Poor Mental and Physical Health), Academics, and R/S	Simultane Academics	ous Regressi, and R/S	ions of the RS	S subscales and H	Religiosity	Predicting Indicat	ors of Distres	ss (Poor Mental
Indicators of Distress	$R^2$	Divine $\beta s$	Demonic $\beta s$	Demonic \u00c8s Interpersonal \u00e8s Moral \u00e8s Ult. Meaning \u00e8s	Moral $\beta s$	Ult. Meaning Bs	Doubt $\beta s$	RCI-A $\beta s$
Insomnia								
Believers	.30**	60.	06	.03	.20**	.36**	00.	05
Non-Believers	.22**	07	10	.14	.08	.47**	00.	
Health								
Believers	.19**	07	01	10	-00	21**	05	$.16^{**}$
Non-Believers	.23**	.42**	.08	04	03	39**	26	
<b>Positive Affect</b>								
Believers	.32**	04	08	-00	03	30**	.06	.37**
Non-Believers	.18*	00.	.15	.12	16	53**	.14	
Self-Esteem								
Believers	.45**	19**	.02	11†	16**	51**	.24**	.14**
Non-Believers	.33**	07	.12	60.	06	65**	.06	
Satisfaction with School								
Believers	.15**	22**	.01	14†	.03	16† [17*]	·] .01	.11†
Non-Believers	08	.39	.02	31	.07	46	.02	
Satisfaction with Grades	es							
Believers	.08**	15† [	[17*]10	10	06	14†	.13	60.
Non-Believers	04	.35	.37	.02	53	19	10	
GPA								
Believers	.01	15†	07	.07	07	.03	.05	60.
Non-Believers	.08	41*	09	.30†	06	12	.24	
* $p \leq .05$ , ** $p \leq .01$ , † $p \leq .10$	$p \leq .10$							
Note. Separate regressions were conducted for Believers (i.e., youth endorsing at least some belief in God or more) and Non-Believers	ions were	conducted for	r Believers (i.	e., youth endorsir	ng at least s	ome belief in God	l or more) an	d Non-Believers

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Note. Separate regressions were conducted for Believers (i.e., youth endorsing at least some belief in God or more) and Non-Believers Commitment Inventory for Adolescents; Scales with skew  $\geq 2$  were transformed into their natural logarithmic values and regressions using these values were run. Results were similar. Any major differences in statistical significance, effect size, or betas are noted in (i.e., youth who endorsed atheistic or agnostic beliefs). The RCI-A was not included in the simultaneous regressions for the nonbelieving group. The same applies to Religious Comfort. See religiosity measures section for this reasoning. RCI-A = Religious brackets within the table.

Table 10. Hypothesis 4: Simu	taneous Regress	Table 10. Hypothesis 4: Simultaneous Regressions of RSS Interpersonal Subscale and the RSS-A Peers and Parents/Family R/S	ale and the RSS-A Peers	and Parents/Family R/S
Indicators of Distress Recurring Indicators of S		Parents/Family (8 items) Bs	Peers (6 items) Bs	RSS Interpersonal Bs
Religious Comfort	.05**	17*	08	07
Religious Commitment	.01	12 [12†]	01	03
Depression	.15**	.14*	.05	.28**
Anxiety	.12**	$.08^{**}$ [.10]	$.10^{+}$	.25**
Anger	$.16^{**}$	$.12^{+}$ [.14 <sup>*</sup> ]	60.	.30**
Bully-Physical	00 <sup>.</sup>	.02	00.	60.
Bully-Social	.02*	06	.13*	.08
Bully-Verbal	.07**	01	.07	.24**
Bully-Cyber	.01	03	02	.02
Victim-Physical	.07**	05	$.15^{*}$ [.13†]	.22**
Victim-Social	$.10^{**}$	13*	.29**	.15*
Victim-Verbal	$.10^{**}$	01	.15*	.25**
Victim-Cyber	.02* [.01†]		[60] **60.	.15* [.12†]
Hassles-Parents	.20**	.42**	.06	.02
Hassles-Friends & Others	**60.	.02	.17**	.21**
Negative Body Image	.05**	.09 [.12†]	60.	.13* [.12†]
Neg. Compensatory Eating	**60.	.07	.11† [.08]	.20**
Negative Mood	.11**	.07	.07	.27**
Anxious Attachment to Parents		.27**	00 <sup>.</sup>	01
Avoidant Attachment to Parents	ts .13**	.33**	.08	.02
Insomnia	$.10^{**}$	.15*	.08	.18**
Health	.08**	12†	14*	13†
Positive Mood	.05**	11 [13†]	04**	14* [13†]
Self-Esteem	$.10^{**}$	15*	02	22**
Satisfaction with School	.07**	-09	09 [11†]	16*
Satisfaction with Grades	.03**	17**	.02	07
GPA	.03**	23**	00.	.13* [.12†]

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65

Note. Scales with skew  $\geq 2$  were transformed into their natural logarithmic values and regressions using these values were run. Results were similar. Any major differences in statistical significance, effect size, or betas are noted in brackets within the table.

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	Parents/Family R/S	
	Struggle	Peers R/S Struggle
RSS Struggles	8 items	6 items
Divine	.33**	.29**
Demonic	.05	.16**
Interpersonal	.49**	.42**
Moral	.25**	.27**
Ultimate Meaning	.31**	.28**
Doubt	.52**	$.42^{**}$

Table 11. Hypothesis 5: RSS Correlations with New Brief RSS-A Parents/Family and Peers R/S Struggle Subscales

\*  $p \le .05$  (2-tailed), \*\*  $p \le .01$  (2-tailed)

Note. Scales with skew  $\geq 2$  were transformed into their natural logarithmic values and correlations using these values were run. No major differences in statistical significance or effect size were found.



	Parents/Family R/S	Peers R/S
	8 Items	6 Items
Religious Commitment	13*	06
Religious Comfort	23**	16**
Depression	.30**	.22**
Anxiety	.24**	.24**
Anger	.29**	.25**
Bully-Physical	.07	.04
Bully-Social	.03	.15*
Bully-Verbal	.13*	.17**
Bully-Cyber	03	02
Victim-Physical	.11† [.08]	.22**
Victim-Social	.05	.30**
Victim-Verbal	.16**	.25**
Victim-Cyber	01	.11† [.12*]
Hassles-Parents	.45**	.22**
Hassles-Friends & Others	.14*	.24**
Neg. Body Image	.19**	.18**
Neg. Compensatory Behaviors	.21**	.22**
Negative Mood	.23**	.21**
Anxious Attachment to Parents	.28**	.11†
Avoidant Attachment to Parents	.36**	.21**
Insomnia	.26**	.21**
Health	23**	24**
Positive Mood	19**	14* [16**]
Self-Esteem	27**	17**
Satisfaction with School	21**	19**
Satisfaction with Grades	20**	07
GPA	16**	02

Table 12. Hypothesis 6: New RSS-A Parents/Family and Peers Subscales' Pearson Correlations with Mental and Physical Health, R/S, and Academics

\*  $p \le .05$  (2-tailed), \*\*  $p \le .01$  (2-tailed), † < .10

Note. Scales with skew  $\geq 2$  were transformed into their natural logarithmic values and correlations using these values were run. Results were similar. Any major differences in statistical significance, effect size, or betas are noted in brackets within the table. Only religious participants were included in the correlations with religious commitment and comfort.



Abbreviation	Item
Div 1	Questioned God's love for me
Div 2	Felt angry at God
Div 3	Felt as though God had abandoned me
Div 4	Felt as though God was punishing me
Div 5	Felt as though God had let me down
Dem 1	Felt attacked by the devil or by evil spirits
Dem 2	Felt as though the devil (or an evil spirit) was trying to turn me away from
	what was good
Dem 3	Worried that the problems I was facing were the work of the devil or evil
	spirits
Dem 4	Felt bullied by the devil or evil spirits
Int 1	Had conflicts with other people about religious/spiritual matters
Int 2	Felt rejected or misunderstood by religious/spiritual people
Int 3	Felt as though others were looking down on me because of my
	religious/spiritual beliefs
Int 4	Felt angry at organized religion
Int 5	Felt hurt, mistreated, or offended by religious/ spiritual people
Moral 1	Felt guilty for not living up to what I believe is right versus wrong
Moral 2	Worried that my actions went against what my religion/spirituality says is
	right versus wrong
Moral 3	Wrestled to follow what is really right versus wrong
Moral 4	Felt torn between what I wanted and what I knew was really right
Mng 1	Had concerns about whether there is any ultimate purpose to life or
	existence
Mng 2	Felt as though my life had no deeper meaning
Mng 3	Questioned whether my life will really make any difference in the world
Mng 4	Questioned whether life really matters
Doubt 1	Struggled to figure out what I really believe about religion/spirituality
Doubt 2	Felt troubled by doubts or questions about religion or spirituality
Doubt 3	Felt confused about my religious/spiritual beliefs
Doubt 4	Worried about whether my beliefs about religion/spirituality were correct
Par/Fam 1	Had conflicts with my parent(s) or family over my religious/spiritual
	beliefs or behaviors
Par/Fam 2	Felt pressured by my parent(s) or family to follow their religious/spiritual
Dom/Earra 2	beliefs or behaviors
Par/Fam 3	Felt frustrated because my parent(s) or family would not allow me to
Dau/E 4	question or explore my religious/spiritual beliefs
Par/Fam 4	Felt concerned because my parents or family members disagreed with
Par/Fam 5	each other about religious/spiritual beliefs or behaviors
ги <i>г/ги</i> т э	Had negative experiences in my family (like divorce or abuse) that made
	me question my religious/spiritual beliefs or behaviors

