DEVELOPMENT OF THE MCLAREN-ALTON SPIRITUALITY SCALE

By

Kevin Alton

Dr. Paul J. Watson
Professor of Psychology
(Chair)

Dr. Christopher Silver
Visiting Lecturer, LEAD Program
(Committee Member)

Dr. Ralph Hood
Professor of Psychology
(Committee Member)

DEVELOPMENT OF THE MCLAREN-ALTON SPIRITUALITY SCALE

By

Kevin Alton

A Thesis Submitted to the Faculty of the University of
Tennessee at Chattanooga in Partial
Fulfillment of the Requirements of the Degree
of Master of Science: Psychology

The University of Tennessee at Chattanooga
Chattanooga, Tennessee

May 2019

ABSTRACT

Researchers in the field of applied developmental science are pursuing effective, cross-fluent relationships between scientists, policy-makers, and practitioners as they co-influence individuals across lifetimes (Lerner, Wertlieb, and Jacobs, 2003). Practitioners in religious communities continue to grapple with their unique *spins* and *takes* (Taylor, 2007) regarding transcendence in a culture which is increasingly vested in the natural order. Christian efforts regarding spiritual formation tend to focus on acceptance of the local religious community as a necessary end to a process known as confirmation (Osmer and Douglass, 2018). The present study seeks to statistically validate a construct of spiritual formation proposed in popular literature that is focused on the individual. A scale building on McLaren's (2011) construct of four spiritual seasons was piloted in the spring semester of 2018 with general psychology students at the University of Tennessee at Chattanooga. Data analysis tests the hypothesis that the scale addresses four distinct factors.

Keywords: spirituality, Christianity, spiritual formation, transcendence

DEDICATION

Early in my experience in the Master of Psychology program, Dr. Paul Watson shared a thesis paper with me that was completed by a previous student with a different cultural background. I was struck by the student's use of the short phrase, "I remember…" to address those he wished to honor in his dedication section. I can think of no better phrase to use for the influence Dr. Watson had on me through this entire process. I remember Dr. Watson's kindness. I remember his guidance. I remember the grace he often extended to me in pursuing my research aims. Along with my wife and children who made personal sacrifices to support me through this program, this paper is dedicated to Dr. Paul J. Watson.

ACKNOWLEDGEMENTS

I would like to thank Dr. Ralph Hood and Dr. Chris Silver for their guidance and friendship throughout this program, and for making difficult paths straight near the end. I would also like Dr. David Rausch who hired me and championed me in the assistantship position I held throughout this program, which made my participation in this program possible. Thanks are also due to Donny Behneman, my immediate supervisor in that position who offered patience after patience as I learned the ropes of new skill sets and ultimately became a friend. I am deeply indebted to Brian McLaren, the author of the work upon which this thesis is based, for years of friendship, mentorship, and being a perpetual guiding light to me. I would be remiss to leave out the members of my cohort who shared both joy and misery over the last two years—misery truly does love company, and joy does as well. Special thanks go out Aaron Eldridge, Aubrey Henriksen, and Marissa Shelton, dear friends without whom I might well have drowned in a statistical Biderman-vortex.

TABLE OF CONTENTS

APPENDIX

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

COMP, Complexity

EXPER, Extrinsic Personal

EXSOC, Extrinsic Social

HARM, Harmony

I/E-R, Intrinsic/Extrinsic Revised

MASS, McLaren-Alton Spirituality Scale

PERP, Perplexity

SIM, Simplicity

QDOUBT, Quest, religious doubt as positive

QEX, Quest, willingness to ask existential questions

QOPEN, Quest, openness to change

CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Spirituality is primarily rooted in self-concept, the purely metaphysical conjecture of the conscious experience (Friedman, 1983). Self-concept uses spirituality as a tool for exploring beyond itself, seeking connection, meaning, and anything else in life that can enhance or inform existence (Canda & Furman, 2010). Understood in this way, spirituality does not come burdened with prescribed beliefs, practices, or concepts of transcendence; spirituality is merely the mechanism by which such things are engaged. This spiritual exploration may ultimately probe beyond self and, indeed, beyond the natural order, seeking to engage transpersonal connection with all that is or may be (Pappas & Friedman, 2007). Taylor (2007) makes a distinction between the natural order and the transcendent, using the term "immanent frame" to describe the observable natural order and designating transcendence as that which is sought in any transpersonal connection beyond the immanent frame. These are critical concepts in understanding spiritual formation and development.

Many aspects of the human experience continue to globalize. The internet has swiftly expanded trade, humanitarian concern, and access to information and general knowledge. This expansion, and the wide availability of the internet, in particular transforms the way young people engage the world around them. Garbarino and Bedard (1996) express that openness to spiritual experience is more naturally present in children than adults. This state of being in

young people coupled with access to awareness of diverse spiritual experiences and religious expressions presents a challenge to existing models of spiritual formation. Religious communities must wrestle with how their prescribed understanding of the transcendent overlaps with "the other"—the other church down the street, entirely other religions in their community and around the world, and an entirely *other* other that disavows transcendence altogether.

While the literature on spirituality is abundant, spirituality in youth has been largely ignored in existing research (Cheon, 2010). Canda, Nakashima, Burgess, Russell, and Barfield (2003) found limited research in their extensive bibliography of social work and spirituality. This is likely due to a longstanding, prevailing perception that youth lack the developmental maturity to process spirituality (Hart, 2005). However, the lack of scaffolding for youth to progress in self-concept and subsequent developmental spirituality certainly plays a role in that immaturity (Benson, Roehlkenpartain, & Rude, 2003). Organizations working with youth populations must develop means for supporting the spiritual development and well-being of youth (Kvarfordt & Sheridan, 2007).

The extant spirituality literature is replete with attention to the individual condition within their spiritual formation. Cornish and colleagues point out that religion essentially arises out of validation of the thoughts and experiences of the individual as they seek the divine (Cornish, Wade, & Post, 2012). Psychologists are encouraged to take note of individual spirituality when offering clinical care (Magaldi-Dopman & Park-Taylor, 2013). Studies have examined the relationship between individual spiritual development in adolescence and a sense of purpose in life with young adults in interview settings (Liang & Ketcham, 2017). Few

measures exist to assess the *current* spiritual condition of individuals. In an example from medical literature regarding end-of-life care, Monod, et al, conducted an extensive literature review of individual spiritual measures for use in medical settings and found—of more than 3,000 examined—only 16 that contained items explicitly regarding the individual's current, self-expressed spiritual sense of well-being (Monod et al., 2011).

Spiritual formation resources for youth developing an individual spiritual identity are rarer still unless they go hand-in-hand with a community construct. Protestant denominational confirmation curricula serve as an example of this. Participants take part in a multi-week effort of a local church (in some instances, up to a year) to communicate key aspects of that local body's expression of transcendence and concepts of spirituality. The participant will either express alignment or not and by that choice be either welcomed into the community or held in an awkward limbo of spiritual community-without-community if they do not comply. These methods not only fail to consider the individual's spiritual self-concept, but they also fail to deal with the critical distinction between spirituality and *religiosity*, the latter taking precedence in many, if not most, religious community spiritual formation models (Canda, 2008).

The eventual intent of the present study is to create a resource for self-knowledge regarding spirituality that addresses the individual directly, regardless of context, with particular application to work in youth populations. The aim is to develop the understanding of self in youth populations alongside that self's impact in their inter-social community (Pappas & Friedman, 2007). The first step of the present study developed a new scale for examining spiritual self-knowledge, beginning within the confines of Christian experience. The development of the McLaren-Alton Spirituality Scale (MASS) seeks to statistically McLaren's

(2011) popular literature construct of spirituality and assessing self-reported spirituality. Successful completion of the scale will offer organizations working with youth populations a tool for gaining understanding of the youth in their care while also developing the spiritual self-knowledge of those youth. The scale will also provide faith communities a fresh way to engage individual spirituality without holding themselves as a necessary end, which can quickly lead to unintentional disfranchisement of the individual as they mature into adulthood (Oestreicher, 2008).

The development of this scale began in 2011 with co-creation with McLaren of a weighted statements questionnaire based upon McLaren's 4 stage expression of spiritual seasons. McLaren's seasons are predicated upon responsive growth through life experience and were built upon the foundation of existing models of development theory, primary among them being Fowler's stages of faith. Fowler's stages are rooted in religious experience and expression but align with Piaget's developmental stage theory (Piaget, 1972) and Kohlberg's stages of moral development (Kohlberg, Levine, & Hewer, 1983). McLaren's stages move away from religiosity toward spirituality, and at times also resemble Perry's (1970) exploratory stages of intellectual and ethical development in college students.

Without engaging too lengthy a reprisal of Fowler's stages, for purposes of comparison with McLaren's seasons a summary seems appropriate due to the primacy of their influence. Fowler's stages commence with a pre-stage state of infancy and undifferentiated faith. This takes place from birth to roughly the age of 2. As it is mostly also pre-*expressive*, much is assumed here, but its existence is primarily defined by some sense of basic trust (or distrust) of primary caregivers. The development of language and communication predicates the move to

the first true stage. Stage 1, called *intuitive-projective faith*, takes place between the ages of 3 and 7. Here the child begins to understand and play with storytelling. At this stage they are particularly vulnerable to intentional or unintentional indoctrination practices of caregivers and faith communities. Stage 2, *mythic-literal faith*, begins to tie stories, practices, and beliefs to meaningful belonging in one's community. Here Fowler begins to draw parallels between the cognitive development of children and adaptive development one might see in adults engaging a religious community for the first time. In this stage an odd collision of conceptualization occurs—here we find both the rise of the use of stories and narratives for purposes of meaning-making and a sharp decline in the welcoming of imaginative exercise that so marked the engagement of storytelling in Stage 1. The ability to find stasis in this apparent conflict is a hallmark of literal interpretation of biblical texts, as an example. Fowler describes their meaningfulness as becoming "trapped" within the story, with meaning only able to be discovered in each story's exact details; persons in this stage cannot reflect upon conceptual meaning beyond the story itself. McLaren's season of Simplicity is largely rooted here (a description of McLaren's seasons follows).

Awareness of contradictions with stories or versions of stories awakens Fowler's Stage 3, *synthetic conventional faith*. Perspective-taking rises to the fore as relationships develop beyond the primary family unit school, with friends, perhaps in religion, and later in work settings. Interestingly, Fowler notes that the fundamental weakness of this stage is that *it leads to the next*, which engages existential despair. It remains a conformist stage, but the strength of this stage is the formation of a personal myth—the ability to weave together the individual's perspectives with the perspectives of others. McLaren's season of Complexity rests within this

season. The transition toward Fowler's Stage 4 begins when holding clashes between authoritative sources in tension becomes an untenable position for the individual. Moving away from the home environment or significant life events can serve as a trigger for this transition.

The transition into Fowler's Stage 4 can begin in young adulthood but may not fully emerge until one reaches their 30s or 40s. This *individual-reflective* stage is experienced as a kind of unsettling, abrupt unmooring. The individual is forced to assess its personal responsibility for decisions regarding commitments, lifestyle, beliefs, and attitudes. Here the individual may become over-reliant on cognition and can become overly pessimistic, both dangers of this stage that can swallow the stage's primary strength: the capacity for critical self-reflection. Stage 4 is where we find McLaren's season of Perplexity rooted. The transition from here to Fowler's Stage 5 begins with the realization of a sort of 2-dimensional character to previous belief systems, and rather than trying to repair or return to those belief systems the individual moves on to seek something more multileveled and complex.

Fowler's Stage 5, *conjunctive faith*, engages what Ricoeur (1969) denotes as a "second naiveté," which emerges as Ricoeur's post-critical reality where precritical myths may be re-engaged for symbolic meaning. Here prior belief patterns and faith structures are reexamined for useful meaning without the baggage of uncritical belief. This stage recognizes our *social unconscious*, the patterns and beliefs woven into our faith structures, socioeconomic status, and cultural environment that predicate our interaction with *other*—anyone holding a different perspective due to those same experienced influences. McLaren's season of Harmony is nested here, and his framework also concludes here. Fowler, however, proceeds to a 6th stage; that

transition begins when the individual becomes dissatisfied with living in an untransformed world while bearing a transforming vision and loyalties.

The *universalizing faith* unveiled in Fowler's Stage 6 is extremely rare and is perhaps intentionally idealistic. An individual reaching this stage holds the inclusion of *all* beings as the ultimate environment and working toward that end they are often experienced as either social outliers or subversive of the structures others used to define our individual and corporate selves. People perceived to be in this stage are often most widely known for their martyrdom—Mohandas Mahatma Gandhi, Martin Luther King, and even the historical Jesus all died due to powerful resistance to their universalizing ideals; they all were figureheads of ethical epitomes silenced by others who could not conceive of the same.

