Internal Structure and Criterion Relationships for Long and Brief Versions of the Intratextual

Fundamentalism Scale (IFS) among Israeli Jews

Joseph H. Hammer, Ph.D.
243 Dickey Hall
University of Kentucky
Lexington, KY 40506
(847) 809-8785
jhhammer@gmail.com

Aryeh Lazar, Ph.D.
Department of Behavioral Sciences & Psychology
Ariel University
Ariel, Israel
972-3-975-8901
lazara@ariel.ac.il

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A digital search of the research literature reveals over 400 scholarly article that include

the term "religious fundamentalism" in their title with almost a quarter of these articles being

published in the last five years. Religious fundamentalism (RF) has been found to be related to a

variety of variables such as belief in G-d, proselytizing (Hunsberger & Altemeyer, 2006),

dogmatism, and hostility towards gay and lesbian individuals *(*Altemeyer, 1996). Williamson

and Hood (2005) developed a measure of religious fundamentalism (Intratextual

Fundamentalism Scale: IFS) based on the concept of intratextuality (Hood, Hill, & Williamson,

2005) to facilitate cross-cultural and cross-religion RF research. The IFS was then later revised

(Williamson, Hood, Ahmad, Sadiq, & Hill, 2010) using samples of American Christians and

Pakistani Muslims. However, since the development of the IFS, neither the dimensionality (i.e.,

factor structure, internal structure) of the IFS nor the model-based reliability of the IFS total

score has been examined. Using bifactor modeling (i.e., in which the IFS is simultaneously

defined by one general RF factor and six specific factors representing the six aspects of

intratextuality) and ancillary bifactor measures, the present study was able to investigate the

internal structure of the IFS, the permissibility of calculating total and subscale scores for the

IFS, and the possibility of developing a new short form of the IFS.

Religious Fundamentalism (RF)

Various definitions and conceptualizations for RF can be found in the research literature.

For example, Ammerman (1991), in her discussion of North American Protestant

fundamentalism, suggested that RF is a multidimensional construct consisting of four

dimensions: scripture inerrancy, evangelism, premillennialism, and separatism. Inerrancy of

scripture refers to the belief that facts and principles in the Bible are both historically and

scientifically true as well as being spirituality and philosophically true. Although Biblical

literalism is an additional aspect of scripture inerrancy, according to Ammerman the literalism is

not absolute and the inerrancy is more important than the literalism. Ammerman gives an

example of the verse from the story of creation that refers to waters above and below the earth.

Whereas a strict literalism approach would say that this is a physical phenomenon which must be

accepted as fact, an inerrancy approach can allow for a poetic interpretation of this verse. The

second aspect of RF according to the Ammerman model is Evangelism which refers to reaching

out to individuals who are not a part of the church in order to help them embrace the truth. The

third aspect is Premillenialism meaning that G-d has dealt differently with mankind at different

stages in history, e.g., before Christ vs. after Christ's death, and that the Bible provides important

information about the future. The final aspect of RF is Separatism, a belief that true believers

should separate themselves from non-believers. It should be noted that Ammerman defined

North American Protestant religious fundamentalism and thus some of these aspects may be

foreign to other religions.

Perhaps the most well-known definition, and associated measure, of RF was offered by

Altemeyer and Hunsberger (1992). These researchers presented a social psychological definition

for RF as "the belief that there is one set of religious teachings that clearly contains the

fundamental, basic, intrinsic, essential, inerrant truth about humanity and deity; that this essential

truth is fundamentally opposed by forces of evil which must be vigorously fought; that this truth

must be followed today according to the fundamental, unchangeable practices of the past; and

that those who believe and follow these fundamental teachings have a special relationship with

the deity" (p. 118). As Altemeyer and Hunsberger (2005) pointed out, this definition does not

refer to any particular set of religious beliefs or doctrines (e.g., the virgin birth of Jesus), but rather conceptualizes RF as an attitude concerning whatever religious beliefs the individual has. As such, this definition should be applicable to the adherents of any and all religions.

Altemeyer and Hunsberger (1992) developed a 20-item Religious Fundamentalism Scale to measure this construct. However, over the years they came to the conclusion that the "one true religion" theme was overrepresented in their scale while the "inerrant truth" theme was underrepresented. Altemeyer and Hunsberger (2004) attempted to remedy this situation and developed the 12-item Revised Religious Fundamentalism Scale. Altemeyer and Hunsberger (2005) suggested that the revised scale demonstrated high internal consistency and a unidimensional structure.

Intratextual Fundamentalism Scale (IFS)

Hood et al. (2005) noted that the Altemeyer and colleagues' definition of RF was an expansion of authoritarianism and could even be considered as religious Right Wing Authoritarianism and therefore associated with militancy. However, as these researchers pointed out, not all religious fundamentalists are militant. They therefore attempted to identify other aspects of RF common to all monotheistic religions that were not directly associated with militancy. One such aspect identified by these researchers was the manner in which religious adherents relate to their respective holy texts, termed intratextuality. This term stresses that objective truth is to be found within the boundaries of the text itself (i.e., intratextual) rather than from external sources (i.e., intertextual) such as science or history. Williamson and Hood (2005) then identified six aspects of intratextuality: (1) the divine origin of the sacred text, (2) the inerrancy of the sacred text, (3) the sacred text is self-interpretive and no outside sources are necessary to uncover the true interpretation, (4) the particular sacred text has a privileged or

superior status in regard to all other sacred texts, (5) the truth of the sacred text is authoritative in comparison to any or all other sources, and (6) the text, and its truths, are eternal and unchanging. Williamson and Hood then constructed the unidimensional 12-item Intratextual Fundamentalism Scale (IFS-12) with two items – one positive and one negative – for each of the six aspects of intratextuality described above. Williamson et al. (2010) later reexamined the dimensionality of the IFS across three studies. In Study 1, the authors used modification indices to adapt a 5-item short form of the IFS (i.e., the IFS-5) using data from 199 Christian U.S. undergraduate students. The unidimensional solution for the IFS-5 demonstrated marginal fit among 220 Pakistani Muslim university students in Study 2 and good fit among 227 Christian U.S. undergraduate students. The IFS-5 demonstrated evidence of concurrent validity via theoretically-expected correlations with church attendance, intrinsic/extrinsic motivation, and need for cognition. The IFS-5 demonstrated evidence of divergent validity via non-redundancy (r's $< -.60$) with measures of quest orientation and religious doubts.