Table 13. RSS and RSS-A Items and Corresponding Abbreviations within Figures



Par/Fam 6	Felt guilty that I was not interested in my parents' or family's
1 <i>ui/1 uii</i> 0	religion/spirituality
Par/Fam 7	Worried about whether I had to accept my parents' or family's
1 al/1 alli /	religion/spirituality or if it was okay to question their beliefs
Par/Fam 8	Felt uncomfortable to be known as part of my parents' or family's
1 <i>un</i> /1 <i>um</i> 0	religious/spiritual group (for example, to be known as Catholic, Jewish,
	atheist, Christian, Muslim, etc.)
Par/Fam 9	Worried about what would happen if I chose different religious/spiritual
	beliefs from my parent(s) or family
Par/Fam 10	Felt like my parent(s) or family members were forcing their
1 ui/1 uiii 10	religious/spiritual beliefs or behaviors on me
Par/Fam 11	Felt frustrated that my parent(s) wouldn't let me do something I wanted to
	do because it went against their religion/spirituality
Par/Fam 12	Felt frustrated that my parent(s) or family did not trust me to make my
	own decisions about religion/spirituality
Peers 1	Felt bullied by friend(s) or peer(s) because of differences between our
	religious/spiritual beliefs or behaviors
Peers 2	Felt uncomfortable with my friend(s) or peer(s) because of differences in
	our religious/spiritual beliefs or behaviors
Peers 3	Felt pressured by my friend(s) or peer(s) to go along with their
	religious/spiritual beliefs or behaviors
Peers 4	Felt like I had to hide my religious/spiritual beliefs or behaviors from my
	friend(s) or peer(s)
Peers 5	Felt that I had to pretend to believe in a certain religion/spirituality to
	avoid problems with my friend(s) or peer(s)
Peers 6	Had conflicts with my friend(s) or peer(s) over religious/spiritual beliefs
	or behaviors
Peers 7	Felt like my friend(s) or peer(s) were forcing their religious/spiritual
	beliefs or behaviors on me
Peers 8	Felt guilty that I let my friend(s) or peer(s) think I had the same
_	religious/spiritual beliefs or behaviors as them
Peers 9	Worried about whether it is right or wrong to date someone who has
	different religious/spiritual beliefs or behaviors
Note Italicize	ed items were removed during the scale refinement process

Note. Italicized items were removed during the scale refinement process.



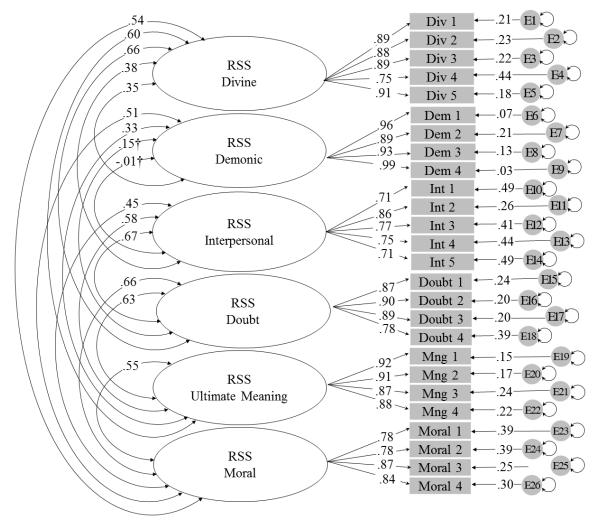


Figure 1. Hypothesis 1: Confirmatory Factor Analysis of the 6-Factor Religious/Spiritual Struggle Scale

 $^{+}.10 > p > .05$ 

Note. Fit indices:  $\chi^2$  (*df* = 284, *N* = 297) = 450.06, p = .00; RMSEA = .04; CFI = .98, TLI = .98. All above values are significant at  $p \le .01$  unless noted. See Table 13 for items corresponding to abbreviated item labels.



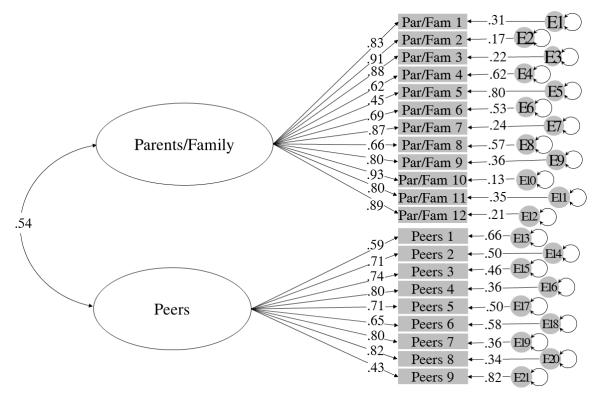
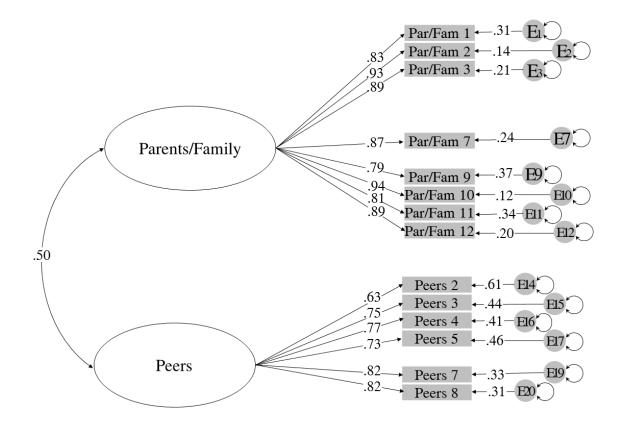


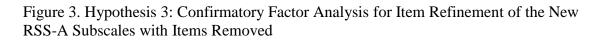
Figure 2. Hypothesis 3: New RSS-A Adolescent R/S Struggle Subscales-All Items



Note. Fit indices: RMSEA = .05; CFI = .97; TLI = .97;  $\chi^2$  (*df* = 188, *N* = 314) = 339.05, *p* = .00. All above values are significant at  $p \le .01$  unless noted. See Table 13 for items corresponding to abbreviated item labels.





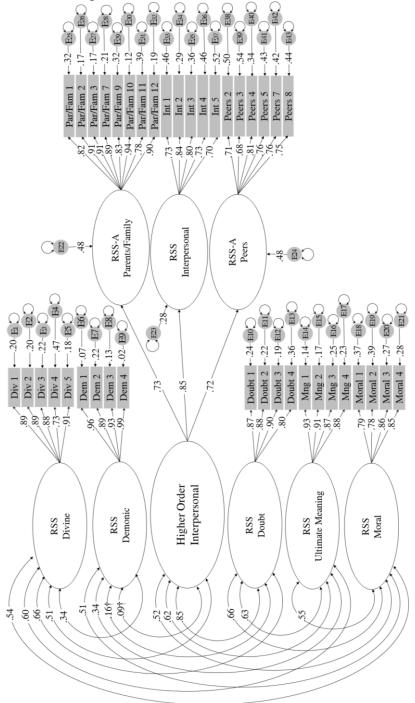


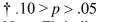
 $^{\dagger}.10 > p > .05$ 

Note. Fit indices: RMSEA = .04; CFI = .99; TLI = .99;  $\chi^2$  (*df* = 76, *N* = 314) = 111.80, *p* = .00. All above values are significant at  $p \le .01$  unless noted. See Table 13 for items corresponding to abbreviated item labels.



Figure 4. Hypothesis 4: 6-Factor Confirmatory Factory Analysis of the RSS with a Higher-Order Interpersonal Struggle Scale Composed of the Brief RSS-A Subscales and the RSS Interpersonal Subscale





Note. Fit indices: RMSEA = .03; CFI = .99; TLI = .98;  $\chi^2$  (*df* = 722, *N* = 294) = 908.35, *p* = .00. All above values are significant at  $p \le .01$  unless noted. See Table 13 for items corresponding to abbreviated item labels.



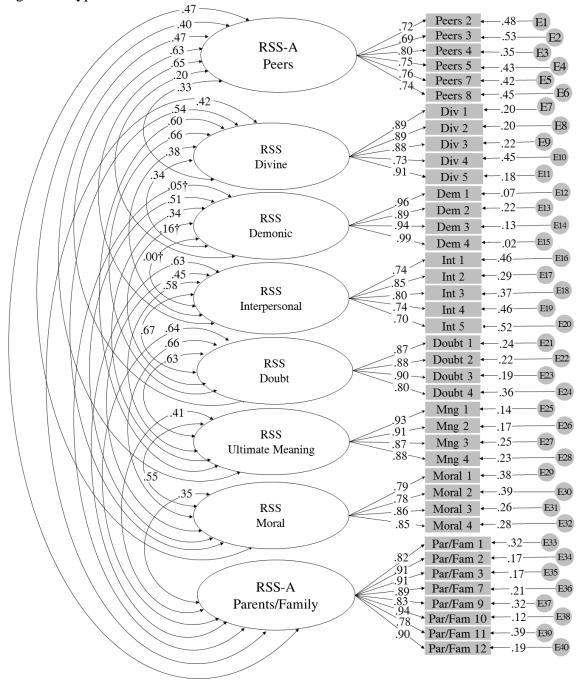


Figure 5. Hypothesis 4: 8-Factor Model of the RSS and Brief RSS-A

 $\dagger .10 > p > .05$ 

Note. Fit indices: RMSEA = .03; CFI = .99; TLI = .98;  $\chi^2$  (*df* = 712, *N* = 294) = 901.37, *p* = .00. All above values are significant at  $p \le .05$  unless noted. See Table 13 for items corresponding to abbreviated item labels.