McLaren frames Fowler's stages as four seasons, namely Simplicity, Complexity, Perplexity, and Harmony, which can be summarized as follows:

> ***Simplicity*****:** certain, dualistic, authority-centered, and highly committed. Self-concept for the individual is usually tied to a leader or group. Persons in Simplicity can be highly committed but can also be arrogant or intolerant. Their spiritual connection comes through awakening.
>
> ***Complexity*****:** pragmatic, increasingly independent, idealistic, cause-oriented. The individual's self-concept becomes rooted in a personal cause. They can be enthusiastic and idealistic, but also superficial or naïve. Spiritual connection comes through need.
>
> ***Perplexity*****:** relativistic, critical, authentic, individualistic, sometimes harsh or cynical. Self-concept for the individual is rooted in solitude, or with a select few similarly alienated individuals. They are starkly honest and sensitive to others but can be cynical

and noncommittal. The spiritual connection comes through *un*knowing—recognizing the tensions in the unknowable within a spiritual formation.

***Harmony*:** integrated, synthesizing, sympathetic, community & other-minded, interdependent. The individual's self-concept is rooted in mutual relationships. They may exhibit strengths of previous seasons, but with greater wisdom. However, they may also occasionally mirror the weaknesses of previous seasons (McLaren, 2011).

The purpose of using McLaren's seasons as the foundation for the new scale is an attempt at bridge-building between empirical science and popular literature, the latter being where spiritual formation practitioners are more likely to seek information. While McLaren's seasons are based upon existing developmental models, they are not necessarily anchored to specific age levels. They are related far more to the faith elements found in Fowler's stages than developmental ones. This allows exploration of the expressive/experiential spiritual capabilities of youth, which was previously downplayed mostly for developmental reasons (Hart, 2005). The emphasis in McLaren's seasons is on spirituality being quite distinct from religiosity, which lends the work toward the stated goal of aiding individual spiritual assessment and growth apart from attachment to any specific religious setting.

With that said, we must acknowledge that this first attempt at a non-religious spirituality scale begins deeply embedded in a Christian expression. The core of the present study started as a collaboration with McLaren in 2011 to develop a survey tool designed to assess with accuracy where a participant orients within the seasons as described. In the survey's primitive form, the author and McLaren selected twelve subject areas that interplay to some degree with individual spirituality, many referencing explicit Christian experience. These

subjects included authority, truth, life, God, heaven & hell (as a single subject area), patriotism, religion, belonging, education, teachers, the Bible, and prayer. Each subject appeared on a single page of a participant booklet with the instructions displayed in Figure 1.

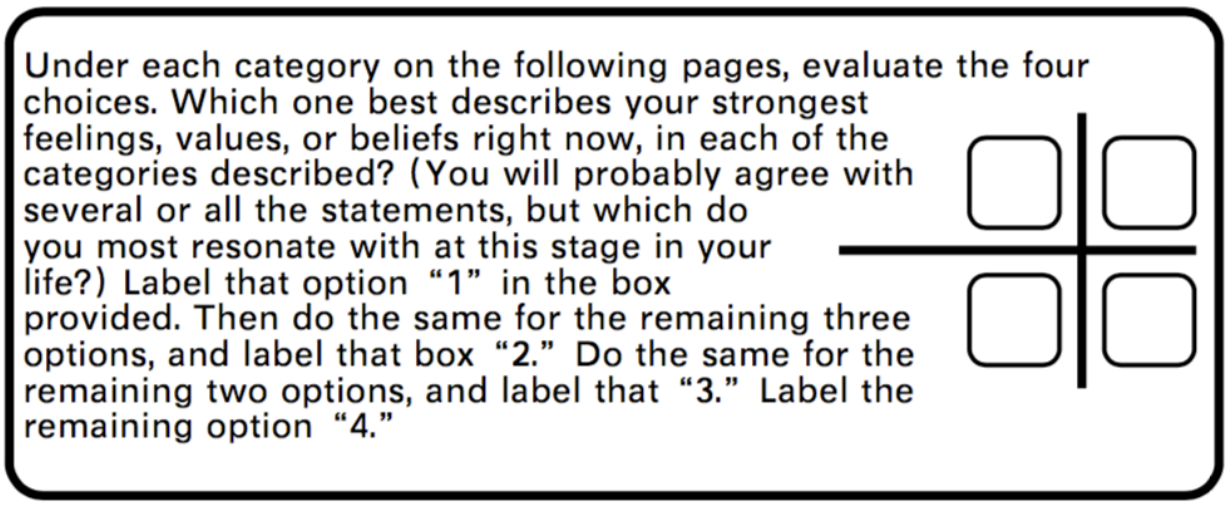

Figure 1 Original booklet instructions

The statements from the original booklet are included as Appendix A (the revised Likert statements are included as Appendix B). As an example of content, the original statements for *authority* were as follows:

1. Certain people are in positions of authority in my life. I appreciate it when they make it very clear what's right and wrong, acceptable and unacceptable, so I can work hard to do what's right.
2. Authority figures are just people like the rest of us, some doing good, some doing bad, and in the end, we each need to be able to decide whom to affiliate with and whom to avoid.

3. I'm somewhat suspicious of authority figures, especially ones who offer easy answers and black-and-white rules and judgments.
4. I prefer authority figures who function like coaches, helping me to learn to succeed and become an effective, independent person.

Here the statements are presented in seasonal order; 1, 2, 3, and 4 correspond to the seasons of Simplicity, Complexity, Perplexity, and Harmony, but they were *not* presented in order in the booklet. An algorithm of sorts was developed to convert participant form data into a visual expression of their location in the seasons. The calculation was based on creating a range of possible responses between a "perfect" Simplicity participant and a "perfect" Harmony participant. Theoretically, a person at the extreme of Simplicity would choose the statement associated with season 1 (Simplicity) *first* for every subject, choose the statement associated with season 2 (Complexity) second, the statement for season 3 (Perplexity) third, and the statement for season 4 (Harmony) fourth. Conversely, a participant at the extreme of Harmony would choose the statements in the reverse order—Harmony first, then Perplexity, Complexity, and Simplicity in order, for each subject presented.

For analysis, the statements were weighted according to which season they corresponded 1-4 (Simplicity 1, Complexity 2, Perplexity 3, Simplicity 4). The statements were also weighted by what order they were ranked within a subject—otherwise all subjects would have tallied to a 10 (1 + 2 + 3 + 4 = 10), regardless of chosen order. To accomplish this, the first statement chosen for each subject received its full statement weight (1, 2, 3, or 4), the second its weight -1 (0, 1, 2, 3), the third its weight -2, without going below zero (0, 0, 1, 2) and the

fourth its weight -3, again without going below zero (0, 0, 0, 1). The resulting range across twelve subjects started at 12 (a “perfect” Simplicity would score (0 + 0 + 0 + 1)12 = 12) and a “perfect” Harmony would score a 72 (0 + 0 + 2 + 4)12 = 72). Figure 2 shows the original scoring sheet, initially processed by hand (in an outdoor festival environment, no less).

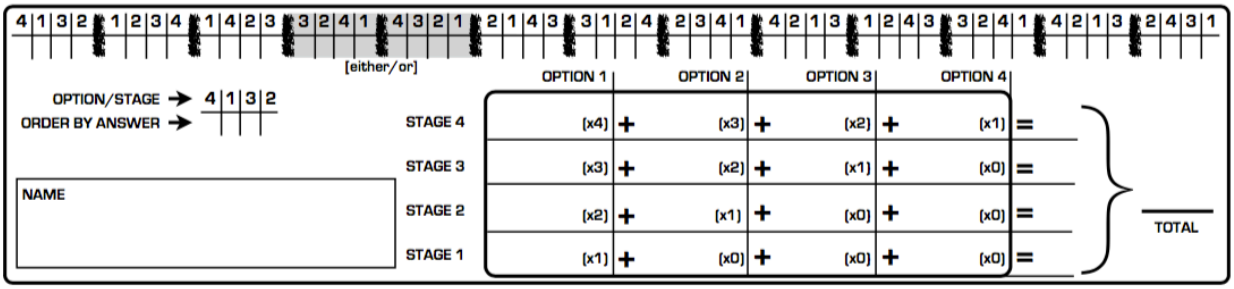

Figure 2 Original participant scoring card

Figure 3 shows the image we used to display results. Imagining the figure as a bicycle wheel, each spoke line represents a possible score within the range. Imagined as a clock face, perfect Simplicity is at 12 o’clock and possible scores proceed clockwise around the circle. The bold lines represent where each season crosses into the next. Eventually the hand-tallied sheet was converted to a spreadsheet, reducing input time from 10-15 minutes per participant to about 30 seconds each. In those early sessions, unfortunately, the primary purpose was not research and basic research methodology was not being employed (e.g., informed consent). An estimated 300 participants over time engaged in post-survey feedback through group conversation, but most of the survey data were not retained. However, given that until this present study was undertaken, there was no record of informed consent, no training for

research with human subjects, and no IRB approval or institutional oversight, any data retained from that time would likely face ethical concerns for publication purposes.

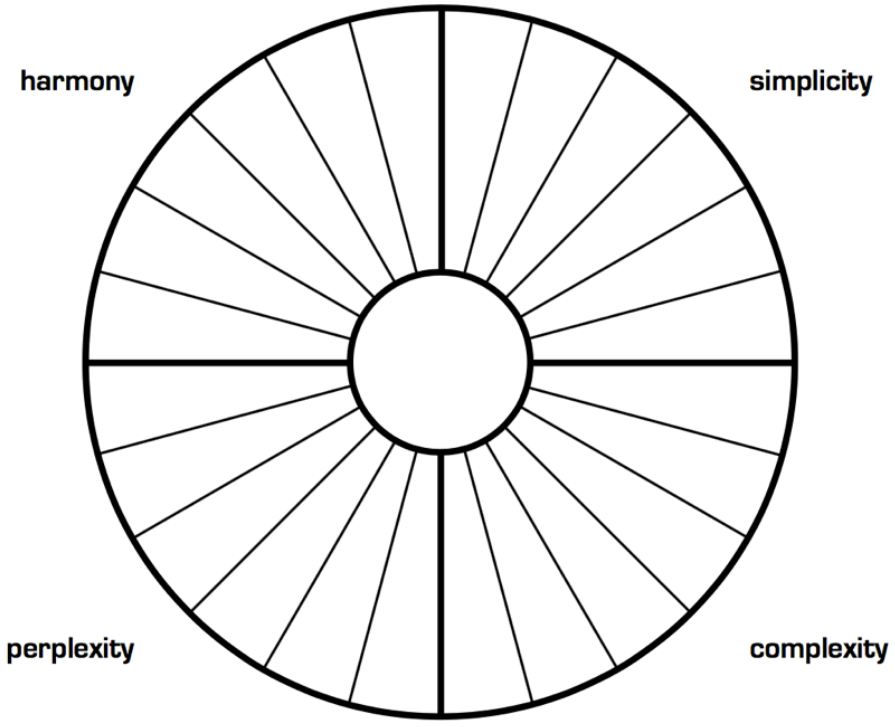

Figure 3 Image used for displaying group results

Self-reporting from participants in the debriefing session seemed to confirm results. The debriefing conversation, done in a group, typically lasted 40 minutes to an hour, sometimes longer. At no time did a participant indicate strong disagreement with where their survey results located them within the seasons. However, as stated earlier, with neither the author nor McLaren having psychometric measure-building education and the pressing reality that the calculation behind the scoring was mathematically unvalidated and initially subject to human

error through hand-scoring, even non-empirical publishing of theoretical results seemed ill-advised. Results were interesting but not useful for generalizing beyond the immediate group of participants. Participant results were not being published or even aggregated, and no broad claims beyond the immediate group of participants were being made. In this form, the measure was essentially a fine conversation-starter but held no empirical statistical merit. The purpose of the proposed studies is to revise the format of the measure and assess the scale's reliability, and test the following hypotheses:

Hypothesis 1: The newly reconfigured McLaren-Alton Spirituality Scale measures four distinct factors.

Hypothesis 2: The Perplexity items of the McLaren-Alton Spirituality Scale will correlate positively with the Batson and Shoenrade Religion as Quest Scale.

Hypothesis 3: The Simplicity items of the McLaren-Alton Spirituality Scale will correlate positively with the Gorsuch and McPhearson intrinsic scale items, and the Perplexity items of the MASS will correlate negatively with the intrinsic items of Gorsuch and McPhearson.