Various versions and adaptations of the IFS have been used among a variety of research samples. Carlucci, Tommasi, Balsamo, Furnham, and Saggino (2015) used an Italian translation of the IFS to examine the relation between RF and psychological well-being among a sample of Christian Roman Catholic students in Italy. Deal and Bartoszuk (2014) used the IFS to investigate the validity of scores from their North American Protestant Fundamentalism Scale among a sample of North American Protestants. The IFS has been used among other Christian samples to examine the relation between RF and a variety of additional variables such as the tendency towards reprisal in response to religious ideological threat (Williamson & Hood, 2014), spiritual transformation among substance users (Williamson & Hood, 2012), racial prejudice

(Williamson, Bishop, & Hood, 2014), and the practices and beliefs of self-identified Christian clinicians (Sutton & Arnzen, 2015).

The IFS has also been used among Muslim samples. As mentioned above, the revision of the IFS scale was tested with Christian samples as well as with a Pakistani Muslim sample (Williamson et al., 2010). Sterkens et al. (2014) used the IFS in a study on ethno-religious conflict in the Philippines. Putra and Wongkaren (2010) examined the relation between RF as measured by the IFS and Muslim prejudice towards Christians. Putra and Sukabdi (2014) used a variation of the IFS in order to examine the association between RF and the support for acts of terrorism. Finally, Abu-Raiya, Exline, Pargament, and Agbaria (2015) administered the IFS to a sample of Muslims living in Israel in order to examine the relation between RF and religious struggle.

The importance of examining the relevance and validity of scores from religious and spirituality (R&S) measures developed with people from one religion for use among individuals of different religious adherence has been pointed out in the research literature. For example, Abu-Raiya and Pargament (2011) stated that measures developed using Christian samples may be problematic since they may not fully capture the intended construct for Muslim respondents, and may be irrelevant or even offensive to them. They cited Williamson and Ahmad's (2007) attempt to administer the IFS among a sample of African-American Muslims: many items were left blank and many handwritten comments expressed complaints about the item content. Due to sensitivity considerations, Putra and Wongkaren (2010) constructed an adapted version of the IFS for use among Indonesian Muslims (see also Muluk & Sumaktoyo, 2010) and other researchers have used only a subset of IFS items in their research on Muslim samples (e.g., Muluk, Sumaktoyo, & Ruth, 2013).

Regarding the use of the IFS among Jewish samples, at first glance the measure seems to be theologically appropriate. The medieval Jewish philosopher Maimonides formulated the well-known 13 principles of (Jewish) faith. A number of these principles (e. g., the belief that that G-d communicates with man through prophecy, that the prophecy of Moses in the Five Books of Moses (Torah) is the prime prophecy, and that the Torah is of Divine origin) are relevant to the intratextual concept. In particular, the ninth principle of faith focuses on the immutability of the Torah, and is therefore directly relevant to this concept.

However, according to Jewish tradition, the scriptures are not to be taken literally since the "Oral Law" was given to Moses on Mount Sinai by G-d together with the "Written Law" and while the scripture cannot be changed, the meaning of the scriptures is according to the Oral Law. Perhaps one of the most famous examples is the verse in "An eye for an eye; a tooth for a tooth". The oral law, as detailed in the Talmud, explains that this verse should not be taken literally and that no injury should be inflicted on an individual who caused injury to his or her neighbor. Rather, if an individual injures his neighbor (e.g., knocks out his tooth), the damager must compensate the injured individual with the monetary value of the injury (e.g., the value of a tooth). In addition, the non-legalistic portions of the Torah (e.g., morality, outlook on life; see Kolatch, 2006) are open to commentary by all as can be seen by the large number of Jewish commentators in the religious Jewish literature. Therefore, in this manner, the intratextual approach may not be compatible with the Jewish outlook on the Holy Scriptures.

To the best of our knowledge, the only study using the IFS among a Jewish sample examined the relation between RF and religious struggle among Israeli Jews (Abu-Raiya, Pargament, Weissberger, & Exline, 2016). Although they reported a satisfactory level of internal consistency for the IFS-5, they did not examine the dimensionality of this measure.

Furthermore, no study has examined the dimensionality or model-based reliability of the IFS-12

among Jews. Model-based reliability coefficients can reveal the extent to which the internal

consistency of the IFS's raw total score is due to the influence of the general religious

fundamentalism factor versus the influence of the specific aspects of intratextuality, which has

important implications for scoring the IFS (see below). Therefore, the examination of the

dimensionality of the IFS and the model-based reliability of its total score among a sample of

Jewish respondents is important and needed.

Bifactor Analysis and Ancillary Bifactor Measures

Many instruments, like the IFS, are designed to measure a single general construct (e.g.,

intratextual fundamentalism) with a heterogeneous content domain (e.g., six aspects of

intratextuality). Instruments that attempt to measure both the general construct and the specific

subdomains often yield item response data that is somewhat consistent with both unidimensional

and multidimensional measurement models (Rodriguez, Reise, & Haviland, 2016b). This leads

to conflicting dimensionality findings for the same instrument across different studies, which

can, in turn, lead to conflicting conclusions about how to score the instrument. The absence of

consensus on the dimensionality and scoring of instruments threatens scientific progress (Danner

et al., 2016).

Bifactor analysis and follow-up ancillary bifactor measures allow researchers to resolve

these debates (see Hammer & Toland, 2016a, for a video walkthrough of bifactor analysis).

When a bifactor solution demonstrates adequate model fit, this suggests that the instrument's

items may be defined by a general factor as well as one or more specific factors. The general

factor accounts for the shared variance across all items. Each specific factor accounts for the

shared variance among a given subset of items, such as the items of a subscale, or all negatively-

keyed items that require reverse-coding (i.e., a method factor). "The general factor represents the broad central construct an instrument intends to measure, whereas [specific] factors represent more conceptually specific subdomain constructs" (Rodriguez et al., 2016b, p. 137). (Alternatively, the general factor might be interpreted as covariance due to a response style, such as acquiescence). To allow the precise calculation of ancillary bifactor measures, the general and specific factors are not allowed to correlate (i.e., set orthogonal) in a confirmatory bifactor solution (i.e., restricted bifactor model). Whereas the overall factor in a second-order model is a second-order (i.e., higher order) factor that explains the covariation among the first-order factors, the general factor in a bifactor model is a first-order factor that explains covariation among the items. This bifactor model redefines the specific factor as only the uniquenesses of the first-order factor in a second-order model, rather than their total variances, and the general factor only represents their commonalities. Each item is specified to load on the general factor as well as one specific factor. Bifactor models are often preferred because the proportionality constraint of second-order models can amount to misspecification that produces poorer model fit.