Appendix A: New Adolescent R/S Struggle Items Regarding Parents/Family and Peers

	NOU	A		Quite	
	at		Some-	a	great
	all	bit	what	bit	deal
Had conflicts with my parents/family over my					
religious/spiritual behaviors or beliefs					
Felt bullied by friends/peers because of differences between					
our religious beliefs					
Felt pressured by my parents/family to follow their					
religious/spiritual practices or beliefs					
Felt uncomfortable with my friends/peers because of					
differences in our religious/spiritual beliefs or practices					
Felt frustrated because my parents/family would not allow me					
to question or explore my religious/spiritual beliefs					
Felt pressured by my friends/peers to go along with their					
religious beliefs and practices					
Felt concerned because my parents/family members disagreed					
with each other about religious/spiritual beliefs					
Felt like I had to hide my religious beliefs or behaviors from					
my friends/peers					
Had negative experiences in my family (like divorce or abuse)					
that made me question my religious/spiritual beliefs					
Felt that I had to pretend to believe in a certain religion to					
avoid problems with my friends/peers					
Felt guilty because I was not interested in my family's					
religion/spirituality					
Had conflicts with my friends/peers over religious beliefs					
Worried about whether I had to believe in my family's religion					
or if it was okay to question their beliefs					
Worried about whether it is right or wrong to date someone					
who has different religious/spiritual beliefs					
Felt uncomfortable to be known as part of my family's					
religious group (for example, Catholic, Jew, Atheist, Christian,					
Muslim)					
Felt like my friends/peers were forcing their religious beliefs					
on me					
Worried about what would happen if I chose different					
religious/spiritual beliefs from my family					
Felt guilty that I let my friends/peers think I had the same					
religious beliefs as them					
Felt like my parents/family members were forcing their					
religious beliefs on me					

Over the past few months, how often have you had each of the experiences listed below?



Felt frustrated that my parents wouldn't let me do something I wanted to do because it went against their religious/spiritual		
beliefs		
Felt frustrated that my parents did not trust me to make my own		
decisions about religion		

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Appendix B. Parent Informed Consent Form

### INFORMED PARENT/GUARDIAN CONSENT DOCUMENT

Validation of Religious and Spiritual Struggles Scales For Adolescents: Religious and Spiritual Struggles and Student Well-Being

Dear Parent/Guardian,

You are being asked to give your consent for your child to participate in a research study about physical health, mental health, and religious and spiritual (r/s) struggles (e.g., anger toward God, conflict with others over religious or spiritual beliefs, religious doubting). [Name of School]'s administrator(s) have reviewed and given approval for the study. Your child was selected as a possible participate because he or she is an adolescent attending [Name of School].

Researchers at Case Western Reserve University (CWRU) are conducting this study.

#### **Purpose**

The purpose of this study is to deepen our understanding of the roles of religious and spiritual issues in the lives of high school students. Prior research has shown that religion and spirituality can be helpful for adolescents; however, sometimes religion and spirituality raise issues that can be challenging to cope with as well. We want to understand how students' experiences around religion and spirituality are related to their mental health and well-being.

#### **Procedures**

If you give permission for your child to participate and he or she also gives assent to participate in the study, we would ask your child to fill out a paper or online survey. The survey will take approximately 30 minutes to complete. It will be administered in groups by the researchers and/or trained school staff during a school period between September and December of 2015 as determined by [Name of School] administrators.

You can choose to withdraw your permission for your child to participate for any reason at any time. If you give permission to participate, your child can still refuse to participate in the study. He or she can also skip questions or withdraw from the study at any point.

#### **Foreseeable Risks and Discomforts**

There are no known risks, harms or discomforts associated with this study beyond those encountered in normal daily life. Some of the questions in the survey might make your child feel uncomfortable. Your child may refuse to answer any of the questions, take a break, or stop participation in this study at any time. The possible risks and/or discomforts associated with the procedures described in this study include questions about the following: religion and spirituality, depression and anxiety, bullying, anger, daily hassles, self-esteem, eating and body image concerns, insomnia, general mood,



relationship styles, academic grades, gender, sexual orientation, and satisfaction with school.

# **Anticipated Benefits**

Students and their families do not benefit directly from taking part in this research. However, a report of the group results of this study may help [Name of School] identify mental health, physical health, and r/s needs and strengths in general and by grade. It may also help [Name of School] to normalize r/s struggle experiences as a part of typical youth development.

# **Compensation**

There will be no costs to you or your child for study participation. You, your child, and schools will not be compensated for participation in this research study.

## **Alternatives to Participation**

You have the option to not allow your child to participate in this research study.

# **Voluntary Nature of the Study**

Your permission for your child to participate in this study is voluntary. If you choose not to give your permission or if your child chooses not to participate, it will not affect your or your child's current or future relations with the University or with [Name of School]. There is no penalty or loss of benefits for not participating or for discontinuing participation. This will be explained to your child verbally and in writing prior to the start of the study.

You are free to withdraw permission for your child to participate in this study at any time. **If you decide to withdraw your permission for your child to participate in this study, you should notify the research team immediately**. If you elect to withdraw your child from this research study, the researchers will discuss with you what they intend to do with your child's study data. Researchers may choose to analyze the study data already collected or they may choose to exclude your child's data from the analysis of study data and destroy it, as per your request. Any data provided by students who later choose not to participate will be destroyed. If your child completes the survey and turns it in and then later decides he or she no longer wants to participate, it will be impossible to destroy your child's specific data because this data will be anonymous and combined with all of the other students' data.

# **Confidentiality**

The survey does not ask for your child's name or contact information. Any time information is collected, there is a potential risk for loss of confidentiality. Every effort will be made to keep your child's information confidential; however, this cannot be guaranteed. In any sort of report we might publish, we will not include any information that will make it possible to identify a participant. All information that identifies your individual child will be removed from the study data. Information about individual youth will not be shared with parents/guardians, youth, or schools. However, confidentiality of



responses will be broken if the researchers are concerned about child safety. This includes information suggesting child abuse or neglect or suicidal or homicidal intent.

# Data Storage

Research records will be kept in a locked file and/or on a password-protected computer. Access to records will be limited to researchers and CWRU's review board responsible for protecting human participants and regulatory agencies. Consent and assent forms containing your child's name will be stored separately from survey data.

## **Data Retention**

The researchers intend to keep the research data indefinitely because the data will be deidentified.

# **Results**

[Name of School] will receive a report of the group results, not individual children's results, of the data collected at your school along with information on how this compares to other local unnamed schools. The researchers may also give a presentation of the study's general findings to school staff, parents, and/or students.

# **Contacts and Questions**

The researchers conducting this study are Steffany Homolka, M.A., and Julie Exline, Ph.D.. If you have any questions, concerns or complaints about the study, you may contact Steffany at (920) 268-9516 or sjh100@case.edu and Dr. Exline (216) 368-8573 or jaj20@case.edu. Steffany Homolka is a doctoral candidate in CWRU's Clinical Child Psychology Ph.D. Program and is using this study as her dissertation project, supervised by Dr. Exline.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, please contact Case Western Reserve University's Institutional Review Board at (216) 368-6925 or write: Case Western Reserve University; Institutional Review Board; 10900 Euclid Ave.; Cleveland, OH 44106-7230.

If you agree to have your child participate in this study, please check the appropriate option, sign one copy of the consent form, and return this copy to the school. If you do not agree to have your child participate, please check the appropriate option, sign one copy of the consent form, and return this copy to the school. Please keep the other copy of the consent letter for your records.

You and your child's cooperation is greatly appreciated. Please return this form to the school office within a week of your child having received it.

Thank you,



Steffany J. Homolka, M.A. Doctoral Candidate, Dept. of Psych. Sciences Case Western Reserve University Cell: (920) 268-9516 Email: sjh100@case.edu Julie Exline, Ph.D. Professor, Dept. of Psych. Sciences Case Western Reserve University Office: (216) 368-8573 Email: jaj20@case.edu

# Parent Statement of Consent PLEASE CHECK <u>ONE</u>:

□ **YES, I CONSENT** as the parent/guardian of a child attending [Name of School], for my child to participate in this research.

□ NO, I DO NOT CONSENT as a parent/guardian of a child attending [Name of School], for my child to participate in this research.

Your signature below certifies the following:

- You are at least 18 years of age.
- You are a parent/guardian of the below listed child.
- You have read (or been read) the information provided above.
- You have received answers to all of your questions and have been told who to call if you have any more questions.
- You have freely decided whether or not to give your permission for your child to participate in this research.
- You understand that you are not giving up any of your legal rights.

Printed Name of Child

Printed Name of Parent/Guardian

Signature of Parent/Guardian

Signature of Person Obtaining Consent

For Researcher Use Only:

- □ Student gave signed assent (if parent gave consent). Consent Date: \_\_\_\_\_
- □ Student did not give assent. Student cannot participate in study.

□ Parent/guardian withdrew consent. Withdrawal Date: \_\_\_\_

□ Student completed survey. Unable to remove data due to anonymity of dataset.

- □ *Student did not participate in survey.*
- □ Student did not complete survey. Incomplete survey data was destroyed.

□ Student withdrew consent. Withdrawal Date: \_\_\_\_

□ Student completed survey. Unable to remove data from dataset due to anonymity.

□ *Student did not participate in survey.* 

□ Student did not complete survey. Incomplete survey data was destroyed.



Date

Date

# Appendix C. Adolescent Assent Form INFORMED STUDENT ASSENT DOCUMENT

Validation of Religious and Spiritual Struggles Scales For Adolescents: Religious and Spiritual Struggles and Student Well-Being

### Dear Student of [Name of School],

You are being asked to participate in a research study about physical health, mental health, and religious and spiritual (r/s) struggles (e.g., anger toward God, conflict with others over religious or spiritual beliefs, religious doubting). [Name of School]'s administrator(s) have reviewed and given approval for the study. You were selected as a possible participate because you are an adolescent attending [Name of School].

Researchers at Case Western Reserve University (CWRU) are conducting this study.

### **Purpose**

The purpose of this study is to improve our understanding of the roles religious and spiritual issues have in the lives of high school students. Prior research has shown that religion and spirituality can be helpful for adolescents; however, sometimes religion and spirituality raise issues that can be hard to cope with as well. We want to understand how students' experiences around religion and spirituality are related to their mental health and well-being.

#### **Procedures**

If you agree to be a participant in this research, we would ask you to fill out a paper or online survey. The survey will take approximately 30 minutes to complete. It will be administered in groups by the researchers and/or trained school staff during a school period between September and December of 2015 as determined by [Name of School] administrators.