CHAPTER II

METHOD

A self-report questionnaire booklet (see Appendix B) containing 72 items related to McLaren's seasons of Simplicity (16 items), Complexity (15 items), Perplexity (21 items), and Harmony (19 items) was presented to participants. The questionnaire also included Gorsuch & McPhearson's Religious Orientation Scale (14 items, see Appendix C) and Batson & Schoenrade's Quest scale (12 items, see Appendix D) to clarify the motivational implications of the MASS items. The self-report questionnaire was selected for its Simplicity and efficiency in quickly gathering data from a sufficient number of participants to achieve goals for statistical analysis. Participants in the sample rated their response to scale items on a scantron form. Personal information was not included in the questionnaire and informed consent was gathered separately. There was no opportunity to associate questionnaire responses with personal information. Informed consent was collected before the questionnaire being presented.

Optical scanning equipment was used to transfer questionnaire data to a computer. This step took place under the supervision of Dr. Paul J. Watson (the researcher's faculty advisor) of the Psychology Department with the assistance of the UTC Academic Computing personnel, who had no information regarding the project participants or the nature of the research being

undertaken. The electronic data file presented no opportunity for identifying any individual participant.

Answer sheets were kept by Dr. Watson until the final data file was delivered for analysis. The final data file was held as a permanent record of the project while the original answer sheets were destroyed. This data consolidation made it possible to test the hypotheses stated above through standard statistical analysis such as internal reliability analysis, inter-item correlations, principal-axis factor analysis, and correlation coefficients regarding the additional measures used. The analysis of all data occurred at the group level, using only electronic data, with no attempt or ability to identify any individual participant in the project. Participant responses were kept anonymous and their identities remain confidential and unknown to anyone involved in the research or analysis.

In its original, pre-research design form, there were 12 scale items per spiritual stage, for a total of 48. These statements were presented in sets of 4, addressing 12 subject areas: authority, truth, life, God, heaven & hell (as a single subject area), patriotism, religion, belonging, education, teachers, the Bible, and prayer. Participants responded to each set of four as weighted statements, ordering them by the strength of personal agreeance. In converting the weighted-statements version to 5-point Likert items, the original statements were simplified internally and, in some instances, split into two separate statements, resulting in the season totals mentioned above (DeVillis, 2017). As an example, a Simplicity statement from the original measure read, “Truth is simple and clear if you have the courage to face it squarely. Some people have it and some don’t. I’m gaining more truth every day.” In the new measure, that became two items: “Truth is simple and clear and it’s better if I just face it

squarely" and "Some people have the truth and some don't." Readability for age level was examined using the Flesch-Kincaid readability scale (Kincaid, 1975), with the goal of a maximum of a 7th-grade reading level to attain reasonably easy reading, potentially even by pre-teens in further studies. Reading levels began in the original weighted statements version with Simplicity items at 6.25, Complexity at 7.56, Perplexity at 8.34, and Harmony at 9.71. After the initial edit converting them to Likert scale statements, the goal was achieved with Simplicity at 2.72, Complexity at 4.20, Perplexity at 5.30, and Harmony at 5.04. After analysis, the reduced final item list (Appendix E) with five items per season finished with Simplicity at 3.51, Complexity at 3.78, Perplexity at 6.64, and Harmony at 5.33.

As the new scale went to piloting, each stage or quadrant had approximately 18 items per stage (72 total; see Appendix B), allowing for further item removal after piloting, with the intention of creating a concise, statistically reliable and conceptually valid scale after weak item removal. The results section will demonstrate which items were strengthening the scale and which were weakening it. Additional measures of motivation and religious development were administered to examine correlations that may support construct validity. The initial study includes Batson and Schoenrade's Quest scale, which explores openness to grappling with existential questions, validates religious doubt as positive, and expresses openness to change (Batson, 1991). The Quest scale should correlate negatively with the Perplexity subscale of the MASS-X. Also included is the Gorsuch and McPherson I/E-Revised and Single-Item Scales, measuring intrinsic and extrinsic motivation (Gorsuch, 1989). Their revised scale examines two areas of extrinsic motivation, extrinsic-personal and extrinsic-social. For purposes of this research, only the broader categories of intrinsic and extrinsic will be examined. The inclusion

of this scale should allow more in-depth examination of the subscale correlations within the MASS-X, mainly looking for differences between Harmony and the previous three seasons, as we shall discuss further on.

Participants

A total of 312 participants took the survey as part of an end-of-semester extra credit opportunity the last day of Dr. Paul J. Watson's general psychology courses in the spring semester of 2018. The participant group spans two class settings. Both groups participated on the same morning, one group at 10 a.m. and the next at 11 a.m. Of the total of 312 participants, 73 were dropped before analysis for certain reasons. Any participant who failed to fill out the questionnaire completely was eliminated, as was any participant who responded to *too many* questions (there were 50 more spaces available on the answer sheet than questions in the survey). Obvious pattern-answering (answering only Cs, or zigzag answering) participants were eliminated. A final filter examined participants' responses to questions 5 and 6 in section one, logically opposed statements about God. #5 claims, "God is the powerful king and supreme master of the universe. All things are under God's control," while #6 states, "God is a lie believed in only by ignorant, backward, unscientific people." Holding both of these positions is logically untenable by a single person; therefore, any participant answering these two questions the same (apart from "I am not sure" responses) was eliminated.

The remaining 239 participants had a mean age of 19.13, with the ages 18-20 making up 91.6% of the total sample. 44.8% of participants identified as male, while 55.2% identified as female. 0% of participants identified as nonbinary. Regarding race, 80.8% of participants were

Caucasian/White, 13.4% of participants were Black/African-American, 1.7% (each) were Hispanic, Middle Eastern, or Asian, and .8% indicated "other."

Religious affiliation was overwhelmingly Christian (Non-denominational, Protestant, Catholic, or Orthodox), as expressed by 79.5% of participants. 13.8% of the participants were Atheist/Agnostic. 3.8% of participants indicated "other." 1.7% of participants were Muslim, with .4% Jewish and .4% Hindu participants rounding out the group. 61.1% of participants described themselves as "both religious and spiritual," the most common response. 12.1% responded as "religious but not spiritual." 18.4% responded as "spiritual but not religious" and 7.5% as "neither religious nor spiritual." 2 participants failed to respond to this question. Regarding their interest in religion of scale of 0 (no interest at all) to 9 (extremely interested), 28.5% indicated they were extremely interested and 6.3% indicated no interest at all, with a mean response score of 6.6.

Materials

A self-report questionnaire booklet containing 72 items related to McLaren's seasons of Simplicity (16 items), Complexity (15 items), Perplexity (21 items), and Harmony (19 items) was used, with individuals expressing agreement on a 5-point Likert format delineated as a) I strongly disagree, b) I tend to disagree, c) I am not sure, d) I tend to agree, and e) I strongly agree (see Appendix B).

The questionnaire also included Gorsuch and McPhearson's (1989) Religious Orientation Scale (14 items, included as Appendix C) and Batson and Schoenrade's (1991) Quest scale (12 items, included as Appendix D) to clarify the motivational implications of the MASS-X items.

Gorsuch and McPhearson's (1989) scale is a measure of intrinsic/extrinsic motivation, which should correlate (moving from internal motivation to external motivation) to progress through the MASS-X seasons. Batson and Schoenrade's (1991) scale, as already described, is a measure of religion as quest, which should also correlate positively with the Perplexity items of the MASS-X and negatively with at least the MASS-X Simplicity items.

Procedure

Participants first provided informed consent. In this initial piloting procedure, participants will be given the scale items in season order (rather than intermingling items)—Simplicity, Complexity, Perplexity, and Harmony, followed by the Gorsuch and McPhearson (1989) scale and the Batson and Schoenrade (1991) scale.

Participants rated their response to scale items on a Scantron form. Identifying personal information was not be included in the questionnaire and informed consent was gathered on a separate form. The informed consent forms were used to ensure students received extra credit for their participation. Demographic information regarding gender, age, spiritual self-description, interest in religion, preferred religious community, and race will be gathered, but not associated with the individual participant.

CHAPTER III

RESULTS

After the data was converted to an SPSS .spv file type, the data was analyzed to assess Cronbach's Alpha of the Simplicity, Complexity, Perplexity, and Harmony subscales, adjust according to Cronbach's Alpha if item deleted, and finally exploratory factor analysis (Miles & Shelvin, 2001). Acceptable reliability would be Cronbach's Alpha = > .7 for the four interior scales and principle axis factoring with Eigenvalues = > 1. The initial reliability statistics were excellent. The 17 Simplicity items had a Cronbach's Alpha of .910 (Appendix F), the 15 Complexity items .813 (Appendix G), the 21 Perplexity items .804 (Appendix H), and the 19 Harmony items .772 (Appendix I). However, after removing weak items and reducing each scale to 12 items each, the Cronbach's Alpha of Simplicity rose to .933, Complexity items to .836, Perplexity items to .851, and Harmony items to .845, as noted in Appendix F, G, H, and I.

A dimension reduction factor analysis using principle axis factoring revealed five factors with an Eigenvalue > 2. The Kaiser-Mayer-Olkin Measure of Sampling Adequacy was .930, which is excellent (Hutcheson and Sofroniou, 1999), and Bartlett's Test of Sphericity was significant (p = < .001). However, the scree plot in Figure 4 shows the lopsided weight of the first factor with an Eigenvalue of 16.877 and accounting for 35.161% of the total variance. Additionally, a four-factor solution (Appendix J) demonstrated loadings inconsistent with the construct.

The visualization in the Figure 4 scree plot points to the possibility that the fourth factor, though its Eigenvalue is > 1, may be part of the scree and not a valid factor. The dimension reduction was repeated, asking for a 3-factor solution (rotated factor matrix in Appendix K). Simplicity items again loaded strongly on the first factor, with item A14, “The Bible is absolutely true in every detail,” loading strongly but negatively on the third factor. Complexity items split relatively evenly between the first and second factor. Perplexity items loaded primarily on factor 3, but item C7, “God is the projection of human hopes and fears, and belief in God is promoted by people who gain money and power by promoting that belief,” item C9, “I have serious doubts about heaven and hell,” and item C18, “I used to accept and believe the Bible, but now I’m not so sure what to think. I have mixed feelings,” all cross loaded negatively on factor 1.

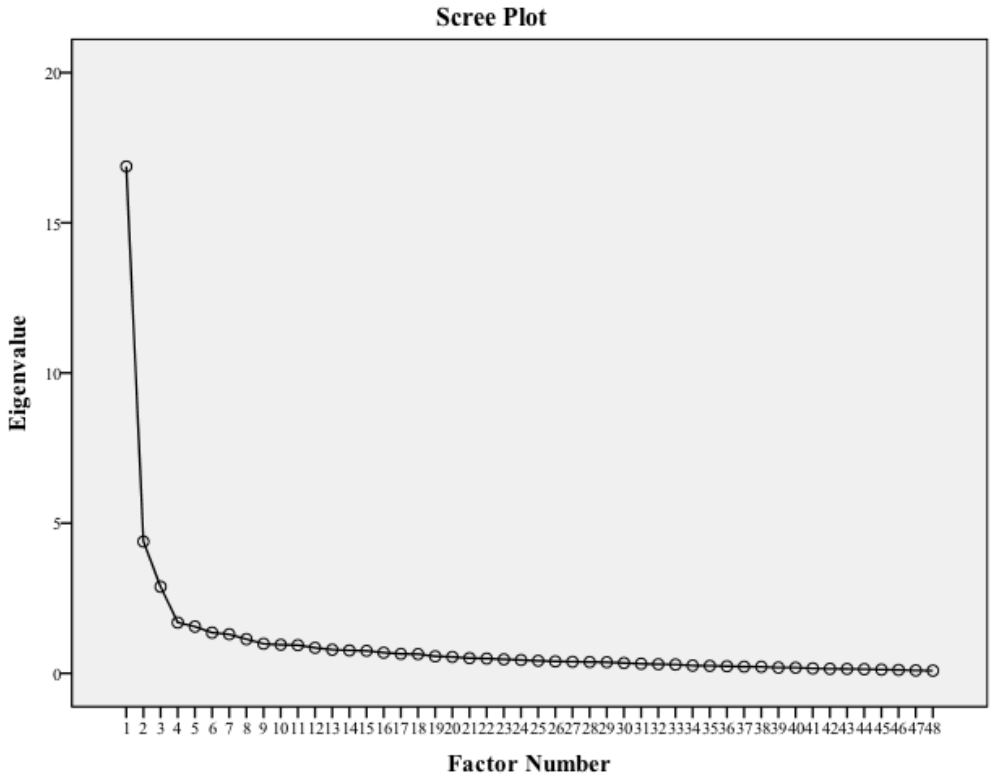

Figure 4 Scree plot of the four-factor solution

A three-factor solution appears to be the best interpretation of the data, but the factor loading of the subscales remained inconsistent with the construct. Turning away from the analysis to revisit the language of the original statements in the subscales, it became clear that the inexperience of the researcher had muddied the subscale divisions by including statements that overlapped the proposed boundaries of the construct. In an effort to clarify the relationship between the scale items and the factors, the data were reanalyzed. The fourth subscale appeared most problematic, so it was temporarily set aside and the remaining three, Simplicity, Complexity, and Perplexity, were subjected to a new 3-factor test to discern the top loading items (see Appendix L). Reducing the scale size once again, only the top 5 loading items from each scale were retained. Simplicity retained items A5, A9, A13, A14, and A16, for a Cronbach's Alpha of .929 (reliability for all four 5-item subscales are included in Appendix M). Complexity retained B2, B3, B10, B11, and B12 for a Cronbach's Alpha of .730. Perplexity retained C12, C13, C18, C20, and C21 for a Cronbach's Alpha of .846. The Harmony items were separately treated as a single factor (Appendix N), and the top 5 loading items of that subscale were retained: D6, D16, D17, D18, and 19, for a Cronbach's Alpha of .886.