The fact that a bifactor model provides adequate fit does not, by itself, tell researchers (a) how unidimensional versus multidimensional the instrument is, nor (b) whether or not the total score (and possible subscale scores) is reliable enough to justify its calculation and interpretation. Only ancillary bifactor measures (e.g., Explained Common Variance, Omega Hierarchical; Rodriguez et al., 2016b), which address either (a) dimensionality or (b) model-based reliability of the total score, can answer these questions. Therefore, the present study used both bifactor analysis and ancillary bifactor measures to rigorously examine the IFS.

The Present Study

The present study had three goals. First, the present study used a variety of statistical techniques to verify what internal structure (e.g., unidimensional) was best supported by the data. Given researchers' documented difficulties with demonstrating the unidimensionality of the IFS-12 (e.g., Williamson et al., 2010), it was anticipated that a bifactor structure may best account for the IFS-12's item covariation. Ancillary bifactor measures addressing dimensionality were examined to determine whether the IFS-12 should be viewed as having a primarily unidimensional or primarily multidimensional structure. Structural equation modeling (SEM) was then used to examine the degree of structural regression parameter bias (i.e., inaccurate path coefficients between IFS factor and another latent factor variable in structural model) that may be introduced by modeling the IFS-12 using a unidimensional solution rather than a multidimensional (bifactor) solution. Given the documented relationship between intratextual fundamentalism and the Big 5 personality traits (e.g., Williamson et al., 2010), we used the Big 5 traits as our criterion variables in these structural regression parameter bias tests. The absence of significant structural regression parameter bias would provide initial evidence that modeling the IFS-12 as a unidimensional instrument would not compromise the validity of the instrument.

Second, assuming the IFS conforms to a bifactor structure, model-based reliability estimates would then be used to determine whether the raw IFS-12 total score is reliable. Even when dimensionality analysis suggests that the instrument is primarily unidimensional, it remains necessary to verify the model-based reliability of a total score prior to its use in future applications. Past research has documented examples of instruments that, despite some degree of multidimensionality across items, are unidimensional enough that their raw total scores may be used as appropriate measures of the general construct assessed by the instrument (e.g.,

Hammer & Toland, 2016b; Rodriguez, Reise, & Haviland, 2016a), assuming other issues associated with raw scores are properly addressed (e.g., variable item uniquenesses; measurement error). It was anticipated that model-based reliability estimates would support the reliability of the IFS-12 total score as a measure of the general intratextual fundamentalism construct, given the small number of items per specific factor representing each of the six aspects of intratextuality (Reise, Scheines, Widaman, & Haviland, 2013, p. 22).

Third, the present study sought to develop a short form of the IFS, using Individual Explained Common Variance coefficients, that (a) assesses all six of the attitudes that define the content domain of intratextual fundamentalism, (b) exhibits good fit when modeled as a unidimensional instrument, and (c) minimizes response burden through brevity. This is necessary, given that existing IFS short forms (e.g., IFS-5 [Williamson et al., 2010], IFS-10 [Putra, 2007, p.224], and IFS-3 [Muluk et al., 2013]) are all subject to one or both of the following limitations: (a) failure to assess all six attitudes, and (b) lack of factor analytic evidence of internal validity documented in a peer-reviewed publication.

Method

Participants

The initial sample consisted of 466 individuals. Cases with > 20% missing data on any given subscale ($n = 34$) were deleted (Parent, 2013), resulting in an effective sample of 432 adults living in Israel (252 women, 127 men, 53 did not indicate their gender identity) who indicated their religious affiliation as Jewish. Age ranged from 19 to 63 years ($M = 29.9$, $SD = 8.3$) and family status was 27% single, 59% married, 2% divorced or widowed, and 22% indicated "other" family status or did not report their family status. Most participants were born in Israel (78%) with 60% city dwellers, 25% living in small communities, 2% living on a

kibbutz, and 13% indicated "other" or did not report where they resided. The participants were

rather highly educated where 19% reported having attained a graduate degree, 44% a bachelor's

degree, 16% reported some post high school education, 8% reported a high school education

only, and 13% did not report their level of education. Regarding level of religiousness, 59%

identified as Religious (Ultra-Orthodox or Orthodox), 5% as Traditional-Religious, 10% as

Traditional-Secular, 23% as Secular, and 3% as other. Regarding ethnic background (i.e., country

of family origin), 53% were Ashkenazi (European / North American), 24% Sephardi (North

African or Middle East), 3% Yemenite, and 20% did not indicate their ethnic background.

Measures

   Intratextual Fundamentalism Scale (IFS). The 12-item IFS was developed by

Williamson and Hood (2005) to measure religious intratextual fundamentalism. The scale

consists of six pairs of items – one positive (e.g., "The Sacred Writing should never be doubted,

even when scientific or historical evidence outright disagrees with it") and one negative (e.g., "If

what the Sacred Writing says disagrees with the findings or discoveries of science, then what

science says is probably closer to what is really true") – representing six aspects of

intratextuality. The IFS was translated into Hebrew using the standard back-translation method

and three academics, all fluent in Hebrew and in English, participated in the translation

procedure. Any discrepancies were discussed and resolved. A six-point Likert response scale (1 –

strongly disagree to 6 – *strongly agree*) was used.

   Big Five Inventory (BFI). The five dimensions of personality were measured by a

Hebrew version (Etzion & Lasky, 1998) of the BFI (John, Donahue, & Kentle, 1991). This 44 –

item measure produces five personality scores: extroversion (e.g., "Has an assertive personality"),

neuroticism (e.g., "Can be moody"), agreeableness (e.g., "Has a forgiving nature"),

conscientiousness (e.g., "Is a reliable worker"), and openness to experience (e.g., "Has an active imagination"). A five-point Likert response scale (1 – *strongly disagree* to 5 – *strongly agree*) was used.

Demographics. Demographic items included age, gender, personal status, religion, religious identity (Ultra-orthodox, Orthodox, Religious-Traditional, Secular Traditional, Secular, Other) type of residence, work status, education and ethnic background.