You can choose to stop participating for any reason at any time. However, if you decide to stop participating in the study, we encourage you to tell the researchers. You can refuse to participate in the study even if your parent/guardian gave permission to participate. You can also skip questions.

## **Potential Risks and Discomforts**

The study contains no major risks that exceed the activities of daily life. Some of the questions in the survey might make you feel uncomfortable. You may refuse to answer any of the questions, take a break, or stop participation in this study at any time. The possible risks and/or discomforts related to the study include questions about the following: religion and spirituality, depression and anxiety, bullying, anger, daily stresses, self-esteem, eating and body image concerns, insomnia, general mood, relationship styles, academic grades, gender, sexual orientation, and satisfaction with school.



## **Possible Benefits**

Students and their families do not benefit directly from taking part in this research. However, a report of the group results of this study (see Results section below) may help [Name of School] better understand and address mental health, physical health, and r/s needs and strengths in general and by grade within your school. It may also help [Name of School] show that r/s struggle experiences are a normal part of many of their students' lives.

### **Compensation**

There will be no costs to you for study participation. You will not be compensated for participation in this research study.

### **Alternatives to Participation**

You have the option to not participate in this research study. If you choose not to participate, your school will offer an alternative activity of their choice (e.g., read quietly, attend a different class, etc.) while your classmates are participating in the survey.

## **Voluntary Nature of the Study**

Your participation in this study is your choice (i.e., voluntary). If you choose not to participate, it will not affect your current or future relationship with the University or with [Name of School]. There is no punishment or loss of benefits for not participating or for discontinuing participation in this study.

You are free to withdraw from this study at any time. If you decide you do not want to participate in this study you should notify the research team immediately.

If you decide to stop participating in the study and inform the researchers of this, any answers you provided will be destroyed. If you complete the survey and turn it in and then later decide you no longer want to participate, it will be impossible to destroy your specific data because your data will be anonymous.

## **Confidentiality**

The survey does not ask for your name or contact information. Please do not provide this information anywhere in the survey. Any time information is collected, there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. This means parents, school staff, and other people will not know what answers you specifically give unless research staff members think you or someone in your family might be in danger of serious harm. If research staff members suspect that you may hurt yourself or someone else, then staff members will report this information to your parent/guardian. If staff members suspect that you are being seriously hurt or someone in your family is being seriously hurt, the staff member will report this to the local Child Welfare Office as directed by law.

In any sort of articles we might publish, we will not include any information that will make it possible to identify you or your school. All information that identifies you will be removed from the study data.



## Data Storage

Research records will be kept in a locked file in a secure location at CWRU and/or on a password-protected computer. Access to records will be limited to researchers and CWRU's review board responsible for protecting human participants and regulatory agencies. Consent and assent forms containing your name will be stored separately from survey data.

# **Data Retention**

The researchers intend to keep the research data forever, because the data will not contain your identities.

## **Results**

[Name of School] will receive a report of the group results, not your individual results, of the data collected at your school along with information on how this compares to other local unnamed schools. The researchers may also give a presentation of the study's general findings to school staff, parents, and/or students.

# **Contacts and Questions**

The researchers conducting this study are Steffany Homolka, M.A., and Dr. Julie Exline. If you have any questions, concerns or complaints about the study, you may contact Steffany at (920) 268-9516 or sjh100@case.edu and Dr. Exline (216) 368-8573 or jaj20@case.edu. Steffany Homolka is a doctoral candidate in CWRU's Clinical Child Psychology Ph.D. Program and is using this study as her dissertation project, supervised by Dr. Exline.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, please contact Case Western Reserve University's Institutional Review Board at (216) 368-6925 or write: Case Western Reserve University; Institutional Review Board; 10900 Euclid Ave.; Cleveland, OH 44106-7230.

If you agree participate in this study, please sign one copy of the assent form and return it to the school. Please keep the other copy of the assent letter for your records.

Your cooperation is greatly appreciated. Please return this form to the school office within a week of having received it.

Thank you,

Steffany J. Homolka, M.A. Doctoral Candidate, Dept. of Psych. Sciences Case Western Reserve University Cell: (920) 268-9516 Email: sjh100@case.edu Julie Exline, Ph.D. Professor, Dept. of Psych. Sciences Case Western Reserve University Office: (216) 368-8573 Email: jaj20@case.edu



### Student Statement of Assent

Your signature below certifies the following:

- You have read (or been read) the information provided above.
- You have received answers to all of your questions and have been told who to call if you have any more questions.
- You have freely decided to participate in this research.
- You understand that you are not giving up any of your legal rights.

Printed Names of Your Parents/Guardians

Printed Name of Student

Signature of Student

Signature of Person Obtaining Consent

For Researcher Use Only:

Parent/guardian gave consent. Consent Date: \_\_\_\_\_

- □ Parent/guardian REFUSED consent. Student cannot participate in study. Refusal Date: \_\_\_\_\_
- □ *Parent/guardian's consent form never received. Student cannot participate in study.*

□ Parent/guardian withdrew consent. Withdrawal Date: \_\_\_\_\_

- □ Student completed survey. Unable to remove data due to anonymity of dataset.
- □ Student did not participate in survey.
- □ Student did not complete survey. Incomplete survey data was destroyed.

□ Student participant withdrew consent. Withdrawal Date: \_\_\_\_\_

□ Student completed survey. Unable to remove data due to anonymity of dataset.

□ *Student did not participate in survey.* 

□ Student did not complete survey. Incomplete survey data was destroyed.



Date

Date

Appendix D. Study Recruitment E-mail for Schools

To whom it may concern,

My name is Steffany Homolka. I am a doctoral student working with Dr. Julie Exline in Case Western Reserve University's clinical psychology program. For my dissertation, I am conducting a research project with high school students regarding challenges in adolescents' religious and spiritual lives (known as religious and spiritual struggles), bullying, self-esteem, mental and physical health, and daily stressors among students. We are writing to see whether it might be possible to invite students from your school to participate in the study's anonymous 20-30 minute survey. The survey is administered once to high school students at a time that is convenient for the school between August and December 2015. The survey can be administered in paper form or through an online link. Of course, we will work with each school to obtain parents' consent before beginning the study. We would be very grateful for the opportunity.

Reflecting on these types of personal issues could benefit students by providing them with new insights about themselves. In addition, the project could benefit your school in this way: After the study is complete, we would prepare a detailed report focusing on the results from your school as well as how your school compares to other local (unnamed) schools. We would also be happy to do a brief presentation for your school's staff and/or students if this would be helpful. Here is the type of information that the study would allow us to provide about participating students from your school:

- religious and spiritual struggle experiences
- bullying and victimization (frequency and forms)
- self-esteem
- negative and positive mood
- attachment styles
- anxiety
- depression
- anger
- body image and eating concerns
- sleep difficulties
- daily stressors
- religious affiliations, salience, and participation

Please let us know if you have any interest or opportunity for you and your school to participate in this study. I would be happy to answer any questions or concerns you may have and provide additional material. You may respond to this email or call Steffany Homolka at (920) 268-9516. We would be happy to meet with you in person if you would prefer to do so. We would be very grateful for the opportunity to work with you. Thank you for your consideration.

Sincerely,



Steffany Homolka, M.A. and Julie J. Exline, Ph.D. Department of Psychological Sciences Case Western Reserve University

Appendix E. Sample In-Depth Description of Proposed Study that was Emailed to Schools

Adolescent Religious/Spiritual Struggles Scale Proposed Study

**Primary Investigators:** Steffany J. Homolka, M.A., and Julie J. Exline, Ph.D. Department of Psychological Sciences Case Western Reserve University **Contacts:** steffany.homolka@case.edu and (920) 268-9516

**Purpose:** The purpose of this study is to provide validation tests for the Religious and Spiritual Struggles scale (RSS; Exline, Pargament, Grubbs, & Yali, 2014) among older adolescents, including several new subscales that may be more specific to adolescents.

**Research Theory:** Many studies have demonstrated that religion and spirituality (r/s) are important and common aspects of youths' well-being and general development. They also serve as their own distinct developmental domains. For instance, researchers have demonstrated that r/s practices, beliefs, and participation often serve as protective factors for many youth, guarding them against serious mental and physical health problems and risky behaviors while promoting resiliency and physical and mental health over time (for a review, see King, Ramos, & Clardy, 2013). Research also reveals that r/s participation tends to decrease and r/s questions and doubts noticeably increase throughout youth development, suggesting that r/s struggles also may be a common developmental experience for many. Unfortunately, while much is known about the important positive aspects of r/s and how they are involved in youth development, little is known about the r/s struggles that youth may experience and the role that these struggles might play in youth well-being and development. By asking about r/s struggles, this study will be able to demonstrate to what degree such struggles are common among youth, what types of struggles are more unique to youth vs. those that are similar to adult struggles, and how such r/s struggles are linked to well-being among youth.

Research has also demonstrated that most adults experience at least some r/s struggles (e.g., doubt about beliefs; questioning life's meaning; anger at God), typically at low levels of intensity. Such struggles are associated with poor mental and physical health, insecure attachment styles, and high religious salience and participation. Struggles may also provide opportunities for personal growth and, if responded to in a supportive manner, encourage individuals to maintain their r/s beliefs (for a review, see Exline, 2013). Given the prevalence of r/s struggles among adults, it is reasonable to hypothesize that adolescents also experience r/s struggles and may show similar links between struggles and mental and physical health. Unfortunately, previous r/s struggle studies among youth (Cotton et al., 2013; Dubow, Pargament, Boxer, & Tarakeshwar, 2000) were limited by struggle scope and population. Furthermore, some research (for a review, see Homolka & Exline, 2014) suggests that adolescent r/s struggle may come in other forms such as r/s struggles related to parents and family (e.g., conflict over religious participation), peers (e.g., bullying by religious peers), and identity development (e.g., deciding one's religious beliefs). However, such r/s struggles have only been studied



retrospectively or inadvertently. Altogether, the field needs a new youth struggle scale that (a) assesses several forms of r/s struggle, (b) is based on data provided by adolescents, and (c) can be used with a wide diversity of adolescents. This study is designed to examine this possibility by providing validation data for a new measure (the Religious & Spiritual Struggles Scale; Exline et al., 2014) among high school students. The study will also assess several forms of r/s struggle that may be more unique to youth, such as those related to parents, peers, and identity development.