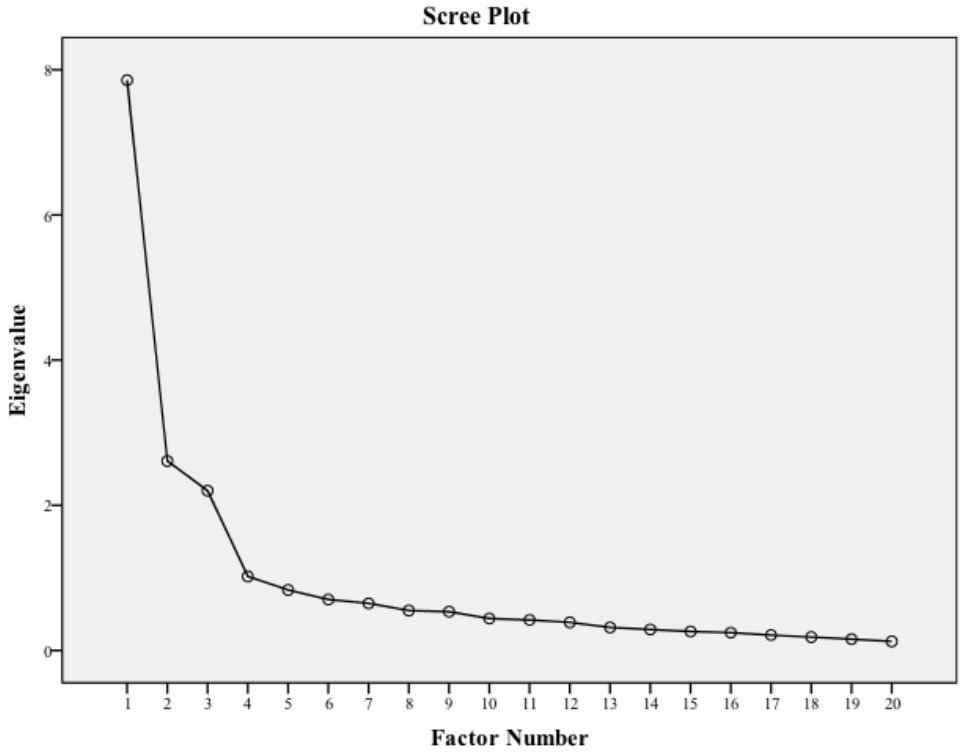

Figure 5 Scree plot of the three-factor solution

A final three-factor solution was explored (see Appendix O), returning a KMO of .899 and passing Bartlett's Test of Sphericity (p = < .01). A much clearer picture of the three factors emerged. All of the Simplicity items loaded on the first factor > .780, with only one cross loading above .2; A14 negatively loaded on a second factor at -.317. All Complexity items loaded on the third factor > .480, with only one cross loading; B10 loaded on the first factor with Simplicity at .389. All of the Perplexity items loaded on the second factor > .640, with a single item cross loading; C18 negatively cross-loaded with the Simplicity items at -.426. All of the Harmony items loaded on the first factor with Simplicity > .640, with one as high as .911. Factor loadings are displayed in Table 1.

The scree plot of the final solution shown in Figure 5 demonstrates a more visually compelling argument for three factors. The weight of the three factors is more evenly distributed than the initial solution. Here the first factor's Eigenvalue is 7.856, accounting for 39.280% of total variance (the Eigenvalue of first factor in the initial solution was approaching 18). All three factors have Eigenvalues > 2, accounting together for 63.339% of total variance (Appendix P).

Following the conclusion of exploratory factor analysis, attention turned to correlation analysis between the MASS and the two additional scales included in the survey, as well as examining inter-correlations between the MASS subscales. The present study exhibited a slightly improved Cronbach's alpha of .807 over Batson and Schoenrade's (1991) Cronbach's alpha of .78 (Appendix Q). Results also confirmed Gorsuch and McPhearson's (1989) Cronbach's alpha of .838 for the intrinsic items and .68 for extrinsic items (all extrinsic social/personal items combined; see Appendix R). Correlations between the 5-item subscales were compared to correlations between their 12-item predecessors (Appendix S). Corresponding to the improvement in factor loading with the reduction in items, the correlation between Simplicity and Complexity subscales dropped from a correlation of $r(238) = .798$, $p = .000$ to $r(238) = .156$, $p = .016$. The correlation between Complexity and Harmony reduced from a correlation of $r(238) = .810$, $p = .000$ to $r(238) = .249$, $p = .000$. With Harmony items settling in on the first factor, its correlation with Simplicity *increased* from $r(238) = .726$, $p = .000$ to $r(238) = .823$, $p = .000$. The discussion section will revisit this in detail, but at this point we begin to observe the differences between Simplicity's and Harmony's interactions with other measures.

Both Gorsuch and McPhearson's Religious Orientation Scale and Batson and Schoenrade's Quest Scale have interior scales; the overall scales were examined first, followed by the subscales of each. The overall Quest scale (Batson and Schoenrade, 1991) correlated slightly negatively but significantly to Simplicity ($r(238) = -.197$, $p = .002$), positively to Perplexity ($r(238) = .580$, $p = .000$) and had no significant correlation with Complexity or Harmony (see Appendix U). The subscales of QEX, QDOUBT, and QOPEN show slight variation (Appendix V). Simplicity does not significantly correlate to QEX but does correlate negatively to QDOUBT ($r(238) = -.250$, $p = .000$) and slightly negatively but significantly to QOPEN ($r(238) = -.162$, $p = .012$). Perplexity correlated positively to QEX, QDOUBT, and QOPEN, with $r(238) = .474$, $p = .000$, $r(238) = .376$, $p = .000$, and $r(238) = .548$ $p = .000$, respectively. Complexity and Harmony again had no significant correlations with any of the three subscales.

The Religious Orientation Scale (Gorsuch and McPhearson, 1989) features overall intrinsic and extrinsic measures, with the extrinsic measure comprised of two subscales (see Appendix W for all correlations). The intrinsic measure correlated strongly with Simplicity ($r(238) = .808$, $p = .000$), slightly but significantly with Complexity ($r(238) = .156$, $p = .016$), negatively with Perplexity ($r(238) = .523$, $p = .000$), and strongly with Harmony ($r(238) = .770$, $p = .000$). The overall extrinsic measure correlated strongly with Simplicity ($r(238) = .435$, $p = .000$), had no significant correlation with Complexity or Perplexity, and had significant positive correlation with Harmony ($r(238) = .569$, $p = .000$). When the subscales of the extrinsic measure are examined, differences once again emerge (Appendix X). Simplicity correlates significantly to EXPER ($r(238) = .535$, $p = .000$), but has no significant correlation to EXSOC. Complexity retains no significant correlation with EXPER and EXSOC. Perplexity retains no significant relationship to

EXPER, but shows slightly positive, significant correlation to EXSOC ($r(238) = .170$, $p = .009$). Harmony is significantly correlated to EXPER ($r(238) = .660$, $p = .000$) and is slightly but significantly correlated to EXSOC ($r(238) = .166$, $p = .010$).

Table 1 An exploratory analysis three-factor solution

20-Item MASS Rotated Factor Matrix[a]

	Factor 1	Factor 2	Factor 3
A5	.836		
A9	.807		
A13	.786		
A14	.793	-.317	
A16	.814		
B2			.530
B3			.598
B10	.389		.482
B11			.640
B12			.657
C12		.720	
C13		.732	
C18	-.426	.641	
C20		.699	
C21		.714	
D6	.657		
D16	.786		
D17	.644		
D18	.911		
D19	.748		

Extraction Method: Principal Axis Factoring; Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.

As a final observation of the data, composite scores of participant responses were examined in SPSS using a Generalized Linear Model (GLM) procedure to determine if any main effects or interactions existed within the limited demographic information we gathered from

the sample. Ultimately this was a fruitless search, as none of the models we ran passed Levene's Test of Equality of Error Variances, which tests the null that variances are equal across groups (Tabachnick and Fidell, 2013). The F from the Levene's Test was significant (p = < .05) for all four seasons of Simplicity, Complexity, Perplexity, and Harmony, indicating that error variances were not equal across groups and, therefore, any conclusion regarding main effects was not possible.

CHAPTER IV

DISCUSSION

To first address the three cross loading items in the final three-factor solution, namely A14, B10, and C18 from Table 1, we must move from the analytic mindset to the conceptual mindset of the construct. McLaren's season of Perplexity stands opposed, in a sense, to the other seasons, conflicting most sharply with the season of Simplicity. Therefore, it is no surprise that Simplicity item A14, "The Bible is true in absolutely every detail," would load negatively on the factor primarily occupied by Perplexity. Similarly, the Perplexity item C18, "I used to accept and the Bible, but now I'm not so sure what I think about it; I have mixed feelings," finds no quarter on the first factor, where Simplicity took root. The lone cross loading Complexity item, B10, "I love being part of a group that helps me grow and mature," is an example of the sort of item that should be refined for content before future studies with this scale. Its generality could be embraced by at least three of the seasons, and even Perplexity might resonate with "grow and mature." The presence of items such as this in the full versions of the subscales is easily what clouded the early exploratory analysis.

While it is true that analysis of the data resoundingly refuted Hypothesis 1 (the newly reconfigured McLaren-Alton Spirituality Scale measures four distinct factors), the fact that the Harmony items loaded so strongly on the same factor as the Simplicity items called for a closer

Table 2 Subscale correlations

Final MASS Correlations

		SIM	COMP	PERP	HARM
SIMPLICITY	Pearson Corr.	-			
	Sig. (2-tailed)				
	N	239			
COMPLEXITY	Pearson Corr.	.156*	-		
	Sig. (2-tailed)	.016			
	N	239	239		
PERPLEXITY	Pearson Corr.	-.456**	-.093	-	
	Sig. (2-tailed)	.000	.153		
	N	239	239	239	
HARMONY	Pearson Corr.	.823**	.249**	-.323**	-
	Sig. (2-tailed)	.000	.000	.000	
	N	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

look. Table 2 provides a reminder of the subscale correlations of the MASS (also included as Appendix T).

Here we see that that Harmony is also highly *correlated* to Simplicity, which was an unexpected outcome. Returning to the scale items themselves deepened the mystery, as 3 of the five items of Simplicity are logically opposed to the construct of the season of Harmony. Here are Simplicity's final items:

1. God is the powerful king and supreme master of the universe. All things are under God's control.
2. I'm part of the one true and valid religion.
3. The Bible gives me simple, helpful answers for life's most complex questions.

4. The Bible is absolutely true in every detail.

5. If I pray, God will answer.

The first statement represents an authoritarian god concept and rebuts Harmony's openness. The second statement is a direct rejection of perspective-taking, as is the fourth. Harmony also includes two statements regarding scripture, and they are arguably logically opposed to the Simplicity statements. Harmony's final statements are as follows:

1. We best love God by loving others—including outsiders, outcasts, and enemies.

2. I read the Bible as a deep and meaningful book that reflects the richness of our lives, full of internal tensions, mysteries, fear, wonder, and hope.

3. The Bible shows us a complex history of people attempting to understand God.

4. Prayer keeps me connected to God.

5. Prayer helps my connection with others.

"Loving outsiders, outcasts, and enemies" in number 1 doesn't sit well against the hard stance of "one true and valid religion." The "internal tensions, mysteries, fear, wonder, and hope" described in number 2 don't resonate with Simplicity's "simple, helpful *answers*." Harmony's description of the Bible as a "complex history of people attempting to understand God" also doesn't fall in line with Simplicity's assertion that "the Bible is absolutely true in every detail."

Here it may be useful to point out that for purposes of creating the hypotheses for this study, McLaren's work was the primary source. The intention from the beginning was to take

something from popular writing and see if it could be validated, rather than judge it empirically *first* and potentially undermine it with my hypotheses. My review of the literature happened alongside the attempt, and it was in Fowler (and Ricoeur) that the logic for the three-factor solution eventually emerged: the second naiveté. When Fowler's stages and McLaren's seasons are aligned side by side, Fowler's Conjunctive faith sits right next to McLaren's Harmony. McLaren does mention in passing that Harmony does blend into a kind of second Simplicity, but Fowler does some heavier lifting here regarding the revisiting of past belief. Previous beliefs are repurposed to find new meaning (or none!) in old symbols and stories.