Procedure

Participants were recruited via convenience snowball sampling through internet social networks (e.g., Facebook). The study was advertised as a voluntary (i.e., no monetary incentive), questionnaire study about religious and social attitudes. Interested participants were directed to an online survey that began with an informed consent page, followed by the survey items, and ended with a debriefing page. Extant research suggests that survey data derived from online measures are consistent with results from paper and pencil measures (Gosling, Vazire, Srivastava, & John, 2004).

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Results

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The means, standard deviations, internal consistency estimates (Cronbach α for the IFS total and Guttman Split Half for the six two-item scales) are presented in Table 1. No variables exceeded the cutoffs of 3 and 10 for high univariate skewness and kurtosis values, respectively (Weston & Gore, 2006).

Evidence of Internal Structure of the IFS-12

The internal structure of the IFS was tested via a series of CFAs with M*plus* version 6.11 (Muthén & Muthén, 1998-2012). Specifically, four competing measurement models (i.e., unidimensional, six-factor oblique, second-order, bifactor) were examined. M*plus*' MLR option

for maximum likelihood estimation with robust standard errors was used initially, which

calculates the scaled chi-square test statistic and protects against deviations from multivariate

normality. The scaled χ^2 is reported but interpreted with caution given its sensitivity to sample

size (Kline, 2016). Model fit was evaluated using the scaled χ^2 statistic, Root Mean Square Error

of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and

Standard Root Mean Square Residual (SRMR). The following fit criteria were used: RMSEA

$\leq .06$, CFI $\geq .95$, TLI $\geq .95$, SRMR $< .08$ for good fit and RMSEA $\leq .10$, CFI $\geq .90$, TLI $\geq .90$,

SRMR $< .10$ for acceptable fit (Weston & Gore, 2006). The goodness of fit statistics for all

models are presented in Table 2.

The unidimensional model and the six-factor oblique (i.e., correlated factors, common

factors) model both demonstrated poor to adequate fit to the data. However, the six-factor

oblique model output indicated that the latent variable matrix was not positive definite and thus

the fit indices may not be accurate. Examination of this model's inter-factor correlations

revealed the likely cause: an out-of-bounds r of 1.06 between the Authoritative and Inerrant

latent factors. The average inter-factor correlation among the six latent factors was .84,

suggesting a lack of divergence between the factors, which calls into question their independence

and uniqueness. These inter-factor correlations hint at the presence of a strong general factor

that runs throughout the 12 items. Normally, this would suggest that a unidimensional or

bifactor model should fit the data well. However, when subsets of items covary (i.e., form

specific factors), this local dependence can result in large residuals for the item factor loadings in

the unidimensional solution and thus engender misfit. This may explain the lack of acceptable fit

for the present unidimensional model. Separately, because the instrument is composed of only

two items from each of the six purported subscales, a second order model of the IFS-12 was not

able to converge, nor could the initial bifactor model of the IFS-12 be identified. It is not

uncommon for second order and bifactor models with limited numbers of indicators per factor to

encounter identification problems (Brunner, Nagy, Wilhelm, 2012; Hammer & Toland, 2016b).

Despite the inability for the initial bifactor model using MLR to converge for the IFS-12,

it was still possible to fit an alternative bifactor model for the purpose of calculating the ancillary

bifactor measures for the IFS-12. Following the procedure of Hammer and Toland (2016b), this

was achieved by setting the variance to one in lieu of using a reference item for each subscale,

using M*plus*' robust weighted least squares mean and variance (WLSMV) estimator, setting the

parameterization to theta, and requesting 1,000 bootstrap samples. This model terminated

normally and evidence a Weighted Root Mean Square Residual (WRMR) value of 1.15. Yu

(2002) states that values close to or below 1.0 for WRMR indicate good fit; values for acceptable

fit are not yet articulated in the literature.

Using the standardized loadings from this WLSMV-estimated bifactor model, we

calculated the Explained Common Variance (ECV; Reise, Moore, & Haviland, 2010), an index of

unidimensionality, attributable to the general factor and each of the six specific factors.

Rodriguez and colleagues (2016a) indicate that an ECV > .70 and Percent of Uncontaminated

Correlations (PUC) > .70 suggest that the presence of some multidimensionality is not severe

enough to disqualify the interpretation of the instrument as primarily unidimensional.

Table 3 summarizes the factor loadings for the unidimensional and bifactor solutions for

the IFS. Four results address the dimensionality of the IFS-12. First, the ECV (.90) and PUC

(.91) values exceeded the .70 cutoffs. Second, except for Item 2, all of the IFS items loaded

higher on the general factor than on their respective specific factors, suggesting that most items

relate more strongly to the general factor than to their respective specific factors. Third, all IFS

items excepting Item 2 had Individual Explained Common Variance (IECV) coefficients

above .50, reinforcing their stronger relationship to the general versus specific factor. When an

instrument best fits a bifactor model but is instead modeled using a unidimensional solution,

there is a risk that the item factor loadings will be measured inaccurately (i.e., measurement

parameter bias occurs). For the IFS-12, the average difference between items' loading in the

unidimensional solution and on the general factor in the bifactor solution was only .07. Thus, the

average relative measurement parameter bias (Rodriguez et al., 2016b) across items was 10%,

which is just at the edge of the 10-15% maximum permissible bias limit discussed by Muthen,

Kaplan, and Hollis (1987). In summary, these four findings suggest that (a) it is acceptable to

use a unidimensional solution to model the IFS when the goal is not to explain the total

covariance structure and (b) the IFS is a better measure of the general factor than of its specific

factors.

Model-Based Reliability of the IFS-12 Total Score

To investigate the model-based reliability of the IFS-12 total score, we calculated

Coefficient Omega Hierarchical (ωH), the proportion of total score variance that can be

attributed to the general factor after accounting for the six specific factors in the bifactor model

(Rodriguez, Reise, & Haviland, 2016b). The ωH value (.95) was well-above the

conservative .75 threshold recommended by Reise, Bonifay, and Haviland (2013). This indicates

the IFS-12's total score predominantly reflects a single general factor despite the presence of

minor multidimensionality across items.