Overall, this study will help to (a) normalize r/s struggle among high school students, (b) develop a r/s struggle scale that can be used by researchers, mental health professionals, and schools to assess r/s struggles among youth, (c) increase our knowledge about the role that r/s struggles play in adolescents' general and r/s identity development, and (d) assist participating schools in identifying their high school students' r/s and mental and physical health needs and strengths so that these schools can address such needs in a manner that promotes their students' r/s, emotional, and physical well-being.

**Measures:** Based on adult struggle research, adolescent's r/s struggles may be associated with poor mental and physical health, negative life experiences, negative mood, insecure attachment styles, high religious salience, and frequent religious participation. To provide data that will be useful for our study and also for your school, we have chosen several measures to include in the study, all of which are brief and have shown good reliability and validity among adolescents. The following are the proposed measures for this study:

- Center for Epidemiological Studies Depression Scale-revised 10-item version for adolescents (CESDR-10; Haroz, Ybarra, & Eaton, 2014)
- State Anxiety scale of the Spielberger State-Trait Anxiety Inventory Y form (STAI-Y; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983)
- Rosenberg Self-Esteem Inventory (Rosenberg, 1965)
- Items from the Revised Olweus Bullying/Victim Questionnaire (Solberg & Olweus, 2003) plus cyberbullying items (Wang, Iannotti, & Nansel, 2009)
- Brief Daily Hassles Scale for Adolescents (Wright, Creed, & Zimmer-Gembeck, 2010)
- State Anger scale of the State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999)
- Pittsburgh Insomnia Rating Scale (Moul, Pilkonis, Miewald, Carey, & Byssen, 2002)
- The Relationship Questionnaire (Bartholomew & Horowitz, 1991; Hazan & Shaver 1987; Howard & Medway, 2004)
- Eating Disorder Diagnostic Scale (EDDS; Stice, Telch, & Rivzi, 2000)
- 10-item Positive and Negative Affect Scale for Children (PANAS-C-10; Ebustani, Regan, Smith, Reise, Higa-McMillan, & Chorpita, 2012)
- Religious and Spiritual Struggles Scale (RSS; Exline, Pargament, Grubbs, & Yali, 2014) plus approximately 20 items on r/s struggles related to parents/family and peers.
- Religious Participation Scale (Exline, Yali, & Sanderson, 2000)
- Religious Belief Salience scale (4 of 5 items; Blaine & Crocker, 1995)
- Religious Comfort subscale (Exline, Yali, & Sanderson, 2000)



The demographic questions will include school, age, gender, sexual orientation (optional), school grade (i.e., 9-12<sup>th</sup> grade), race/ethnicity (optional), grades (optional), religion, language, and satisfaction with grades and school. School staff are encouraged to express any concerns or questions they may have to us. <u>We are happy to answer</u> <u>questions about the measures and to work with school staff to determine the final content of the survey.</u>

**Method:** Each participating school must first provide a letter of cooperation for which we are happy to provide a template, indicating their understanding and agreement to participate in the study. We will work with each school to determine the best method for collecting parent/guardian consent and adolescent assent and the best time for administration of the approximately 30 minute survey between September and December of 2015. The survey will be administered by the researchers to only those students in grades 9 through 12 who have proof of parent/guardian consent and student assent. Administering the survey to students in groups will be the most effective. The order of the scales and the items will be randomized within the survey packets. Alternatively, an online version of the survey can also be provided if the school so desires. Students will be informed verbally and by the assent form that their participation is voluntary and they can skip any questions or discontinue participation at any point during the study without consequence. The data will remain in the possession of the researchers, once collected, and will be used for the purposes of Steffany Homolka's dissertation (see above "Purpose" section).

**Educational Value:** Each school will receive a summary report of the aforementioned variables' aggregate data collected at their school along with information on how this compares to other local (unnamed) schools. This data will help schools identify mental health, physical health, and r/s needs and strengths in general and by grade. It can also help the schools to normalize their students' r/s struggle experiences as a part of typical youth development. The researchers are also happy to provide a presentation to school staff, parents, and/or students of the study's general findings and implications.

#### Privacy:

*Efforts to protect student privacy during survey administration:* All participants and their parents/guardians will be informed in writing and/or verbal communication of the following: (a) student information will remain confidential, (b) participation is completely voluntary, and (c) students are free to skip questions or withdraw from the study at any point at no consequence. While the consent/assent forms will require each student's name, the survey will not ask for any personally identifying information. To ensure that students' responses are not externally influenced and their privacy is protected, the survey should be administered by the researchers in a room where students can spread out across the room.

*Privacy of data to be collected:* Consent and assent forms containing the students' names will be stored separately from the actual surveys. Only those researchers involved in the study will have access to the raw data and completed surveys. Any identifying



information voluntarily provided by students will be immediately removed from the surveys by the primary investigator, Steffany Homolka. Any data provided by students who later choose not to participate will be destroyed. Any publications produced using the data from this study will never mention particular students or schools. Rather, sources for the data will be referred to as U.S. high schools in the Great Lakes or Midwest region.

*Data storage and access*: Only those researchers and research assistants directly involved with the study will have access to the surveys and survey data. Consent and assent forms will be accessible to the primary investigators, Steffany Homolka and Julie Exline. The data from surveys will then be input into statistics software (e.g., SPSS, R), analyzed, and stored by the study's researchers (Steffany J. Homolka, M.A., Julie J .Exline, Ph.D., and undergraduate research assistants) on a password-protected computer.

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Appendix F. Sample Letter of Cooperation

[Institutional Letterhead]

Steffany Homolka, M.A., has described her and Dr. Julie Exline's proposed research to me, titled "*Validation of Religious and Spiritual Struggles Scales for Adolescents*." As [insert title] of [High School Name], I approve of this research to occur at our school.

[Signature]

[Name, institutional title]



Appendix G. Introductory E-mail Sent to Parents/Caregivers by the Schools

To all parents of [Name of School] students,

[Name of School] is excited to announce that we have teamed up with researchers at Case Western Reserve University to conduct a study about religiosity, spirituality, and physical and mental health with our students. The study includes a simple one-time *anonymous* survey that students can fill out during the week of [school's designated dates]. Student participation is completely voluntary. As a benefit of participating, [Name of School] will receive a summary report of how well our students are doing and how this compares to other local (unnamed) schools. Case Western Reserve University researchers believe that this report can help us identify and better address mental health, physical health, and religious/spiritual needs and strengths in general and by grade. The researchers are also happy to provide a presentation to school staff, parents, and students of the study's general findings and implications. You will be receiving an email with a link to an online consent form soon asking your permission for your child to participate in the study. Please read it and thoughtfully consider whether you would like to give your consent.

If you have any additional questions or concerns, please feel free to contact me (phone number and email). Thank you!

Sincerely,

[Name of Administrator] [Administrative Position], [Name of School]



Appendix H. Email of Consent Form Link Sent to Parents by Schools

Dear parents,

We recently sent you a letter about a study being conducted at [Name of School] by researchers at Case Western Reserve University. The link below will take you to an online consent form for this study. Please take the time to review the form and indicate by [given date] whether you give your child permission to participate in the study. Please feel free to contact me with any questions or concerns you may have. Thank you!

Link: [link]

Sincerely,

[Name of Administrator] [Position, School Name]



Appendix I. Reminder Email Sent to Parents from Schools

Dear Parents,

We recently sent you a link to a parent consent form for a study being conducted at [School's Name] with researchers from Case Western Reserve University. Please take the time to review the form and indicate whether you are giving permission for your child to participate in it. **Please complete the form by [given date]**. If you have any questions or concerns, please feel free to contact me at [administrator's contact information] or the researchers, Steffany Homolka (920-268-9516, sjh100@case.edu) and Dr. Julie Exline (216 368-8573; jaj20@case.edu). Thank you!

Sincerely,

[Name of Administrator] [Position, School Name] 97

### Appendix J. Script to Administer the Survey to Participants

<u>Script for Trained School Staff Administering the Online Survey</u> Text to speak is in bold. Text to modify according to the situation is in italics.

Good [morning or afternoon] everyone. \_\_\_\_\_\_\_\_\_ (Name of school) has teamed up with researchers from Case Western Reserve University to conduct a study. Right now you have the opportunity to decide if you want to participate in this study. Please click on the "CWRU Study" link in the email you recently received. You have received this link because one of your parents gave permission for you to participate in this study. If you do not think your parents gave permission for you to do this study, please raise your hand now. [If any students raise their hand, check the provided list of students with parent consent to determine if the student's parent has given permission and inform the student if they do or do not have parental permission.]