Even understanding that theoretically it would be difficult to be so bold as to hypothesize that these two conceptually different constructs would map mathematically on the same factor. As it sorted out, being wrong has never been so exciting.

The correlations within the MASS and between its subscales and the Quest and Intrinsic/Extrinsic Revised (I/E-R) scales supported the remaining hypotheses but also provided some unique surprises that helped clarify that there are real differences between Simplicity and Harmony in the way they interacted the other MASS subscales and the Quest and I/E-R measures. Table 3 shows the correlations between the MASS subscales and the Quest scale and its three internal subscales.

Table 3 Correlation of MASS subscales with Quest subscales

Correlations

		SIM	COMP	PERP	HARM	QEX	QDOUBT	QOPEN
SIM	Pearson Corr.	-						
	Sig. (2-tailed)							
	N	239						
COMP	Pearson Corr.	.156*	-					
	Sig. (2-tailed)	.016						
	N	239	239					
PERP	Pearson Corr.	-.456**	-.093	-				
	Sig. (2-tailed)	.000	.153					
	N	239	239	239				
HARM	Pearson Corr.	.823**	.249**	-.323**	-			
	Sig. (2-tailed)	.000	.000	.000				
	N	239	239	239	239			
QEX[a]	Pearson Corr.	-.085	.088	.474**	.086	-		
	Sig. (2-tailed)	.189	.176	.000	.184			
	N	239	239	239	239	239		
QDOUBT[b]	Pearson Corr.	-.250**	.107	.376**	-.099	.456**	-	
	Sig. (2-tailed)	.000	.098	.000	.128	.000		
	N	239	239	239	239	239	239	
QOPEN[c]	Pearson Corr.	-.162*	.072	.548**	.063	.591**	.384**	-
	Sig. (2-tailed)	.012	.270	.000	.330	.000	.000	
	N	239	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Readiness to face existential questions

b. Self-criticism and perception of religious doubt as positive

c. Openness to change

When examined against the full Quest scale (see Appendix U), the hypothesized relationship between Perplexity and Quest proved true; Perplexity was significantly positively correlated to Quest. The next point of interest was how the highly correlated Simplicity and Harmony interacted with other measures. Even examining Table 2 MASS subscale correlations

we see that while Perplexity was negatively correlated to Simplicity and Harmony, it was *more* negatively correlated with Simplicity. Examining the Quest scale as a whole, Simplicity is slightly but significantly negatively correlated to Quest, but Harmony displays no significant correlation to Quest. This is not surprising; the construct defines Harmony as more open to perspective-taking than Simplicity.

Quest's subscales examine three dimensions: openness to existential questions, willingness to regard self-criticism and religious doubt as positive, and openness to change. Simplicity has no significant correlation to openness to existential questions, is significantly negatively correlated to religious doubt as positive, and slightly but significantly correlated to openness to change. The more substantial negative correlation to religious doubt as positive holds up logically, given that Simplicity believes it participates in the one true, valid religion. Harmony exhibits no significant correlations with any of the Quest subscales, though it is interesting to note that two of its non-significant correlations are *positive*, moving away from Simplicity. Perplexity remains significantly positively correlated with all three Quest subscales, with its largest correlation being openness to change; this resonates with Perplexity's continual state of personal flux. It is also worth noting that the perspective-taking season of Complexity shows no significant correlation with the entire Quest scale nor any of its three subscales.

Table 4 Correlations of MASS subscales with I/E-R scales

Correlations

		SIM	COMP	PERP	HARM	INTRIN	EXTRIN
SIM	Pearson Corr.	-					
	Sig. (2-tailed)						
	N	239					
COMP	Pearson Corr.	.156*	-				
	Sig. (2-tailed)	.016					
	N	239	239				
PERP	Pearson Corr.	-.456**	-.093	-			
	Sig. (2-tailed)	.000	.153				
	N	239	239	239			
HARM	Pearson Corr.	.823**	.249**	-.323**	-		
	Sig. (2-tailed)	.000	.000	.000			
	N	239	239	239	239		
INTRIN	Pearson Corr.	.808**	.152*	-.523**	.770**	-	
	Sig. (2-tailed)	.000	.019	.000	.000		
	N	239	239	239	239	239	
EXTRIN	Pearson Corr.	.435**	.098	.093	.569**	.260**	-
	Sig. (2-tailed)	.000	.130	.151	.000	.000	
	N	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4 displays the correlations for the MASS subscales with the Intrinsic/Extrinsic-Revised measure, which are also available in Appendix W. The original tool measured religious motivation, examining the individual's responsiveness to personal satisfaction and external reward (Allport & Ross, 1967). The revised measure includes additional subscales for extrinsic motivation, which consider aspects of extrinsic motivation regarding social relationships and extrinsic motivation regarding personal benefits (Gorsuch & McPherson, 1989). Table 5 displays the correlations for the MASS subscales with the I/E-R extrinsic subscales, which are also available in Appendix X.

Table 5 Correlations of MASS subscales with I/E-R subscales

Correlations

		SIM	COMP	PERP	HARM	EXPER	EXSOC
SIM	Pearson Corr.	-					
	Sig. (2-tailed)						
	N	239					
COMP	Pearson Corr.	.156*	-				
	Sig. (2-tailed)	.016					
	N	239	239				
PERP	Pearson Corr.	-.456**	-.093	-			
	Sig. (2-tailed)	.000	.153				
	N	239	239	239			
HARM	Pearson Corr.	.823**	.249**	-.323**	-		
	Sig. (2-tailed)	.000	.000	.000			
	N	239	239	239	239		
EXPER[a]	Pearson Corr.	.535**	.225**	-.008	.660**	-	
	Sig. (2-tailed)	.000	.000	.906	.000		
	N	239	239	239	239	239	
EXSOC[b]	Pearson Corr.	.090	-.108	.170**	.166**	.181**	-
	Sig. (2-tailed)	.165	.096	.009	.010	.005	
	N	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Extrinsic-personal

b. Extrinsic-social

Results also confirmed hypothesis 3, which stated that the Simplicity items of the McLaren-Alton Spirituality Scale would correlate positively with the Gorsuch and McPhearson intrinsic scale items, and the Perplexity items of the MASS will correlate negatively with the intrinsic items of the I/E-R. Complexity initially appears only significantly correlated to intrinsic motivation, but when we look at the extrinsic subscales we see a significant positive correlation to extrinsic personal motivation. Unsurprisingly, the troubled season of Perplexity has a strong

negative correlation to intrinsic motivation. Interestingly, the extrinsic subscales reveal a significant positive correlation to extrinsic personal benefits for Perplexity, while it had no significant correlation to the extrinsic measure overall.

Differences in the behavior of the highly correlated Simplicity and Harmony subscales continue to emerge here. Both Simplicity and Harmony have strong positive correlations to intrinsic motivation and smaller—but still significantly positive—correlations to extrinsic motivation. Looking at the extrinsic subscales, both Simplicity and Harmony have strong significantly positive correlations to extrinsic personal items, but *only* Harmony shows a significant positive correlation to extrinsic social items. These differences resonate with McLaren's own shorthand description of Simplicity, Complexity, Perplexity, and Harmony as dependent, independent, counter-dependent, and interdependent (B.D. McLaren, personal communication, February 13, 2018). Harmony's extrinsic social motivation is matched here by Perplexity, novel due to its described inability to engage socially apart from "a select few similarly alienated individuals."

Additional Analyses

Having completed the intended exploratory factor analysis and addressed all stated hypotheses, the data were revisited to see if any main effects could be discerned from the demographic information collected from the sample. Without repeating the descriptive statistics from the participant section above, we collected information regarding gender using male, female, and non-binary as possible responses. Age of participants was also obtained. A self-report of religiousness/spirituality was expressed by a) I am both religious and spiritual, b) I

am religious but not spiritual, c) I am spiritual but not religious, or d) I am neither spiritual or religious. *Interest* in religion was expressed on a scale from 0 (no interest at all) to 9 (extremely interested). Preferred religious community options included Christian (non-denominational, Protestant, Catholic, or Orthodox, all taken together), Jewish, Buddhist, Hindu, Muslim, Atheist/Agnostic, or other. Race responses included Black/African-American, Caucasian/White, Hispanic, Middle Eastern, Asian, or other.

The hope was that creating composite scores of responses by season and performing a multiple regression using the Generalized Linear Model procedure in SPSS might yield some further insight into potential main effects for each season. Initially, the results were quite intriguing. In short, Simplicity, Perplexity, and Harmony all showed significant main effects of religious community, spiritual self-report, and interest in religion. *None* of those held as main effects for Complexity, where gender, age, and race emerged as main effects. After more (and more) manipulation examining interactions and reducing terms in the equation for each, the truth was realized: the models were failing Levene's Test of Equality of Variance (Tabachnick & Fidell, 2013), which assumes variances are equal across groups. Our models all had significance levels $< .05$, so the null was rejected.

If an eyebrow has raised about bothering to report about analysis, this information was included mainly to shine a light on the exact makeup of our data sample. Our sample was large enough to return robust observed power and massive partial Etas when examining for main effects, but it was also lopsidedly Caucasian and lopsidedly Christian. Our Ns in other categories for those variables were nearly non-existent. Even the interest in religion was not particularly

balanced when treated as a categorical variable instead of a covariate. The immediate desire is to seek a more diverse sample of participants for a second study with the revised scale.

Conclusion

While overall satisfied with the results of the exploratory factor analysis, the preference of the researcher before proceeding with any future examination or comparison of the MASS is to conduct a further content edit on the scale statements and repeat the exploratory factor analysis. While the correlative differences between Simplicity and Harmony are interesting, they might be clarified by ensuring that there is no crossover between Simplicity and Harmony scale statements. Several are logically opposed, which strengthens the argument they are different parts of the overall construct. However, while the fifth Simplicity statement, "If I pray, God will answer," is unlikely to be adopted by someone in Harmony, the fourth and fifth Harmony statements—"Prayer keeps me connected to God," and "Prayer helps my connection with others"—could be expressed by a person in Simplicity. More questionable is the near doubling of two statements in the relatively easy to encapsulate contrarian season of Perplexity. "I have a lot of questions about prayer," and, "I have a lot of questions about prayer—probably more questions than answers," hardly stand as distinct scale items after surfacing among the highest performing mathematically during scale analysis.

A disappointment of this construct validation process is not emerging with a useful tool for practitioners to return to the work of engaging individuals regarding their spirituality. The initial version employed by the researcher and McLaren, while not statistically validated, proved useful in engaging individuals in group settings regarding their self-perception of

personal spiritual orientation. Looking ahead at future directions for researching this construct, two points stand out as prominent. First, the scale item revisions and a second exploratory factor analysis with a new sample as described. Second, the reduction of total MASS items in play from the original 72 to 20 should allow for space to not only replicate (and hopefully improve) correlations with the Quest scale items and I/E-R items, but also allow analysis of correlations with The Religious Schema Scale (Streib, Hood, & Klein, 2010) that was cut from consideration due to format limitations in the present study. The original work done by myself and McLaren, while not statistically validated, discovered youth resonating with of perspective-taking, conflict, and eventual resolution that lay beyond the stages (Fowler, 1981) or seasons (McLaren, 2011) they were developmentally likely to have achieved. The possibility that first encounters with elements of particularly the seasons of conflict and resolution through life experience agrees in principle with the cyclical styles (vs. stages) of The Religious Schema Scale measure—a definite point of interest for future study.

REFERENCES

Allport, G.W., Ross, J.M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 423-43.

Batson, C. D., & Schoenrade, P. (1991). Measuring religion as quest: 2) Reliability concerns. *Journal for the Scientific Study of Religion, 30*, 430-447.

Benson, P.L., Roehlkepartain, E.C., & Rude, S.P. (2003). Spiritual development in childhood and adolescence: Toward a field of inquiry. *Applied Developmental Science, 7*(3), 205-213.

Canda, E. R. (2008). Religion and spirituality. In T. Mizrahi & L. E. Davis (Eds.). *Encyclopedia of social work*. National Association of Social Workers and Oxford University Press (e-reference edition) University of Kansas. 15 October 2008 http://www.oxford-naswsocialwork.com.ww2.lib.ku.edu:2048/entry?entry=t203.e188-s4.

Canda, E. R., & Furman, L. D. (2010). *Spiritual diversity in social work practice: The heart of helping* (2nd ed.). New York: Oxford University Press.

Canda, E. R., Nakashima, M., Burgess, V. L., Russel, R., & Barfield, S.T. (2003). *Spiritual diversity and social work: A comprehensive bibliography with annotations* (2nd ed.). Council on Social Work Education, Inc.