Evidence Regarding Lack of Structural Regression Parameter Bias

The dimensionality and model-based reliability results discussed above suggest that

modeling the IFS-12 as a unidimensional instrument should engender minimal structural

regression parameter bias. As stated above, measurement parameter bias may result when

forcing an instrument into a unidimensional solution. This measurement parameter bias may, in

turn, result in inaccurate path coefficients (i.e., structural regression parameter bias) when

examining the relation between two variables. The absence of substantial structural regression

parameter bias would provide initial evidence that modeling the IFS-12 as a unidimensional

instrument would not compromise the validity of the instrument, which further support the use of

the unidimensional solution with the IFS-12. We tested a series of SEMs to directly evaluate

potential structural regression parameter bias. Given the documented relationship between

intratextual fundamentalism and the Big 5 personality traits (e.g., Williamson et al., 2010), we

used the Big 5 as our criterion variables.

For each of the five personality traits, two models were tested. In the first model, the IFS

items were set to load in accordance with the aforementioned WLSMV-estimated bifactor

model, the relevant personality trait items were set to load on a personality trait latent factor, and

the IFS general factor was regressed onto the personality trait latent factor. In the second model,

the IFS items were set to load in accordance with the aforementioned unidimensional model, the

personality trait items were set to load on a personality trait latent factor, and the IFS

unidimensional factor was regressed onto the personality trait latent factor. We then compared

the size of the standardized betas for the structural path between the IFS factor (i.e., the general

factor from the bifactor solution vs. the overall factor from the unidimensional solution) and the

criterion personality trait latent factor. This comparison modeling process was performed for all

five personality traits. In all instances, the lack of difference in standardized beta strength

indicated a lack of structural regression parameter bias (see Table 4). In other words, the decision

to model the IFS-12 as a unidimensional instrument rather than a bifactor instrument did not alter

the strength of the association between the intratextual fundamentalism construct and the personality criterion variables.

Development and Psychometric Properties of the IFS-6 Total Score

Having established the essentially unidimensional nature of the IFS-12, we next sought to develop a short form of the instrument. We had three criteria for the short form. First, this and other papers (i.e., Williamson et al., 2010) have documented that a true unidimensional solution provides a poor fit to IFS-12 data in the context of CFA. Therefore, we sought to develop a short form that would demonstrate clear unidimensional structure. Second, the one existing peer-reviewed short form of the IFS (i.e., IFS-5; Williamson et al., 2010) measures only five of the six attitudes thought to define intratextual fundamentalism, neglecting the Self-Interpretative aspect. Therefore, we sought to develop an alternative short form that would assess all six attitudes, thereby providing full coverage of the construct's content domain. Third, we sought to develop a concise short form to minimize response burden.

To accomplish this goal, we used IECV coefficients to select six items (see Table 3) that tapped the six attitudes and were likely to demonstrate good fit when subjected to a unidimensional CFA (Stucky, Edelen, Vaughan, Tucker, & Butler, 2014). Following the procedure of Stucky and colleagues, we selected one item from each of the six attitudes with the highest IECV (minimum IECV of .80 for all items selected; Stucky & Edelen, 2014). This process resulted in the creation of the IFS-6 (see Appendix for a copy of the instrument), which we then evaluated and compared to Williamson and colleagues' (2010) IFS-5.

As expected, three of the four indices from the MLR-estimated unidimensional model suggested that the IFS-6 provided a good fit to the data and the RMSEA indicated an adequate fit (see Table 2). In contrast, three of the four indices suggested that the IFS-5 provided a good fit

to the data, whereas the RMSEA indicated a poor fit (see Table 2). The IFS-6 and IFS-5 total

scores demonstrated similar internal consistency (see Table 1). In addition, the IFS-6 total score

may be a slightly cleaner measure of the general intratextual fundamentalism construct than the

IFS-5 total score, given the higher average IECV values for the IFS-6 items compared to those of

the IFS-5 (see Table 2). The total scores of the IFS-6 and IFS-5 ($r = .98$) both correlated .96 with

the total score of the IFS-12. In summary, the IFS-6 total score demonstrated a similar (if not

slightly better) unidimensional structure and reliability compared to the IFS-5 total score in the

present sample.

Given the potential utility of the IFS-6 and IFS-5, we constructed a series of WLSMV-

estimated models in which each instrument was modeled as unidimensional, and a structural path

between the single IFS latent factor and each of the Big 5 latent factors was specified. Review of

Table 4 indicates that the standardized betas for the IFS-6 and IFS-5 structural models were

generally consistent, as were the standardized betas for the IFS-6, IFS-5, and both IFS-12

models. The IFS-5 demonstrated slightly stronger standardized betas than the other three

models. This provides initial concurrent evidence of validity in favor of the IFS-6 and IFS-5, in

that their relationship with theoretically-related criterion variables was similar to that of the IFS-

12 models. Thus, dropping items to create these short forms did not appear to compromise their

ability to account for variance in external criteria.

Discussion

The present study utilized data from 432 Jewish participants to investigate (a) the internal

structure of the IFS-12, (b) whether model-based reliability estimates support the reliability of

the raw IFS-12 total score, and (c) the psychometric properties of the IFS-6, an alternative

unidimensional short form of the instrument developed in the present study.

Internal Structure, Scoring, and Interpretation of the IFS-12

CFA results indicated that a unidimensional model and six-factor oblique model both provided a poor fit to the IFS-12 data. Given evidence of a strong general factor that runs through the 12 items, a WLSMV-estimated bifactor CFA model was specified in order to obtain item factor loadings on the general intratextual fundamentalism factor and the six specific attitude factors. These loadings were used to calculate ECV, PUC, IECV, and relative measurement parameter bias estimates, which collectively indicated that the IFS-12 is unidimensional enough to permit the use of a unidimensional solution when modeling the instrument. In other words, minimal measurement parameter bias would be introduced by treating the IFS-12 as unidimensional, even when the IFS-12 demonstrates a poor overall CFA model fit, as reported above.

Furthermore, ωH indicated that the IFS-12's total score predominantly reflects a single general factor despite the presence of minor multidimensionality across items, which in turn suggests the raw total score is a reliable measure of the general construct of intratextual fundamentalism. It is important to note here that multidimensionality is not the only potential problem with using raw scores. Raw scores that are a unit-weighted (i.e., unweighted) sum or average of responses effectively ignore potential differences in loadings, thresholds, and residuals across items, which can bias estimates of structural parameters. However, the results from structural regression parameter bias testing indicated that the decision to model the IFS-12 using a unidimensional solution rather than a bifactor solution did not alter the strength of the association between the general intratextual fundamentalism construct and any of the five Big 5 personality trait criterion variables. The finding that a total score containing some degree of

multidimensionality can permissibly be scored and interpreted as unidimensional is not uncommon in the bifactor literature (e.g., Rodriguez et al., 2016a).