You will now be given a few minutes to read through this page where you will learn more about the study, how research is generally conducted, and decide if you want to do the survey. Here are some of the important points you will read about:

- **1.** Researchers from Case Western Reserve University are conducting the study and I am helping them with it for today.
- 2. The purpose of this study is to help the researchers better understand the role that religion and spirituality has in your lives.
- 3. Whether you participate in this study is up to you.
- 4. You do <u>not</u> have to participate in the study just because your parents gave their permission.
- 5. You can choose to not be in the study at any time for any reason. If you choose to stop, please raise your hand to let me know.
- 6. If you agree to participate in this study, you will fill out a 30 minute survey online.
- 7. The survey will never ask for your name or contact info. Don't type this anywhere in the study.
- 8. You can skip any questions.
- 9. The study does not have any big risks beyond your normal life. Some questions might make you feel uncomfortable. You can skip any questions, take a break, or stop participating at any time.
- 10. We will do our absolute best to make sure your answers are never shared with anyone. This means that your parents, the school staff, including myself, and other people will never know what answers you specifically give.
- **11.** A report of the general results will be given to the school. This report will <u>not</u> contain your names or specific answers.
- **12. If you choose not to do the study, your options are to** [*describe appropriate options for your school, such as read quietly, work on homework, attend a different class, etc.* Do not punish them with a distasteful activity for not participating in the study] **at this time**



- 13. The researchers conducting this study are Steffany Homolka and Dr. Julie Exline. If you have any questions or concerns about the study, you may talk with them at the listed numbers.
- 14. The school has copies of this form if you would like one. If you cannot reach the researchers using the contact info on this form, you can also call the Institutional Review Board at Case at the number provided.
- 15. For those of you who chose to participate, please read the questions carefully and answer them based on what you think or feel most of the time. If you do not understand a word or question, skip the question or raise your hand to ask me for help if you feel comfortable doing this.

With all that said, does anyone have any questions? [Answer questions. Do NOT try to influence students to participate in the study at this time] Please take a few minutes to go through the form and decide if you want to participate.

[If the students seem to have a handle on this, stop here and allow the students to give or deny their assent and take the survey] If you agree to participate in the study, please choose the circle next to "Yes, I want to participate in the study" and then click the button on the bottom of the screen. Please provide the names of your parents and your name and the date and click the button on the bottom of the screen. You will be taken to a screen with another link. Clicking on the link will begin the survey. Make sure that you go back to the first screen and click the button on the bottom of the page so that the researchers receive this form.

If you do not want to participate, simply choose the circle next to "No, I do not want to participate" and click the button on the bottom of the page.

ANSWERING QUESTIONS: Feel free to help a student understand the meaning of any questions if they ask. However, be very careful to not influence their answers. Please make a note of the answers you provided and put this in the provided large yellow envelope that contained the script.

RESPECTING PRIVACY: <u>As much as possible, remain in an area of the room where</u> you cannot easily read the students' answers or see their screens/monitors. Avoid looking at their screens/monitors as much as possible. Do not wander around the room while students are taking the survey.

### WITHDRAWING FROM THE STUDY:

If a student says they do not want to participate in the study while still in the middle of taking the online version of the survey, ask the student to type the word "DESTROY" in any text box within the survey and close the window. If they cannot find a text box to type this in, it is likely too late to destroy the info the student has already provided but they can simply stop taking the survey by closing the window.



Students cannot withdraw their data from an online version of the study if they have already completed the survey due to the anonymity of the survey.

QUESTIONS/CONCERNS: If you have any questions or concerns at any time, please contact Steffany Homolka via phone, text or email at (920) 268-9516 or sjh100@case.edu



Appendix K. Demographics Questions

Thank you for agreeing to take this survey. Remember, you can skip any questions or choose to stop taking the survey at any time. If you choose to stop taking the survey, please let the researcher or school staff member know immediately. PLEASE DO NOT PUT YOUR NAME ANYWHERE ON THE SURVEY. Thanks!

### What is the name of your school?

What is your gender?	What is your sexual	orientation? (Optional)
O Male O Female		OAsexual
O Transgender Male O Transgender Female O Prefer not to say O Other:	O Gay O Lesbian	OPrefer not to say OQuestioning
<u></u>	O Bisexual	O Other:
What is your grade?	What is v	our age?

#### What is your grade? O

O 9 <sup>th</sup> (Freshman)	$\bigcirc$ 13 years old $\bigcirc$ 17 years old
O 10 <sup>th</sup> (Sophomore)	$O_{14}$ years old $O_{18}$ years old
O 11 <sup>th</sup> (Junior)	$O_{15}$ year old $O_{19}$ years old
O 12 <sup>th</sup> (Senior)	○ 16 years old ○ Other:

If you are not one of the above options, stop here now! If you are not 14-17, stop here now!

#### What is your race/ethnicity? Please mark ALL that apply. (Optional) OAmerican Indian / Native American / Alaskan Native

- O African American / Black
- O Asian / Pacific Islander
- O Latino / Hispanic
- O Middle Eastern
- O Caucasian / European American / White

O African

- O Other (please describe):
- O Prefer not to say

What have your grades in the following subjects been on average over the past few months? (Optional) If you aren't sure, please take your best guess.

Subjects	A+	Α	A-	$\mathbf{B}+$	В	<b>B-</b>	C+	Ċ	C-	$\mathbf{D}+$	D	D-	F
Math	0	0	0	0	0	0	0	0	0	0	0	0	0
English	Ο	Ο	0	0	Ο	0	0	Ο	Ο	0	0	Ο	0
Science	0	0	0	0	0	0	0	0	0	0	0	0	0
History	Ο	Ο	0	0	Ο	Ο	0	Ο	0	0	0	Ο	0
Gym/Phys. Ed.	0	Ο	0	0	0	0	0	Ο	0	0	0	0	0
Art	0	0	0	0	0	0	0	0	0	0	0	0	0
Music	0	Ō	0	0	0	0	0	0	0	0	0	0	0
Other:	Ο	Ο	0	0	0	0	Ο	Ο	Ο	0	0	0	0

**Is English your first language?** O YES O NO: What is your first language?

Were you born in the United States? <sup>O</sup> YES  $O_{NO}$ 

If you were NOT born in the United States, name the country in which you were born:

Overall, how satisfied are you with your grades in school?



- O Very Dissatisfied
- O Dissatisfied
- O Somewhat Dissatisfied
- O Neutral
- O Somewhat Satisfied
- O Satisfied
- O Very Satisfied

## Overall, how satisfied are you with your school?

- O Very Dissatisfied
- O Dissatisfied
- O Somewhat Dissatisfied
- O Neutral
- O Somewhat Satisfied
- O Satisfied
- O Very Satisfied

## In general, how is your health?

- O Poor
- O Fair/Average
- O Good
- O Very Good
- O Excellent

## What is your religion?

## What is your parents'/caregivers' religion?

*Choose all that apply. Choose all that apply.* O Christian (type):\_\_\_\_\_ O Christian (type): O Jewish (type): O Jewish (type): O Muslim (type): O Muslim (type): O Hindu (type): \_\_\_\_\_ O Hindu (type): \_\_\_\_\_ O Buddhist (type): \_\_\_\_\_ O Buddhist (type): O New Age O New Age O Agnostic  $\bigcirc$  Agnostic O Sikh O Sikh O Spiritual but not Religious • Spiritual but not Religious O None/Atheist O None/Atheist O I don't know O I don't know O Other: \_\_\_\_\_ O Other: \_\_\_\_\_



## How much importance do your parents or caregivers place on religious/spiritual beliefs and practices?

O None

- O A Little
- O Moderate
- O Quite a bit
- O A lot

## Below, which statement comes closest to expressing what you believe about God?

- O I don't believe in God.
- O I don't whether there is a God, and I don't believe there is any way to find out.
- O I find myself believing in God at some of the time, but not at others.
- O While I have doubts, I feel that I do believe in God.
- O I know that God really exists, and I have no doubts about it.

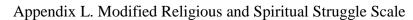
This survey has questions talking about your religious and spiritual beliefs and behaviors. If you are not religious and not spiritual, you could think of these items referring to your non-religious and non-spiritual beliefs and behaviors.

If you do not believe in God, you may still be able to answer the following items based on an image or picture of God in your mind. This might be based on your past life experiences or things that you have learned about, read, or imagined regarding God in the past.

If not, please answer "not at all / does not apply" for any questions that do not apply to you. You may also to skip the questions if you prefer.



Ν	Not at	Α		Quite	A
		little	Some-	a	great
have you had each of the experiences listed below? not a	apply	bit	what	bit	deal
questioned God's love for me					
felt attacked by the devil or by evil spirits					
had conflicts with other people about religious/spiritual					
matters					
felt guilty for not living up to what I know is right versus					
wrong					
had concerns about whether there is any ultimate purpose to	o 🗆				
life existence					
struggled to figure out what I really believe about					
religion/spirituality					
felt angry at God					
felt as though the devil (or an evil spirit) was trying to turn					
me way from what was good					
felt rejected or misunderstood by religious/spiritual people					
worried that my actions went against what my religion or					
spirituality says is right versus wrong					
felt as though my life had no deeper meaning					
Ν	Not at	Α		Quite	A
all	/Does	little	Some-	a	great
	2000		10 0 0		5
not a	apply	bit	what	bit	deal
					0
not a		bit		bit	deal
not a felt troubled by doubts or questions about religion or		bit		bit	deal
<b>not a</b> felt troubled by doubts or questions about religion or spirituality	apply	bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me	apply	bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the	apply	bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs	apply	bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of	apply	bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really		bit	what	bit	deal deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really right		bit	what	bit	deal deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really		bit	what	bit	deal deal deal deal deal deal deal deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really right questioned whether my life will really make any difference the world		bit	what	bit	deal deal deal deal deal deal deal deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really right questioned whether my life will really make any difference		bit	what	bit	deal
not a felt troubled by doubts or questions about religion or spirituality felt as though God had abandoned me worried that the problems I was facing were the work of the devil or evil spirits felt as though others were looking down on me because of my religious/spiritual beliefs wrestled to follow what is really right versus wrong questioned whether life really matters felt confused about my religious/spiritual beliefs felt as though God was punishing me felt bullied by the devil or evil spirits felt angry at organized religion felt torn between what I wanted and what I knew was really right questioned whether my life will really make any difference the world worried about whether my beliefs about religion/spirituality		bit	what	bit	deal





Appendix M. New Adolescent R/S Struggle Items Regarding Parents/Family and Peers

These next questions ask about religious and spiritual struggles related to your family, parents, and friends/peers. Please note that the terms "parents" and "family" include non-biological caregivers and family members that you would consider your main caregivers (e.g., step/foster/adoptive parents and families).