Cheon, J. W. (2010). A transpersonal understanding of youth spirituality: Implications for an expanded view of youth work. *Currents, 9*(1).

Cornish, M. A., Wade, N. G., & Post, B. C. (2012). Attending to religion and spirituality in group counseling: Counselors' perceptions and practices. *Group Dynamics: Theory, Research, and Practice, 16*(2), 122-137. doi:10.1037/a0026663

DeVillis, R.F. (2017). *Scale development: Theory & applications*. 4th ed. (Sage Applied Social Research Methods Series, Vol. 26.) Thousand Oaks, CA: Sage.

Fowler, J. (1981). *Stages of faith : The psychology of human development and the quest for meaning* (1st ed.). San Francisco: Harper & Row.

Friedman, H. (1983). The Self-expansiveness level form: A conceptualization and measurement of a transpersonal construct. Journal of Transpersonal Psychology, 15, 37–50.

Garbarino, J., & Bedard, C. (1996). Spiritual challenges to children facing violent trauma. Childhood, 3, 467-478.

Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/extrinsic measurement: I/E revised and single-item scales. Journal for the Scientific Study of Religion, 28, 348-354.

Hart, T. (2005). Spiritual experiences and capacities of children and youth. In E. C. Roehlkepartain, P. E. King, L., Wagner, & P. L. Benson, (Eds.), The handbook of spiritual development in childhood and adolescence (pp. 163-177). Thousand Oaks, CA: Sage.

Hutcheson, G. and Sofroniou, N. (1999) The Multivariate social scientist: Introductory statistics using generalized linear models. Sage Publication, Thousand Oaks, CA. https://doi.org/10.4135/9780857028075

Kincaid, J.P., Fishburne, R.P., Rogers, R.L., & Chissom, B.S. (1975). Derivation of new readability formulas (automated readability index, fog count, and flesch reading ease formula) for Navy enlisted personnel. Research Branch Report 8–75. Chief of Naval Technical Training: Naval Air Station Memphis.

Krinsic measurement: I/E revised and single-item scales. *Journal for the Scientific Study of Religion, 28*, 348-354.

Kohlberg, Lawrence; Charles Levine; Alexandra Hewer (1983). *Moral stages: A current formulation and a response to critics*. Basel, NY: Karger. ISBN 3-8055-3716-6.

Kvarfordt, C. L., & Sheridan, M. J. (2007). The role of religion and spirituality in working with children and adolescents: Results of a national survey. Journal of Religion & Spirituality in Social Work, 26(3), 1-23.

Learner, R., Wertlieb, D., Jacobs, F. (2003). Historical and theoretical bases of applied developmental science. *Foundations of Applied Developmental Science.*

Liang, B., & Ketcham, S. G. (2017). Emerging adults' perceptions of their faith-related purpose. *Psychology of Religion and Spirituality, 9*(Suppl 1), S22-S31. doi:10.1037/rel0000116

Magaldi-Dopman, D., & Park-Taylor, J. (2013). Sacred adolescence: Practical suggestions for psychologists working with adolescents' religious and spiritual identity. *Spirituality in Clinical Practice, 1*(S), 40-52. doi:10.1037/2326-4500.1.s.40

McLaren, B.D. (2011). *Naked spirituality: A life with God in 12 simple words*. New York, NY: HarperOne.

Miles, J. & Shelvin, M. (2001). *Applying regression & correlation: A guide for students and researchers.* Thousand Oaks, CA: Sage.

Monod, S., Brennan, M., Rochat, E., Martin, E., Rochat, S., & Büla, C. J. (2011). Instruments measuring spirituality in clinical research: A systematic review. *Journal of General Internal Medicine, 26*(11), 1345-1357. doi:http://dx.doi.org/10.1007/s11606-011-1769-7

Oestreicher, M. (2008). *Youth ministry 3.0: A manifesto of where we've been, where we are, and where we need to go*. Grand Rapids, MI: Zondervan.

Osmer, Richard R., & Douglass, Katherine M. (2018). *Cultivating teen faith: Insights from the confirmation project*. Grand Rapids, MI: William B. Eerdsmans Publishing Company.

Pappas, J. D., & Friedman, H. L. (2007). The construct of self-expansiveness and the validity of the Transpersonal Scale of the Self-expansiveness Level form. *The Humanistic Psychologist, 35*(4), 323-347. doi:http://dx.doi.org/10.1080/08873260701593334

Perry, William G., Jr. (1970), *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart, and Winston.

Piaget, Jean (1972). *The psychology of intelligence*. Totowa, NJ: Littlefield.

Ricoeur, Paul (1969). *The symbolism of evil*. Boston: Beacon.

Streib, H., Hood Jr, R.W., Klein, Constantin. (2010), The religious schema scale: Construct and initial validation of a quantitative measure for religious styles. *The International Journal for the Psychology of Religion*. 20:151-172.

Tabachnick, B.G., & Fidell, L. S. (2013). *Using mulitivariate statistics*. Boston: Pearson/Allyn & Bacon.

Taylor, C. (2007). *A secular age.* Cambridge, Mass: Belknap Press of Harvard University Press.

APPENDIX A

ORIGINAL WEIGHTED STATEMENTS MCLAREN-ALTON SPIRITUALITY SCALE (MASS)

Simplicity:

Certain people are in positions of authority in my life. I appreciate it when they make it very clear what's right and wrong, acceptable and unacceptable, so I can work hard to do what's right.

Truth is simple and clear if you have the courage to face it squarely. Some people have it and some don't. I'm gaining more truth every day.

Life is a war, a battle between good and evil, right and wrong, and I want to fight on the right side.

God is the powerful king and supreme master of the universe, and all things are under God's control.

God is a lie believed in only by ignorant, backward, unscientific people.

Heaven and hell are literal places – one with real streets paved with real gold, and one with real flames and gnashing teeth. Each of us will end up in one or the other.

I am part of the greatest nation in the world. We may not be perfect, but we're the best.

I'm part of the one true and valid religion.

I love being part of a group that is based on what is good and right.

Education is about one thing: learning the right answers to the right questions and being guided away from wrong answers and the wrong questions.

I love teachers who organize the important information that you really need to know, present it in a way you can remember it, and make things interesting and clear.

The Bible is absolutely true in every detail and its message is easy to understand if you have faith.

We are commanded to pray. If we pray, God will answer. Never doubt God's promises.

Complexity

I prefer authority figures who function like coaches, helping me learn to succeed and become an effective, independent person.

It takes a lot of skill and hard work to discover the truth for yourself, but it can be done if you take the necessary steps and precautions.

Life is a challenge and with the right knowledge and skills you can succeed, and I want to succeed.

God is working to help all who seek God to experience life in all its fullness, and God's blessings are available to all who have true faith.

God is a concept that helps some people succeed in life, but the concept doesn't work for me.

Heaven and hell refer to two destinations after this life – and the way we choose to live this life will determine how well or bad off we are in the next.

I love our nation because it provides freedom and opportunity to succeed.

My religion works for me.

I love being part of a group that helps me grow and mature.

Education is about learning how to learn so you can learn on your own.

I love teachers who inspire and challenge me to try harder and excel more.

The Bible is essential for effective Christian living. We can learn correct techniques to interpret and apply it correctly to our lives.

Prayer works if you learn the right approaches.

Perplexity

I'm somewhat suspicious of authority figures, especially ones who offer easy answers and black-and-white rules and judgments.

Everybody thinks they have the truth, but it's actually pretty baffling and mysterious sometimes. What seems like the truth to you may not seem like the truth to me.

Life is a puzzle or a mystery, and I'm trying to face my oversimplified concepts and see through my illusions.

God can't be contained by any creed or religion.

God is the projection of human hopes and fears, and belief in God is promoted by people who gain money and power by promoting that belief.

Heaven and hell are myths. They may have some social value in promoting good behavior through desire for rewards and fear of punishment, but belief in them also produces negative outcomes.

I have mixed feelings about our nation. It has both good and bad qualities.

I'm troubled or conflicted about my religion, and all religion in general.

I love being part of a group of people who are honest and refuse to be manipulated.

Education is about asking questions freely and confronting myths, superstitions, and false certainties.

I love teachers who make me think for myself by providing the freedom to question.

I used to accept and believe the Bible, but now I'm not so sure what I think about it. I have mixed feelings.

Prayer frustrates and confuses me sometimes. I have a lot of questions about it.

Harmony

Authority figures are just people like the rest of us, some doing good, some doing bad, and in the end, we each need to be able to evaluate them and decide whom to affiliate with and whom to avoid.

I don't know as much as I used to know, but I've sorted through a lot of old beliefs and now I hold to some deep, basic truths I can trust.

Life is a gift that I'm seeking to enjoy and use for the benefit of others.

We best love God by loving others – including outsiders, outcasts, and enemies.

Although I don't choose to call it God, I do believe there is a mysterious and sacred dimension to life.

Heaven and hell may or may not be literal places that resemble what we've imagined, but what matters is that they do describe two paths in life – one towards communion with God and others and one towards alienation and hate.

I’m sure that other people love their nations just as much as I love mine, and they want their nation to fulfill its potential for greatness.

I find meaning and direction in my religion, and I acknowledge that other people find meaning and direction in their religions too.

I love being part of a group that is making the world a better place.

Education is about taking the next step in your journey.

I love teachers who treat me as a peer and fellow learner, encouraging my desire to learn.

I love the Bible and read it as a deeply meaningful book that reflects the richness of our lives, full of internal tensions, mysteries, fear, wonder, and hope.

Prayer is more about being connected with God than about asking for things.

APPENDIX B

REVISED LIKERT SCALE MCLAREN-ALTON SPIRITUALITY SCALE (MASS)

For each statement below, please indicate to what extent you agree or disagree, using the following scale items to respond. Please respond to all items.

A: I strongly disagree
B: I tend to disagree
C: I am not sure
D: I tend to agree
E: I strongly agree

1. I appreciate it when my authority figures make it very clear what's right and wrong, acceptable and unacceptable, so I can work hard to do what's right. (A1)

2. Truth is simple and clear and it's better if I just face it squarely. (A2)

3. Some people have the truth and some don't. (A3)

4. Life is a battle between good and evil, a struggle between right and wrong. I want to fight on the right side. (A4)

5. God is the powerful king and supreme master of the universe. All things are under God's control. (A5)

6. God is a lie believed in only by ignorant, backward, unscientific people. (A6)

7. Heaven and hell are literal places – one with real streets paved with real gold, and one with real flames and gnashing teeth. Each of us will end up in one or the other. (A7)

8. I am part of the greatest nation in the world. We may not be perfect, but we're the best. (A8)

9. I'm part of the one true and valid religion. (A9)

10. I love being part of a group that is based on what is right. (A10)

11. Education helps me get to the right answers quickly. (A11)

12. I prefer teachers that just give me the answers rather than marching me through the process of getting them on my own. (A12)

13. The Bible gives me simple, helpful answers for life's most complex questions. (A13)

14. The Bible is absolutely true in every detail. (A14)

15. The Bible's message is easy to understand if you have faith. (A15)

16. If I pray, God will answer. (A16)

17. I never doubt God's promises. (A17)

18. I prefer authority figures who function more like coaches than strict rule-givers. They help me learn to succeed and become an effective, independent person. (B1)

19. It takes a lot of perseverance and hard work to discover truth for yourself, but I'm learning a lot in the process. (B2)

20. With the right knowledge and skills you can succeed in life, and I want to succeed. (B3)

21. I've come to realize that experiencing life fully involves learning from people who think differently than me. (B4)

22. God is working to help everyone who seeks God. (B5)

23. God is a concept that helps some people succeed in life, but the concept doesn't work for me. (B6)

24. The way we choose to live this life determines how well or bad off we are in the next. (B7)

25. I love our nation because it provides freedom and opportunity to succeed. (B8)

26. My religion works for me. (B9)

27. I love being part of a group that helps me grow and mature. (B10)

28. Education is about learning how to learn so you can keep learning on your own. (B11)

29. I love teachers who inspire and challenge me to try harder and dig deeper. (B12)

30. The Bible is essential for meaningful Christian living. (B13)

31. We can learn how to carefully interpret the Bible for practical application in many areas of life. (B14)

32. Prayer is meaningful to me, but it's not a magic trick. (B15)

33. I'm somewhat suspicious of authority figures. (C1)

34. I'm skeptical of anyone who offers easy answers and black-and-white rules or judgments. (C2)

35. Everybody thinks they have the truth. (C3)

36. The truth is baffling and mysterious sometimes. Certainty doesn't seem entirely possible. (C4)

37. Life is a puzzle or a mystery, and I'm trying to face where I've oversimplified concepts and see through my own illusions. (C5)