Development, Internal Structure, Scoring, and Interpretation of the IFS-6

Because the IFS-12 demonstrated poor global model fit when modeled as a unidimensional instrument, we sought to develop a psychometrically-sound short form of the IFS characterized by three key qualities: (a) measures all six attitudes underlying the intratextual fundamentalism construct, (b) demonstrates good unidimensional model fit, and (c) minimizes participant burden through the use of a concise set of items. IECVs were used to create the IFS-6, which is characterized by these three qualities. Regarding evidence concerning internal structure (Standard 1.13; AERA et al., 2014), the IFS-6 demonstrated a clear unidimensional factor structure. This supports the use of the IFS-6 total score as a measure of overall intratextual fundamentalism. Regarding evidence of reliability/precision (Standard 2.3), the IFS-6 total score demonstrated similar (if not better) internal consistency and measurement of the general intratextual fundamentalism construct than the total score for the IFS-5, an alternative short form (Williamson et al., 2010). Regarding content-oriented evidence of the validity of the IFS-6 total score (Standard 1.1), the IFS-6 contains items from each of the six attitudes. Regarding concurrent evidence of the validity, both the IFS-6 and IFS-5 latent factors demonstrated a similar degree of covariance with each of the Big 5 personality traits as the IFS-12 latent factor did. In other words, these short form scores received a similar degree of concurrent evidence of validity as did the IFS-12 score. In summary, the present results offer initial evidence in favor of the psychometric soundness of the IFS-6, a short form that may offer a sound alternative to the IFS-12 and IFS-5.

Implications for Use of the IFS

Four recommendations stem from the present findings. First, it may be defensible to conceptualize and model the IFS-12 using either a bifactor or a unidimensional solution. Second, it is recommended that users conceptualize and model the IFS-6 and IFS-5 using a unidimensional solution. Third, it may be defensible to calculate the raw IFS-12, IFS-6, or IFS-5 total score using traditional methods (e.g., averaging or summing the item scores) and interpret it as a measure of the general construct of intratextual fundamentalism. However, given the other limitations of raw total scores, we encourage researchers to use latent factors in lieu of raw scores when possible. Fourth, given that the IFS-5 does not assess the Self-Interpretative aspect of intratextual fundamentalism, we recommend users consider the IFS-6 as a viable alternative.

Cautions, Limitations, and Future Directions

As with any psychological science findings, our results are undoubtedly influenced by context. First, our sample was composed of Israeli Jews, so the generalizability of the present findings to Jews living in other national contexts, non-Jewish Israelis, and individuals from other faiths and nations is not yet known. Second, our sample was predominantly religious, with over two thirds of the sample identifying as being religious or traditional-religious. Since, as pointed out in the Introduction section, one of the basic tenants of the Jewish religion is the intratextual fundemantalistic character of the Torah, the adequate reliability and validity of the IFS total score as demonstrated in this religious sample is not surprising. However, in order to use the IFS as a measure of intratextual fundamentalism for mixed samples of religious and nonreligious, the psychometric properties of the measure should be empirically investigated with samples of individuals who do not identify as being religious. For these reasons, we strongly encourage future research on the psychometric properties of the IFS-12 and IFS-6 among other cultural groups. This future research will help determine how generalizable versus idiosyncratic our

findings are. Similarly, there are other versions of the IFS (e.g., IFS-3, IFS-10) that exist but

have not been scrutinized in this manner. The applicability of the present findings to these

alternative versions is uncertain until tested directly. In addition, our tests of structural

regression parameter bias tested a simple structural model (one estimated path) and thus it is

uncertain whether the instrument would continue to demonstrate a lack of structural regression

parameter bias in the context of more complex structural models. Thus, we present these

findings not as a final conclusion regarding the true structure of the IFS, but as a starting point

for further dialogue about the instrument and its various versions. In addition, we strongly

encourage future researchers to further investigate the psychometric strengths and weaknesses of

the IFS-6 across diverse populations, given its potential psychometric advantages. We also

encourage future researchers who are interested in measuring each of the six aspects of

intratextuality to consider developing a new instrument with enough items per factor to allow a

stable multifactor solution. Finally, because bifactor analysis scholarship is rapidly evolving

(Rodriguez et al., 2016b), the protocols and guidelines used to conduct and interpret the present

analyses may shift over time, potentially requiring a re-interpretation of the present findings.

Therefore, we see these findings as a continuation, rather than a conclusion, of the ongoing

conversation about the IFS.

References

Abu-Raiya, H., & Pargament, K. I. (2011). Empirically based psychology of Islam: Summary and critique of the literature. *Mental Health, Religion & Culture*, *14*, 93-115.

Abu-Raiya, H., Exline, J. J., Pargament, K. I., & Agbaria, Q. (2015). Prevalence, predictors, and implications of religious/spiritual struggles among Muslims. *Journal for the Scientific Study of Religion*, *54*, 631-648.

Abu-Raiya, H., Pargament, K. I., Weissberger, A., & Exline, J. (2016). An empirical examination of religious/spiritual struggle among Israeli Jews. *The International Journal for the Psychology of Religion*, *26*, 61-79.

Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion*, *2*, 113-133.

Altemeyer, B., & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *The International Journal for the Psychology of Religion*, *14*, 47-54.

Altemeyer, B., & Hunsberger, B. (2005). Fundamentalism and authoritarianism. *Handbook of the psychology of religion and spirituality*, 378-393.

American Educational Research Association, American Psychological Association, National Council on Measurement in Education, & Joint Committee on Standards for Educational and Psychological Testing. (2014). *Standards for educational and psychological testing*. Washington, DC: AERA.

Ammerman, N. 1991. North American Protestant fundamentalism. In M. Marty and R. Appleby (Eds.), *Fundamentalisms Observed* (pp.1–65). Chicago, IL: University of Chicago Press.

Brunner, M., Nagy, G., & Wilhelm, O. (2012). A tutorial on hierarchically structured constructs.

    Journal of Personality, *80*(4), 796-846.