	Not at	Α		Quite	A
OVER THE PAST FEW MONTHS, how often	all/Does	little	Some-	a	great
have you had each of the experiences listed below?	not apply	bit	what	bit	deal
Had conflicts with my parent(s) or family over my					
religious/ spiritual beliefs or behaviors Felt bullied by friend(s) or peer(s) because of difference	es 🗆				
between our religious/spiritual beliefs or behaviors					
Felt pressured by my parent(s) or family to follow their religious/spiritual beliefs or behaviors					
Felt uncomfortable with my friend(s) or peer(s) because differences in our religious/spiritual beliefs or behavior					
Felt frustrated because my parent(s) or family would no allow me to question or explore my religious/spiritual beliefs	ot 🗆				
Felt pressured by my friend(s) or peer(s) to go along with their religious/spiritual beliefs or behaviors	ith 🗆				
Felt concerned because my parents or family members disagreed with each other about religious/spiritual belie practices, or behaviors	□ efs,				
				<b>•</b> ••	
	Not at	Α		Ouite	A
OVER THE PAST FEW MONTHS, how often	Not at all/Does	A little		Quite a	
<b>OVER THE PAST FEW MONTHS</b> , how often have you had each of the experiences listed below?	all/Does	little		Quite a bit	A great deal
have you had each of the experiences listed below? If Felt like I had to hide my religious/spiritual beliefs or	all/Does	little	Some-	a	great
have you had each of the experiences listed below? If Felt like I had to hide my religious/spiritual beliefs or behaviors from my friend(s) or peer(s)	all/Does not apply	little bit	Some- what	a bit	great deal
have you had each of the experiences listed below? If Felt like I had to hide my religious/spiritual beliefs or	all/Does <pre>not apply </pre>	little	Some-	a bit	great deal
<ul> <li>have you had each of the experiences listed below? If Felt like I had to hide my religious/spiritual beliefs or behaviors from my friend(s) or peer(s)</li> <li>Had negative experiences in my family (like divorce or abuse) that made me question my religious/spiritual below or behaviors</li> <li>Felt that I had to pretend to believe in a certain religion/spirituality to avoid problems with my friend(s)</li> </ul>	all/Does not apply	little bit	Some- what	a bit	great deal
have you had each of the experiences listed below? IfFelt like I had to hide my religious/spiritual beliefs orbehaviors from my friend(s) or peer(s)Had negative experiences in my family (like divorce orabuse) that made me question my religious/spiritual beliefsor behaviorsFelt that I had to pretend to believe in a certainreligion/spirituality to avoid problems with my friend(speer(s)Felt guilty that I was not interested in my parents' or	all/Does not apply	little bit	Some- what	a bit	great deal
have you had each of the experiences listed below? IfFelt like I had to hide my religious/spiritual beliefs orbehaviors from my friend(s) or peer(s)Had negative experiences in my family (like divorce orabuse) that made me question my religious/spiritual beliefsor behaviorsFelt that I had to pretend to believe in a certainreligion/spirituality to avoid problems with my friend(speer(s)Felt guilty that I was not interested in my parents' orfamily's religion/spiritualityHad conflicts with my friend(s) or peer(s) over	all/Does not apply	little bit	Some- what	a bit	great deal
have you had each of the experiences listed below? InFelt like I had to hide my religious/spiritual beliefs orbehaviors from my friend(s) or peer(s)Had negative experiences in my family (like divorce orabuse) that made me question my religious/spiritual beliefsor behaviorsFelt that I had to pretend to believe in a certainreligion/spirituality to avoid problems with my friend(speer(s)Felt guilty that I was not interested in my parents' orfamily's religion/spirituality	all/Does	little bit	Some- what	a bit	great deal



	Not at	Α		Quite	e A
OVER THE PAST FEW MONTHS, how often al	l/Does	little	Some-	a	great
have you had each of the experiences listed below? not	apply	bit	what	bit	deal
Felt uncomfortable to be known as part of my parents' or					
family's religious/spiritual group (for example, to be know	vn				
as Catholic, Jewish, atheist, Christian, Muslim, etc.)					
Felt like my friend(s) or peer(s) were forcing their					
religious/spiritual beliefs or behaviors on me					
Worried about what would happen if I chose different					
religious/spiritual beliefs from my parent(s) or family					
Felt guilty that I let my friend(s) or peer(s) think I had the					
same religious/spiritual beliefs or behaviors as them					
Felt like my parent(s) or family members were forcing the	ir 🗆				
religious/spiritual beliefs or behaviors on me					
Felt frustrated that my parent(s) wouldn't let me do					
something I wanted to do because it went against their					
religion/spirituality					
Felt frustrated that my parent(s) or family did not trust me					
to make my own decisions about religion/spirituality					
Felt frustrated that adults outside my family did not trust r	ne 🗆				
to make my own decisions about religion/spirituality					

Please describe any other religious or spiritual struggles you have experienced between the ages of 13 and 17-years-old. Check the box that best describes how often you have had each of these experiences.

Α		Quite	Α
little	Some-	a	great
bit	what	bit	deal



Appendix N. Religious Commitment Inventory for Adolescents (Miller et al., 2013)

Read of the following sentences. Use the scale, CIRCLE the answer that best describes how true each sentence is for you.

I	Not at all true of me	Somewhat true of me	Moderately true of me	me	Totally true of me
I often read books, magazines, and websites about my faith.	<b>1</b>	<b>2</b> 2	<b>3</b>	<b>4</b> 4	<b>5</b>
I give money to my religious organization.	1	2	3	4	5
I try to increase my understanding of my faith.	1	2	3	4	5
Religion is especially important to me because it answers many questions about the meaning of life	1	2	3	4	5
My religious beliefs lie behind my whole approach to life.	1	2	3	4	5
I enjoy spending time with others of my religious affiliation.	1	2	3	4	5
Religious beliefs influence all my dealings in life.	1	2	3	4	5
It is important to me to spend periods of time in private religious thought and reflection.	1	2	3	4	5
I enjoy participating in religious activities	1	2	3	4	5
I am involved in my religious group.	1	2	3	4	5
I have some influence on the decisions of my religious group.	1	2	3	4	5



Appendix O. Religious Comfort subscale of the Religious Comfort and Strain Scale (Exline et al., 2000)

To what extent are you currently having each of these experiences?

		A little	Quite	
ſ	Not at All	bit	a bit	Extremely
Feeling that God has forgiven you for sins				
Trusting God to protect and care for you				
Feeling that God is close to you				
Feeling loved by God				
Good memories of past experiences with religion religious people	nor 🗆			
Feeling like part of a religious or spiritual comm	unity 🛛			
Feeling comforted by your faith				



Appendix P. Patient Reported Outcomes Measurement Information System (PROMIS) Pediatric Anxiety Short Form (National Institutes of Health)

## Please respond to each item by marking one box per row to show how you felt <u>OVER THE PAST 7 DAYS</u>.

In the past 7 days	Never	Almost Never	 Often	Almost Always
I felt like something awful might happen				
I felt nervous.				
I felt scared				
I felt worried.				
I felt worried when I was at home.				
I got scared really easy.				
I worried about what could happen to me.				
I worried when I went to bed at night.				



Appendix Q. The Center for Epidemiological Studies Depression Scale-Revised 10-Item Version for Adolescents (CESDR-10; Haroz et al., 2014)

## Check the box for each statement which best describes how often you felt or behaved this way – DURING THE PAST WEEK

	Not at all		v	5-7 days	Nearly
	or less than 1 day	days in		in the	every
	in a week	week	week	last week	day for 2 weeks
My appetite was poor.					
My sleep was restless.					
I felt sad.					
I felt like a bad person.					
I lost interest in my usual activities.					
I felt like I was moving too slowly.					
I wished I were dead.					
I was tired all the time.					
I could not focus on the important thin	ıgs. □				
I felt irritable.					



Appendix R. Adolescent Peer Relations Instrument (Parada, 2000) and Two Cyberbullying Items (Wang et al., 2009)

# Since you have been a student at this school THIS YEAR how often HAVE YOU done any of the following things to a STUDENT (or students) at this school. CIRCLE THE NUMBER THAT IS CLOSEST TO YOUR ANSWER.

		Sometimes (once every couple	Once or		Several	
	Novon	times or			times a	•
Teased them by saying things to them	Never 1	LESS)	month 3	week 4	week 5	<b>day</b> 6
Pushed or shoved a student	1	2	3	4	5	6
Made rude remarks at a student	1	2	3	4	5	6
Got my friends to turn against a student	1	2	3	4	5	6
Made jokes about a student	1	2	3	4	5	6
Crashed into a student on purpose as they walked by	1	2	3	4	5	6
Pick on a student by swearing at them	1	2	3	4	5	6
Told my friends things about a student to get them into trouble	1	2	3	4	5	6
Got into a physical fight with a student because I didn't like them	1	2	3	4	5	6
		Sometimes (once every couple	Once or	0	Several	
	Never	times or LESS)	twice a month	Once a week	times a week	Every day
Said things about their looks they didn't like	1	2	3	4	5	6
Got other students to start a rumor about a student	1	2	3	4	5	6
I slapped or punched a student	1	2	3	4	5	6
Got other students to ignore a student	1	2	3	4	5	6
Made fun of a student by calling them names	1	2	3	4	5	6
Threw something at a student to hit them	1	2	3	4	5	6
Threatened to physically hurt or harm a student	1	2	3	4	5	6



		Sometimes (once every couple	Once or		Several	
		times or			times a	·
	Never	LESS)	month	week	week	day
Left them out of activities or games on purpose	1	2	3	4	5	6
Kept a student away from me by giving them mean looks	1	2	3	4	5	6
I sent a student mean or hurtful messages, pictures, or in other ways over the internet (computer, tablet)	1	2	3	4	5	6
I sent a student mean or hurtful messages, calls, texts, pictures, or in other ways using a cell phone.	1	2	3	4	5	6

# Please indicate how often a student (or students) at this school has done the following things TO YOU since you have been at this school this year. CIRCLE THE NUMBER THAT IS CLOSEST TO YOUR ANSWER.