38. God can't be contained by any creed or religion. (C6)

39. God is the projection of human hopes and fears, and belief in God is promoted by people who gain money and power by promoting that belief. (C7)

40. Heaven and hell are myths. (C8)

41. I have serious doubts about heaven and hell. (C9)

42. I've witnessed belief in heaven and hell create negative social outcomes. (C10)

43. Sometimes I find myself preoccupied—even angry—with some of the things I think are wrong with our country. (C11)

44. I'm troubled or conflicted about my religious beliefs. (C12)

45. I'm conflicted about how I feel about religions in general. (C13)

46. I love being part of a group of people who are honest and refuse to be manipulated. (C14)

47. Education is about asking questions freely and confronting myths, superstitions, and false certainties. (C15)

48. I love teachers who make me think for myself by providing the freedom to question. (C16)

49. I resist teachers who are always looking for a certain few answers. (C17)

50. I used to accept and believe the Bible, but now I'm not so sure what I think about it. I have mixed feelings. (C18)

51. Prayer frustrates and confuses me sometimes. (C19)

52. I have a lot of questions about prayer. (C20)

53. I have a lot of questions about prayer—probably more questions than answers. (C21)

54. When it comes to authority figures, I think it's best to evaluate everyone fairly. (D1)

55. My experience with authority figures has taught me to listen to everyone and remember that my loyalty is up to me. (D2)

56. I've learned it's not always useful to make sure the other person knows what I think. (D3)

57. I've sorted through a lot of old beliefs and now I hold to some deep, basic truths I can trust. (D4)

58. Life is a gift that I'm seeking to enjoy and use for the benefit of others. (D5)

59. We best love God by loving others – including outsiders, outcasts, and enemies. (D6)

60. Although I don't choose to call it God, I do believe there is a mysterious and sacred dimension to life. (D7)

61. Heaven and hell may or may not be literal places that resemble what we've imagined, but what matters is that they do describe two paths in life – one towards communion with God and others and one towards alienation and hate. (D8)

62. I'm sure that other people love their nations just as much as I love mine, and they want their nation to fulfill its potential for greatness. (D9)

63. I find meaning and direction in my religion, and I acknowledge that other people find meaning and direction in their religions too. (D10)

64. I love being part of a group that is making the world a better place. (D11)

65. Education is about taking the next step in your journey. (D12)

66. Education is about preparing for whatever is next. (D13)

67. I love teachers who treat me as a peer and fellow learner. (D14)

68. I love teachers who encourage my desire to learn and celebrate me as an equal thinker. (D15)

69. I read the Bible as a deeply meaningful book that reflects the richness of our lives, full of internal tensions, mysteries, fear, wonder, and hope. (D16)

70. The Bible shows us a complex history of people attempting to understand God. (D17)

71. Prayer keeps me connected to God. (D18)

72. Prayer helps my connection with others. (D19)

APPENDIX C

GORSUCH & MCPHEARSON'S RELIGIOUS ORIENTATION SCALE

(Item numbers continue from Appendix B.)

73. I enjoy reading about my religion.

74. I go to church because it helps me to make friends.

75. It doesn't much matter what I believe so long as I am good.

76. It is important to me to spend some time in private thought and prayer.

77. I have often had a strong sense of God's presence.

78. I pray mainly to gain relief and protection.

79. I try hard to live all my life according to my religious beliefs.

80. What religion offers me most is comfort in times of trouble and sorrow.

81. Prayer is for peace and happiness.

82. Although I am religious, I don't let it affect my daily life.

83. I go to church mostly to spend time with my friends.

84. My whole approach to life is based on my religion.

85. I go to church mainly because I enjoy seeing people I know there.

86. Although I believe in my religion, many other things are more important in life.

87. I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.

APPENDIX D

BATSON & SCHOENRADE'S QUEST SCALE

(Item numbers continue from Appendix C.)

88. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to the world.

89. My life experiences have led me to rethink my religious convictions.
90. God wasn't very important to me until I began to ask questions about the meaning of my own life.

91. It might be said that I value my religious doubts and uncertainties.

92. For me, doubting is an important part of what it means to be religious.

93. I find religious doubts upsetting.

94. Questions are far more central to my religious experience than are answers.

95. As I grow and change, I expect my religion also to grow and change.

96. I am constantly asking questions about my religious beliefs.

97. I do not expect my religious convictions to change in the next few years.

98. There are many religious issues on which my views are still changing.

APPENDIX E

MCLAREN-ALTON SPIRITUALITY SCALE, FINAL ITEMS

Simplicity:

1. God is the powerful king and supreme master of the universe. All things are under God's control.

2. I'm part of the one true and valid religion.

3. The Bible gives me simple, helpful answers for life's most complex questions.

4. The Bible is absolutely true in every detail.

5. If I pray, God will answer.

Complexity:

6. It takes a lot of perseverance and hard work to discover truth for yourself, but I'm learning a lot in the process.

7. With the right knowledge and skills you can succeed in life, and I want to succeed.

8. I love being part of a group that that helps me grow and mature.

9. Education is about learning how to learn so you can keep learning on your own.

10. I love teachers who inspire and challenge me to try harder and dig deeper.

Perplexity:

11. I'm troubled or conflicted about my religious beliefs.

12. I'm conflicted about how I feel about religion in general.

13. I used to accept and believe the Bible, but now I'm not so sure what I think about it. I have mixed feelings.

14. I have a lot of questions about prayer.

15. I have a lot of questions about prayer—probably more questions than answers.

Harmony:

16. We best love God by loving others—including outsiders, outcasts, and enemies.

17. I read the Bible as a deep and meaningful book that reflects the richness of our lives, full of internal tensions, mysteries, fear, wonder, and hope.

18. The Bible shows us a complex history of people attempting to understand God.

19. Prayer keeps me connected to God.

20. Prayer helps my connection with others.

APPENDIX F

INITIAL SIMPLICITY ITEM RELIABILITY ANALYSIS

Simplicity Reliability Statistics

Cronbach's Alpha	N of Items
.910[a]	17

Simplicity Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	42.01	163.407	.382	.910
A2	42.11	163.841	.387	.910
A3	42.68	165.746	.260	.913
A4	42.16	157.480	.590	.905
A5	42.27	145.688	.792	.898
A6	41.63	159.717	.644	.904
A7	42.78	148.392	.685	.902
A8	42.76	157.969	.479	.908
A9	42.61	143.594	.819	.897
A10	42.12	158.562	.654	.904
A11	42.38	168.780	.183	.914
A12	43.71	169.044	.151	.916
A13	42.84	147.008	.787	.898
A14	42.82	143.251	.774	.898
A15	42.92	152.503	.633	.903
A16	42.46	146.512	.796	.898
A17	42.58	147.871	.735	.900

a. Cronbach’s Alpha rose to .933 after reducing items to 12 total.

APPENDIX G

INITIAL COMPLEXITY ITEM RELIABILITY ANALYSIS

Complexity Reliability Statistics

Cronbach's Alpha	N of Items
.813[a]	15

Complexity Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B1	42.79	63.197	.170	.819
B2	42.64	62.306	.315	.809
B3	42.43	62.044	.362	.807
B4	42.73	64.711	.118	.819
B5	43.08	54.464	.608	.788
B6	43.02	54.874	.533	.794
B7	43.76	59.848	.267	.817
B8	42.99	60.781	.329	.809
B9	42.72	57.053	.611	.790
B10	42.44	59.214	.617	.794
B11	42.75	62.153	.279	.811
B12	42.69	61.205	.358	.807
B13	43.00	54.966	.580	.790
B14	43.04	53.595	.713	.780
B15	43.27	54.533	.541	.793

a. Cronbach’s Alpha rose to .836 after reducing items to 12 total.

APPENDIX H

INITIAL PERPLEXITY ITEM RELIABILITY ANALYSIS

Perplexity Reliability Statistics

Cronbach's Alpha	N of Items
.804[a]	21

Perplexity Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C1	40.02	105.177	.395	.795
C2	39.89	107.460	.296	.800
C3	39.75	112.213	.103	.809
C4	39.60	107.464	.314	.799
C5	39.59	107.162	.386	.796
C6	39.76	116.115	-.077	.819
C7	40.94	101.418	.511	.788
C8	41.22	99.859	.536	.786
C9	41.08	97.956	.573	.783
C10	40.39	105.234	.360	.797
C11	39.28	108.851	.255	.802
C12	40.92	102.192	.513	.788
C13	40.88	100.163	.557	.785
C14	39.06	114.106	.034	.810
C15	39.37	109.771	.224	.803
C16	38.98	110.215	.245	.802
C17	39.93	110.278	.195	.805
C18	41.16	99.935	.568	.784
C19	40.89	105.656	.339	.798
C20	40.66	100.148	.545	.785
C21	40.66	100.218	.544	.785

a. Cronbach’s Alpha rose to .851 after reducing items to 12 total.

APPENDIX I

INITIAL HARMONY ITEM RELIABILITY ANALYSIS

Harmony Reliability Statistics

Cronbach's Alpha	N of Items
.772[a]	19

Harmony Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D1	51.77	71.719	.233	.768
D2	51.83	72.192	.227	.769
D3	51.90	71.286	.259	.767
D4	52.25	71.037	.221	.770
D5	51.67	69.510	.348	.761
D6	51.75	62.823	.650	.737
D7	53.59	81.871	-.316	.819
D8	52.68	67.963	.283	.768
D9	52.05	68.577	.367	.760
D10	51.83	66.313	.532	.748
D11	51.46	69.987	.417	.759
D12	51.59	69.354	.415	.758
D13	51.56	70.103	.403	.759
D14	51.51	69.937	.426	.758
D15	51.41	70.759	.427	.760
D16	52.29	63.682	.491	.749
D17	52.12	64.845	.559	.745
D18	51.92	64.061	.479	.750
D19	52.31	64.411	.455	.752

a. Cronbach’s Alpha rose to .845 after reducing items to 12 total.

APPENDIX J

MCLAREN-ALTON SPIRITUALITY SCALE, INITIAL 4-FACTOR SOLUTION

48-Item MASS Rotated Factor Matrix[ab]

	Factor			
	1	2	3	4
A4	.538			
A5	.833			
A6	.721			
A7	.707			
A8	.342			.679
A9	.804			
A10	.567			
A13	.800			
A14	.799			
A15	.648			
A16	.817			
A17	.718			
B2		.454		
B3		.540		
B5	.751			
B6	.803			
B8				.766
B9	.576			
B10	.390	.479		
B11		.598		
B12		.575		
B13	.745			
B14	.821			
B15	.649			
C1				
C5				
C7	-.440		.383	
C8	-.776			
C9	-.782		.314	
C10	-.338			
C12			.696	
C13			.700	
C18	-.465		.589	
C19			.440	
C20			.735	
C21			.742	

(cont.)

D6		
D9		.310
D10	.506	.345
D11		.489
D12		.666
D13		.641
D14		.598
D15		.610
D16	.782	
D17	.616	
D18	.914	
D19	.755	

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.
b. Items loading < .3 are suppressed.

APPENDIX K

MCLAREN-ALTON SPIRITUALITY SCALE INITIAL 3-FACTOR SOLUTION

48-Item MASS Rotated Factor Matrix[ab]

	1	2	3
A4	.571		
A5	.845		
A6	.717		
A7	.720		
A8	.467		
A9	.809		
A10	.592		
A13	.795		
A14	.791		-.326
A15	.631		
A16	.815		
A17	.728		
B2		.457	
B3		.543	
B5	.758		
B6	.811		
B8	.338		
B9	.597		
B10	.419	.483	
B11		.598	
B12		.567	
B13	.736		
B14	.804		
B15	.628		
C1			
C5			
C7	-.435		.391
C8	-.786		
C9	-.790		.328
C10	-.342		
C12			.713
C13			.715
C18	-.420		.626
C19			.453
C20			.713
C21			.720
D6	.657		
D9		.314	
D10	.506	.346	
D11		.492	

D12		.667
D13		.643
D14		.597
D15		.605
D16	.770	
D17	.606	
D18	.898	
D19	.729	

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

b. Items loading < .3 are suppressed.