Carlucci, L., Tommasi, M., Balsamo, M., Furnham, A., & Saggino, A. (2015). Religious

    fundamentalism and psychological well-being: an Italian study. *Journal of Psychology &*

    Theology, *43*, 23-33.

Danner, D., Blasius, J., Breyer, B., Eifler, S., Menold, N., Paulhus, D. L., ... & Ziegler, M.

    (2016). Current challenges, new developments, and future directions in scale construction.

    European Journal of Psychological Assessment, 32, 175-180.

Deal, J. E., & Bartoszuk, K. (2014). Preliminary validation of the North American Protestant

    Fundamentalism Scale. *Journal of Beliefs & Values*, *35*, 265-277.

Etzion, D., & Lasky, S. (1998). *Personality traits questionnaire (Big Five).* (Unpublished

    manuscript). Faculty of Management, Institute of Business Research, Tel-Aviv University,

    Tel-Aviv, Israel.

Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based

    studies? A comparative analysis of six preconceptions about internet questionnaires.

    American Psychologist, *59*(2), 93.

Hammer, J. H., & Toland, M. D. (2016, November). *Bifactor analysis in Mplus*. [Video file].

    Retrieved from http://sites.education.uky.edu/apslab/upcoming-events/

Hammer, J. H., & Toland, M. D. (2016). Internal Structure and Reliability of the Internalized

    Stigma of Mental Illness Scale (ISMI-29) and Brief Versions (ISMI-10, ISMI-9) among

    Americans with Depression. *Stigma and Health*. Advance online publication. doi:

    10.1037/sah0000049

Hood, R. W., Hill, P. C., & Williamson, W. P. (2005). *The psychology of religious fundamentalism*. New York, NY: Guilford Press.

Hunsberger, B., & Altemeyer, B. (2006). *Atheists: A groundbreaking study of America's nonbelievers*. Amherst, NY: Prometheus Books.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory-Versions 44 and 54*. Berkeley: University of California at Berkeley, Institute of Personality and Social Research.

Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). New York, NY: Guilford.

Kolatch, Y. (2006) *Masters of the word: Traditional Jewish bible commentary from the first through tenth centuries*. Jersey City, NJ: Ktav Publishing.

Muluk, H., & Sumaktoyo, N. G. (2010). Intratextual fundamentalism and the desire for simple cognitive structure: The moderating effect of the ability to achieve cognitive structure. *Archive for the Psychology of Religion, 32*, 217-238.

Muluk, H., Sumaktoyo, N. G., & Ruth, D. M. (2013). Jihad as justification: National survey evidence of belief in violent jihad as a mediating factor for sacred violence among Muslims in Indonesia. *Asian Journal of Social Psychology*, *16*, 101-111.

Muthén, B., Kaplan, D., & Hollis, M. (1987). On structural equation modeling with data that are not missing completely at random. *Psychometrika*, *52*(3), 431-462.

Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide (7th ed)*. Los Angeles, CA: Authors.

Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist, 41*, 568–600.

Putra, I. E. (2007). *The effects of religious orientation, political ideology, fundamentalism, and*

   social dominance orientation on political intolerance (Unpublished masters thesis).

   University of Indonesia, Depok.

Putra, I. E., & Sukabdi, Z. A. (2014). Can Islamic fundamentalism relate to nonviolent support?

   The role of certain conditions in moderating the effect of Islamic fundamentalism on

   supporting acts of terrorism. *Peace and Conflict: Journal of Peace Psychology*, *20*, 583-589.

Putra, I. E., & Wongkaren, Z. A. (2010). Konstruksi skala fundamentalisme Islam di Indonesia

   [The construction of an Islamic fundamentalism scale in Indonesia]. *Psikobuana, 1*, 151-

   161.

Reise, S. P., Bonifay, W. E., & Haviland, M. G. (2013). Scoring and modeling psychological

   measures in the presence of multidimensionality. *Journal of Personality Assessment, 95*,

   129-140.

Reise, S. P., Moore, T. N., & Haviland, M. G. (2010). Bifactor models and rotations: Exploring

   the extent to which multidimensional data yield univocal scale scores. *Journal of*

   Personality Assessment, 92, 544–559.

Reise, S. P., Scheines, R., Widaman, K. F., & Haviland, M. G. (2013). Multidimensionality and

   structural coefficient bias in structural equation modeling: A bifactor perspective.

   Educational and Psychological Measurement, 73(1), 5–26.

Rodriguez, A., Reise, S. P., & Haviland, M. G. (2016a). Applying bifactor statistical indices in

   the evaluation of psychological measures. *Journal of Personality Assessment, 98,* 223-

   237.

Rodriguez, A., Reise, S. P., & Haviland, M. G. (2016b). Evaluating bifactor models: Calculating

   and interpreting statistical indices. *Psychological Methods, 21*, 137-150.

Sterkens, C. J. A., Abanes, M., Camacho, A., Kanas, A., Thijs, P. E., & Scheepers, P. L. H.
    (2014). *Ethno-religious conflicts in the Philippines 2012 (ERCP 2012)*. Amsterdam: Pallas
    Publications-Amsterdam University Press.

Stucky, B. D., Edelen, M. O., Vaughan, C. A., Tucker, J. S., & Butler, J. (2014). The
    Psychometric Development and Initial Validation of the DCI-A Short Form for
    Adolescent Therapeutic Community Treatment Process. *Journal of Substance Abuse*

Stucky, B. D., & Edelen, M. O. (2014). Using hierarchical IRT models to create unidimensional
    measures from multidimensional data. In S. P. Reise & D. A. Revicki (Eds.), *Handbook
    of item response theory modeling: Applications to typical performance assessment* (pp.
    183–206). New York, NY: Routledge/Taylor & Francis Group.

Sutton, G. W., & Arnzen, C. A. (2015, April). *Evidenced-Based religious accommodative
    psychotherapy: Practice and belief*. Paper presented at the annual meeting of the Christian
    Association for Psychological Studies, International Conference, Denver, CO.

Weston, R., & Gore, P. (2006). A brief guide to structural equation modeling. *The Counseling
    Psychologist, 34,* 719-751.

Williamson, W.P., & Ahmad, A. (2007). Survey research and Islamic fundamentalism: A
    question about validity. Journal of Muslim Mental Health, 2, 155–176.

Williamson, W.P., & Hood Jr, R. W. (2005, November). *A new religious fundamentalism
    measure: Preliminary work based on the principle of intratextuality*. Paper presented at the
    annual meeting of the Society for the Scientific Study of Religion, Rochester, NY.