		Sometimes (once every couple	Once or		Several	
		times or			times a	•
	Never	LESS)	month	week	week	day
I was teased by students saying things to me	1	2	3	4	5	6
I was pushed or shoved	1	2	3	4	5	6
A student wouldn't be friends with me because other people didn't like me	1	2	3	4	5	6
A student made rude remarks at me	1	2	3	4	5	6
I was hit or kicked hard	1	2	3	4	5	6
A student ignored me when they were with their friends	1	2	3	4	5	6
Jokes were made up about me	1	2	3	4	5	6
Students crashed into me on purpose as they walked by	1	2	3	4	5	6
A student got their friends to turn against me	1	2	3	4	5	6
My property was damaged on purpose	1	2	3	4	5	6



		Sometimes (once every couple	Once or		Several	
		times or	twice a	Once a	times a	Every
	Never	LESS)	month	week	week	day
Things were said about my looks I didn't like	1	2	3	4	5	6
I wasn't invited to a student's place because other people didn't like me	1	2	3	4	5	6
I was ridiculed by students saying things to me	1	2	3	4	5	6
A student got students to start a rumor about me	1	2	3	4	5	6
Something was thrown at me to hit me	1	2	3	4	5	6
I was threatened to be physically hurt or harmed	1	2	3	4	5	6
I was left out of activities or games on purpose	1	2	3	4	5	6
I was called names I didn't like	1	2	3	4	5	6
A student sent me mean or hurtful messages, pictures, or in other ways over the internet (computer, tablet)	1	2	3	4	5	6
A student sent me mean or hurtful messages, calls, texts, pictures, or in other ways using a cell phone.	1	2	3	4	5	6





Appendix S. Patient Reported Outcomes Measurement Information System (PROMIS) Pediatric Anger Scale (National Institutes of Health)

## Please respond to each item by marking one box per row to show how you felt <u>OVER THE PAST 7 DAYS.</u>

		Almost	Some-		Almost
In the past 7 days	Never	Never	times	Often	Always
I felt fed up.					
	0	1	2	3	4
I felt mad.					
	0	1	2	3	4
I felt upset					
	0	1	2	3	4
I was so angry I felt like throwing something.					
	0	1	2	3	4
I was so angry I felt like yelling at somebody.					
	0	1	2	3	4



Appendix T. Brief Daily Hassles Scale for Adolescents (Wright et al., 2010)

These questions ask about day-to-day hassles. Record how often each one happened in the past month.

in the past month.		At least	At least		
	NT	once per	once per	Almost	<b>D</b> "
D	Never	month	week	daily	Daily
Parents not trusting me					
Feeling unsafe in the community (outside school)					
Parents trying to tell me how to live my life					
People not treating me with respect					
Parents being strict					
Not being accepted by other people my age					
Worrying about my parents finding out about something					
e					
	Never	At least once per month	At least once per week	Almost daily	Daily
Being bullied or teased	Never			Almost daily	Daily
	Never	once per	once per		Daily
Being bullied or teased		once per month	once per week	daily	
Being bullied or teased Having to lie to my parents		once per month	once per week	daily	
Being bullied or teased Having to lie to my parents Not feeling safe at school		once per month	once per week	daily	
Being bullied or teased Having to lie to my parents Not feeling safe at school Parents not listening to my opinion		once per month	once per week	daily	



Appendix U. Rosenberg Self-Esteem Inventory (Rosenberg, 1965)

# Below is a list of statements dealing with your general feelings about yourself. If you <u>STRONGLY AGREE</u>, circle <u>SA</u>. If you <u>AGREE</u> with the statement, circle <u>A</u>. If you <u>DISAGREE</u>, circle <u>D</u>. If you <u>STRONGLY DISAGREE</u>, circle <u>SD</u>.

	RONGLY			STRONGLY
DI	SAGREE	DISAGREE	AGREE	AGREE
I feel that I'm a person of worth, at lea on an equal plane with others.	ast SD	D	А	SA
I feel that I have a number of good qualities.	SD	D	А	SA
All in all, I am inclined to feel that I at a failure.	m SD	D	А	SA
I am able to do things as well as most other people.	SD	D	А	SA
I feel I do not have much to be proud of	of. SD	D	А	SA
I take a positive attitude toward mysel	f. SD	D	А	SA
On the whole, I am satisfied with mys	elf.SD	D	А	SA
I wish I could have more respect for myself.	SD	D	А	SA
I certainly feel useless at times.	SD	D	А	SA
At times I think I am no good at all.	SD	D	А	SA



## Appendix V. Eating Disorder Diagnostic Scale (EDDS; Stice et al., 2000)

## Please carefully complete all questions.

Over the <u>past 3 months</u>	Not at	all	Slightly	N	Iodera		Extr	emel v
Have you felt fat?	0	1	2	3	4	5	(	6
Have you had a definite fear that you might gain weight or become fat?	0	1	2	3	4	5	(	6
Has your weight influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	(	6
Has your shape influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	(	б
During the past <u>6 months</u> have there been eaten what other people would regard as food (e.g., a quart of ice cream) given the	an unusi	ıally	large am	•		YES	5 1	10
During the time when you ate an unusual experience a loss of control (feel you cou or how much you were eating)?	• •				•	YES	5 1	NO
How many <b>DAYS per week</b> on average					<u>S</u> have	you ea	ten	an
unusually large amount of food and expe $0$ 1 2 3	erienced 4	a los	s of cont 5	rol?	6	7	,	
How many <b>TIMES per week</b> on average					HS have	e you e	eate	n an
unusually large amount of food and expendence $0  1  2  3  4  5$	erienced 6 7	a los 8	s of cont 9	rol? 10	11	12	13	14
During these episodes of overeating an	· ·	-	-			12	15	14
Eat much more rapidly than normal?				5.00		YI	ES	NO
Eat until you felt uncomfortably full?						YI	ES	NO
Eat large amounts of food when you didn	n't feel n	hvsio	cally hun	erv?		YI		NO
Eat alone because you were embarrassed	-	•	-					NO
Feel disgusted with yourself, depressed, of	-		-		-			NO
Feel very upset about your uncontrollable gain?					U	YI	ES	NO
How many times per week on average of					ve you	made y	your	rself
<i>vomit</i> to prevent weight gain or countera 0 1 2 3 4 5	ct the ef 6        7	fects 8	-	;? 10	11	12	13	14
How many <u>times per week</u> on average o		-	-	-			-	
or diuretics to prevent weight gain or cou	interact	the e	ffects of	eatir	ıg?			
0 1 2 3 4 5	6 7	8	9	10	11	12	13	14



How many <u>times per week</u> on average over the past <u>3 months</u> have you <i>fasted (skipped at least 2 meals in a row)</i> to prevent weight gain or counteract the effects of eating?													
				-		0	0			10		0	14
•					0		-			<u>hs</u> hav ereatin	•	 · · · · · · · · · · · · · · · · · · ·	
		-		•						10	U 1		14

How much do you weigh? If uncertain, please give your best estimate. \_\_\_\_\_lbs.

How tall are you? \_\_\_\_\_feet, \_\_\_\_\_inches



- Please use the following University of Pittsburgh link for access to the PIRS-20:
- $http://www.psychiatry.pitt.edu/sites/default/files/page-images/PIRS_20\_Instrument\_0.pdf$



Appendix X. 10-item Positive and Negative Affect Scale for Children (PANAS-C-10; Ebustani et al., 2012)

This measure consists of a number of words that describe different feelings and									
emotions. Using the scale below, indicate how much you have felt this way over the									
past week.									

	Very Slightly				
_	or Not at All	A Little	Moderately	Quite a Bit	Extremely
Joyful					
Miserable					
Cheerful					
Mad					
Нарру					
	Very Slightly				
	, er j ongherj				
	or Not at All	A Little	Moderately	Quite a Bit	Extremely
Afraid	• • •	A Little	Moderately	Quite a Bit	Extremely
Afraid Lively	• • •	A Little	Moderately	Quite a Bit	Extremely
	• • •			Quite a Bit	
Lively	or Not at All				



Appendix Y. Parent Form Items and Experiences in Close Relationships-Relationship Structures Questionnaire (ECR-RS; Fraley et al., 2011)

You will now be asked to answer some questions about your parents and/or caregivers. For the questions below, please check <u>ALL</u> statements that are TRUE in your case.

	I lived with both of my biological parents (in the same home) during part or all of my
	life.
	My biological mother lived somewhere else (not with me) during part or all of my life.
	My biological father lived somewhere else (not with me) during part or all of my life.
	My biological mother died.
	My biological father died.
	My biological parents were married to each other during part or all of my life.
	My biological parents were not married to each other during part or all of my life.
	My biological parents are currently divorced from each other.
	My biological parents are currently separated from each other.
	I lived with a stepfather or a biological parent's boyfriend during all or part of my life.
	I lived with a stepmother or a biological parent's girlfriend during all or part of my life.
	I lived with one or more relatives. How were you related to them (e.g., aunt,
	grandparents, etc.)?
	I never knew my biological mother.
	I never knew my biological father.
	I was adopted.
	I lived in a foster home at some point in my life.
	I lived in residential care or a group home during all or part of my life.
	Other description of your parent(s) and/or caregiver(s):

## Please answer the following 9 questions about your parents.

				Neither Agree			
	Strongly		Somewhat		Somewhat		Strongly
	Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
I usually discuss my problems and concerns with my parents.							
I'm afraid my parents may abandon me.							
I talk things over with my parents.							
I worry that my parents won't care about me as much as I care about them.							



				Neither Agree			
	Strongly		Somewhat	nor	Somewhat		Strongly
	Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
I find it easy to depend on my parents.							
I often worry that my parents don' really care for me.	t 🗆						
I prefer not to show my parents how I feel deep down.							
I don't feel comfortable opening up to my parents.							
It helps to turn to my parents in times of need.							



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