APPENDIX L

MCLAREN-ALTON SPIRITUALITY SCALE 3-FACTOR SOLUTION, HARMONY ITEMS REMOVED

12-Item Simplicity, Complexity, and Harmony Rotated Factor Matrix[a]

	1	2	3
A4	.569		
A5	.851		
A6	.697		
A7	.728		
A8	.481		
A9	.815		
A10	.602		
A13	.799		
A14	.803	-.306	
A15	.626		
A16	.818		
A17	.728		
B2			.577
B3			.617
B5	.751		
B6	.802		
B8	.356		
B9	.595		
B10	.437		.526
B11			.596
B12			.618
B13	.728		
B14	.792		
B15	.607		
C1			
C5			.333
C7	-.435	.375	
C8	-.787		
C9	-.779	.333	
C10	-.356		
C12		.702	
C13		.719	
C18	-.419	.632	
C19		.462	
C20		.729	
C21		.731	

APPENDIX M

MCLAREN-ALTON SPIRITUALITY SCALE, 20-ITEM RELIABILITY ANALYSIS

Simplicity (Short) Reliability Statistics

Cronbach's Alpha	N of Items
.929	5

Simplicity (Short) Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A5	9.97	25.590	.818	.912
A9	10.32	25.002	.822	.912
A13	10.54	26.435	.792	.918
A14	10.52	24.090	.831	.911
A16	10.16	26.087	.813	.914

Complexity (Short) Reliability Statistics

Cronbach's Alpha	N of Items
.730	5

Complexity (Short) Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B2	13.50	5.579	.445	.701
B3	13.28	5.490	.519	.675
B10	13.30	5.705	.448	.700
B11	13.61	4.995	.524	.671
B12	13.55	5.047	.524	.671

Perplexity (Short) Reliability Statistics

Cronbach's Alpha	N of Items
.846	5

Perplexity (Short) Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C12	5.46	15.956	.672	.811
C13	5.42	15.169	.699	.803
C18	5.70	15.808	.620	.824
C20	5.20	15.573	.632	.821
C21	5.20	15.478	.649	.816

Harmony (Short) Reliability Statistics

Cronbach's Alpha	N of Items
.886	5

Harmony (Short) Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D6	10.80	18.897	.649	.877
D16	11.34	16.514	.772	.850
D17	11.17	19.271	.644	.879
D18	10.97	16.109	.834	.834
D19	11.36	16.893	.731	.860

APPENDIX N

MCLAREN-ALTON SPIRITUALITY SCALE 3-FACTOR SOLUTION, HARMONY ITEMS ISOLATED

12-Item Isolated Harmony Factor Matrix[a]

	Factor
	1
D6	.718
D9	.356
D10	.628
D11	.483
D12	.388
D13	.388
D14	.358
D15	.399
D16	.746
D17	.691
D18	.759
D19	.669

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

APPENDIX O

MCLAREN-ALTON SPIRITUALITY SCALE, 20-ITEM 3-FACTOR SOLUTION

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.899
Bartlett's Test of Sphericity	Approx. Chi-Square	3024.888
	df	190
	Sig.	.000

20-Item MASS Rotated Factor Matrix[a]

	Factor		
	1	2	3
A5	.836		
A9	.807		
A13	.786		
A14	.793	-.317	
A16	.814		
B2			.530
B3			.598
B10	.389		.482
B11			.640
B12			.657
C12		.720	
C13		.732	
C18	-.426	.641	
C20		.699	
C21		.714	
D6	.657		
D16	.786		
D17	.644		
D18	.911		
D19	.748		

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

APPENDIX P

MCLAREN-ALTON SPIRITUALITY SCALE, VARIANCE TABLE

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.856	39.280	39.280	7.514	37.572	37.572	6.548	32.741	32.741
2	2.610	13.050	52.331	2.102	10.508	48.080	2.860	14.298	47.039
3	2.202	11.008	63.339	1.668	8.341	56.421	1.876	9.382	56.421
4	1.021	5.103	68.442						
5	.834	4.170	72.612						
6	.703	3.513	76.125						
7	.649	3.247	79.372						
8	.550	2.749	82.121						
9	.535	2.674	84.795						
10	.440	2.200	86.994						
11	.421	2.103	89.097						
12	.387	1.936	91.033						
13	.317	1.586	92.620						
14	.289	1.445	94.065						
15	.262	1.310	95.375						
16	.246	1.230	96.605						
17	.212	1.061	97.666						
18	.185	.923	98.589						
19	.157	.785	99.374						
20	.125	.626	100.000						

Extraction Method: Principal Axis Factoring.

APPENDIX Q

BATSON AND SCHOENRADE 12-ITEM QUEST SCALE RELIABILITY ANALYSIS

Reliability Statistics

Cronbach's Alpha	N of Items
.807	12

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BAT1	21.08	53.787	.481	.790
BAT2	20.49	55.643	.468	.792
BAT3	21.12	50.788	.628	.775
BAT4	21.41	53.382	.526	.786
BAT5	20.75	55.580	.426	.795
BAT6	20.92	53.792	.536	.785
BAT7	20.65	62.177	.049	.826
BAT8	20.81	56.519	.458	.793
BAT9	20.56	55.471	.412	.797
BAT10	20.61	53.893	.520	.787
BAT11	21.46	57.481	.317	.805
BAT12	20.84	51.673	.627	.776

APPENDIX R

GORSUCH AND MCPHERSON INTRINSIC/EXTRINSIC-REVISED SCALE RELIABILITY ANALYSIS

Intrinsic Scale Reliability Statistics

Cronbach's Alpha	N of Items
.838	8

Intrinsic Scale Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GOR1	16.91	40.165	.637	.811
GOR3	17.32	37.087	.667	.805
GOR4	16.78	38.756	.680	.805
GOR5	17.08	37.429	.703	.800
GOR7	17.06	37.878	.707	.800
GOR10	16.96	45.707	.267	.851
GOR12	17.58	37.139	.694	.801
GOR14	17.70	44.887	.225	.862

Extrinsic Scale Reliability Statistics

Cronbach's Alpha	N of Items
.689	6

Extrinsic Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GOR2	9.16	13.630	.387	.658
GOR6	8.24	12.033	.531	.607
GOR8	7.95	12.497	.465	.632
GOR9	7.91	12.904	.461	.634
GOR11	9.46	14.770	.343	.671
GOR13	9.31	14.199	.325	.678

APPENDIX S

MCLAREN-ALTON SPIRITUALITY SCALE, 12-ITEM AND 5-ITEM CORRELATIONS

Correlations

		S5	C5	P5	H5	S12	C12	P12	H12
SIM5	Pearson Corr.	-							
	Sig. (2-tailed)								
	N	239							
COMP5	Pearson Corr.	.156*	-						
	Sig. (2-tailed)	.016							
	N	239	239						
PERP5	Pearson Corr.	-.456**	-.093	-					
	Sig. (2-tailed)	.000	.153						
	N	239	239	239					
HARM5	Pearson Corr.	.823**	.249**	-.323**	-				
	Sig. (2-tailed)	.000	.000	.000					
	N	239	239	239	239				
SIM12	Pearson Corr.	.972**	.203**	-.422**	.833**	-			
	Sig. (2-tailed)	.000	.002	.000	.000				
	N	239	239	239	239	239			
COMP12	Pearson Corr.	.772**	.619**	-.358**	.802**	.798**	-		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	N	239	239	239	239	239	239		
PERP12	Pearson Corr.	-.690**	-.063	.884**	-.556**	-.663**	-.538**	-	
	Sig. (2-tailed)	.000	.335	.000	.000	.000	.000		
	N	239	239	239	239	239	239	239	
HARM12	Pearson Corr.	.708**	.462**	-.278**	.886**	.726**	.810**	-.473**	-
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	239	239	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX T

MASS SUBSCALE CORRELATIONS

Correlations

		SIM	COMP	PERP	HARM
SIMPLICITY	Pearson Corr.	-			
	Sig. (2-tailed)				
	N	239			
COMPLEXITY	Pearson Corr.	.156*	-		
	Sig. (2-tailed)	.016			
	N	239	239		
PERPLEXITY	Pearson Corr.	-.456**	-.093	-	
	Sig. (2-tailed)	.000	.153		
	N	239	239	239	
HARMONY	Pearson Corr.	.823**	.249**	-.323**	-
	Sig. (2-tailed)	.000	.000	.000	
	N	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX U

MASS SUBSCALE CORRELATIONS WITH QUEST SCALE

Correlations

		SIM	COMP	PERP	HARM	QUEST
SIM	Pearson Corr.	-				
	Sig. (2-tailed)					
	N	239				
COMP	Pearson Corr.	.156*	-			
	Sig. (2-tailed)	.016				
	N	239	239			
PERP	Pearson Corr.	-.456**	-.093	-		
	Sig. (2-tailed)	.000	.153			
	N	239	239	239		
HARM	Pearson Corr.	.823**	.249**	-.323**	-	
	Sig. (2-tailed)	.000	.000	.000		
	N	239	239	239	239	
QUEST	Pearson Corr.	-.197**	.108	.580**	.030	-
	Sig. (2-tailed)	.002	.095	.000	.648	
	N	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX V

MASS SUBSCALE CORRELATIONS WITH QUEST SUBSCALES

Correlations

		SIM	COMP	PERP	HARM	QEX	QDOUBT	QOPEN
SIM	Pearson Corr.	-						
	Sig. (2-tailed)							
	N	239						
COMP	Pearson Corr.	.156*	-					
	Sig. (2-tailed)	.016						
	N	239	239					
PERP	Pearson Corr.	-.456**	-.093	-				
	Sig. (2-tailed)	.000	.153					
	N	239	239	239				
HARM	Pearson Corr.	.823**	.249**	-.323**	-			
	Sig. (2-tailed)	.000	.000	.000				
	N	239	239	239	239			
QEX[a]	Pearson Corr.	-.085	.088	.474**	.086	-		
	Sig. (2-tailed)	.189	.176	.000	.184			
	N	239	239	239	239	239		
QDOUBT[b]	Pearson Corr.	-.250**	.107	.376**	-.099	.456**	-	
	Sig. (2-tailed)	.000	.098	.000	.128	.000		
	N	239	239	239	239	239	239	
QOPEN[c]	Pearson Corr.	-.162*	.072	.548**	.063	.591**	.384**	-
	Sig. (2-tailed)	.012	.270	.000	.330	.000	.000	
	N	239	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Readiness to face existential questions

b. Self-criticism and perception of religious doubt as positive

c. Openness to change

APPENDIX W

MASS SUBSCALE CORRELATIONS WITH INTRINSIC/EXTRINSIC-REVISED SCALE

Correlations

		SIM	COMP	PERP	HARM	INTRIN	EXTRIN
SIM	Pearson Corr.	-					
	Sig. (2-tailed)						
	N	239					
COMP	Pearson Corr.	.156*	-				
	Sig. (2-tailed)	.016					
	N	239	239				
PERP	Pearson Corr.	-.456**	-.093	-			
	Sig. (2-tailed)	.000	.153				
	N	239	239	239			
HARM	Pearson Corr.	.823**	.249**	-.323**	-		
	Sig. (2-tailed)	.000	.000	.000			
	N	239	239	239	239		
INTRIN	Pearson Corr.	.808**	.152*	-.523**	.770**	-	
	Sig. (2-tailed)	.000	.019	.000	.000		
	N	239	239	239	239	239	
EXTRIN	Pearson Corr.	.435**	.098	.093	.569**	.260**	-
	Sig. (2-tailed)	.000	.130	.151	.000	.000	
	N	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX X

MASS SUBSCALE CORRELATIONS WITH EXTRINSIC SUBSCALES

Correlations

		SIM	COMP	PERP	HARM	EXPER	EXSOC
SIM	Pearson Corr.	-					
	Sig. (2-tailed)						
	N	239					
COMP	Pearson Corr.	.156*	-				
	Sig. (2-tailed)	.016					
	N	239	239				
PERP	Pearson Corr.	-.456**	-.093	-			
	Sig. (2-tailed)	.000	.153				
	N	239	239	239			
HARM	Pearson Corr.	.823**	.249**	-.323**	-		
	Sig. (2-tailed)	.000	.000	.000			
	N	239	239	239	239		
EXPER[a]	Pearson Corr.	.535**	.225**	-.008	.660**	-	
	Sig. (2-tailed)	.000	.000	.906	.000		
	N	239	239	239	239	239	
EXSOC[b]	Pearson Corr.	.090	-.108	.170**	.166**	.181**	-
	Sig. (2-tailed)	.165	.096	.009	.010	.005	
	N	239	239	239	239	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Extrinsic-personal

b. Extrinsic-social

VITA

Kevin Alton was born in Cranston, RI, to Walt and Colleen Alton. He is the middle child of three brothers. Kevin attended Murdock Elementary in Marietta, GA, Oak Grove Elementary in Acworth, GA, then E.T. Booth Middle and Etowah High in Woodstock, GA. He graduated from Shorter College in 2005 with a Bachelor of Science in Ministry Studies. Kevin then began a decade-long career in local church youth ministry, which eventually brought him and his family to Ringgold, GA. At the same time, he began a prolific writing career contracting for various ministry publishers, youth worker organizations, and grant-funded studies. His work as a writer and public speaker turned his interest from being a youth ministry practitioner to researching spiritual formation. That change was the impetus for resuming higher education and in September 2017 he began working as graduate assistant at the University of Tennessee at Chattanooga. Kevin graduated with a Master of Science degree in Psychology in May of 2019.