Williamson, W. P., & Hood Jr, R. W. (2012). The Lazarus Project: A longitudinal study of
    spiritual transformation among substance abusers. *Mental Health, Religion & Culture*, *15*,
    611-635.

Williamson, W. P., Bishop, J., & Hood Jr, R. W. (2014). Religious fundamentalism and racial

    prejudice: a comparison of implicit and explicit approaches. *Mental Health, Religion &*

    Culture, *17*, 847-859.

Williamson, W. P., & Hood Jr, R. W. (2014). Religious fundamentalism and perceived threat: A

    report from an experimental study. *Mental Health, Religion & Culture*, *17*, 520-528.

Williamson, W. P., Hood Jr, R. W., Ahmad, A., Sadiq, M., & Hill, P. C. (2010). The Intratextual

    Fundamentalism Scale: Cross-cultural application, validity evidence, and relationship with

    religious orientation and the big 5 factor markers. *Mental Health, Religion & Culture*, *13*,

    721-747.

Yu, C.-Y. (2002). *Evaluating cutoff criteria of model fit indices for latent variable models with*

    binary and continuous outcomes. Unpublished doctoral dissertation, University of

    California, Los Angeles.

Table 1

Means, Standard Deviations, and Cronbach Alpha Internal Consistency Estimates for the IFS

Total and Subscale Scores

	M	SD	α [95% CI]
IFS total	3.67	1.02	.93 [.92, .94]
Divine	4.03	1.24	.84 [.82, .87]
Inerrant	3.6	1.34	.79 [.75, .83]
Authoritative	3.62	1.37	.82 [.78, .85]
Self-interpretive	3.00	1.06	.51 [.40, .59]
Privileged	4.09	1.09	.62 [.55, .69]
Unchanging	3.62	1.19	.74 [.69, .79]

Table 2

Goodness of Fit Statistics for All Tested Measurement Models

Model	Scaled χ^2	df	RMSEA [90% CI]	CFI	TLI	SRMR
IFS-12 Unidimensional	303.95	54	.104 (.092, .115)	.895	.871	.052
IFS-12 Six-Factor Oblique	199.56	39	.098 (.084, .111)	.932	.885	.041
IFS-12 Second Order			Failed to converge.			
IFS-12 Bifactor			Model could not be identified.			
IFS-6 Unidimensional	31.35	9	.076 (.048, .106)	.977	.961	.022
IFS-5 Unidimensional	19.29	5	.081 (.045, .121)	.979	.957	.024

Note: The scaled χ^2 for all models was statistically significant at the $p < .001$ level. IFS = Intratextual

Fundamentalism Scale. Statistics are based on MLR estimation. RMSEA = Root Mean Square Error of

Approximation, CI = Confidence Interval, CFI = Comparative Fit Index, TLI = Tucker-Lewis Index, SRMR =

Standard Root Mean Square Residual.

Table 3

Confirmatory Factor Analysis Standardized Loadings for the IFS-12

	IFS-12									IFS-6	IFS-5
	Uni	Bifactor								Uni	Uni
		Gen	F1	F2	F3	F4	F5	F6	IECV		
Specific Factor 1: Divine											
Item 1	**.90**	**.95**	**-.20**						**.95**	**.89**	
Item 5	**.73**	**.80**	**-.35**						**.85**		**.68**
Specific Factor 2: Inerrant											
Item 7	**.93**	**.96**		**.14**					**.96**	**.93**	**.94**
Item 9	**.72**	**.82**		-.41					**.89**		
Specific Factor 3: Authoritative											
Item 4	**.89**	**.94**			**.17**				**.96**	**.90**	**.90**
Item 12	**.82**	**.88**			**-.23**				**.95**		
Specific Factor 4: Self-Interpretative											
Item 2	**.25**	**.31**				**.61**			**.22**		
Item 10	**.62**	**.68**				**.30**			**.82**	**.63**	
Specific Factor 5: Privileged											
Item 3	**.79**	**.87**					**-.22**		**.95**	**.81**	**.79**
Item 8	**.53**	**.68**					**-.31**		**.79**		
Specific Factor 6: Unchanging											
Item 6	**.74**	**.80**						**-.20**	**.94**	**.74**	**.74**
Item 11	**.70**	**.78**						**-.26**	**.90**		

Note: IFS = Intratextual Fundamentalism Scale. Uni = Unidimensional Model, Gen = General Factor, F1 = Divine Specific

Factor, F2 = Inerrant Specific Factor, F3 = Authoritative Specific Factor, F4 = Self-Interpretative Specific Factor, F5 = Privileged

Specific Factor, F6 = Unchanging Specific Factor, IECV = Individual Explained Common Variance. Loadings for Uni are based

on MLR estimation. Loadings and IECVs for Bifactor are based on WLSMV estimation. Items are listed in the same order as

Table 1 of Williamson et al. (2010). All bolded loadings significant at p < .05

Table 4

Standardized Betas for the Structural Paths Between IFS Latent Factors and Big 5 Latent Factors

	Extroversion	Agreeableness	Conscientiousness	Neuroticism	Openness to Experience
IFS-12 General Factor	**.21**	**.23**	**.15**	-.06	.05
IFS-12 Unidimensional Factor	**.21**	**.23**	**.15**	-.06	.05
IFS-6 Unidimensional Factor	**.23**	**.23**	.17	-.08	.08
IFS-5 Unidimensional Factor	**.21**	**.26**	**.18**	-.11	.07

Note: IFS = Intratextual Fundamentalism Scale. Standardized betas are based on WLSMV estimation. All bolded standardized betas were significant at p < .05

Appendix

Intratextual Fundamentalism Scale – 6 Item Version (IFS-6) Items

1. The Sacred Writing is without question the words of God.
2. The Sacred Writing is the only one that is true above all Holy Books or sacred texts of other religions.
3. The Sacred Writing should never be doubted, even when scientific or historical evidence outright disagrees with it.
4. The truths of the Sacred Writing will never be outdated, but will always apply equally well to all generations.
5. Everything in the Sacred Writing is absolutely true without question.
6. To understand the true interpretation of the Sacred Writing, you should NOT give final say to outside sources like science or history, but you should rely mainly on studying the Sacred Writing itself and seeking God to find its true meaning.