Intratextual Fundamentalism and the Desire for Simple Cognitive Structure: The Moderating Effect of the Ability to Achieve Cognitive Structure

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Summary
Religious fundamentalism has been suspected as a product of simple cognitive structuring. On the other hand, recent publications have shown that cognitive structure formation is not as simple as was previously thought. The concept of the Ability to Achieve Cognitive Structure (AACS) revealed that not everyone was able to form simple cognitive structure. This study employed a total of 187 Indonesian university students as participants. By the mean of Structural Equation Modeling, this study treated the desire for simple cognitive structure as a "new" latent variable and examined its relation with intratextual fundamentalism using AACS as moderator. The desire for simple structure was reflected by the Need for Cognitive Structure (NCS), the Dogmatism, and the RWA. The fundamentalism was reflected by the Intratextual Fundamentalism Scale (IFS). The result showed that fundamentalism, among other things, was a product of desire for simple cognitive structure. This study also showed that AACS moderated the relation in which high AACS would lead to higher fundamentalism while low AACS would not. Implications of the findings for social psychology and cross-cultural understanding of religious fundamentalism were discussed.

Keywords
cognitive structuring; religious fundamentalism; structural equation modeling

Introduction
As this sentence was being written, the Indonesian Police was announcing its success in capturing dead the notorious Bali bomber Noordin Mohammad

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Top. He was held responsible for several bomb attacks in Indonesia: Bali 2002 and 2005, J. W. Marriot 2003, Australian Embassy 2004, and the latest Ritz Carlton-J. W. Marriot bombing 2009, to name a few. He had been a fugitive for 9 years, valued 1 Billion Rupiah (USD 100,000), and, amazingly, married several times whilst being hunted.

This brief story of Noordin ia presented here with good reason. He was a terrorist and can serve as a good introduction to the significance of this study (although one must not assume that terrorism and fundamentalism are the same thing). The relationship between terrorism and fundamentalism rests on the notion that no terrorism can exist in a region with no fundamentalism. Experts on Southeast Asian terrorism (e.g. Ismail & Ungerer, 2009; Mobley, 2004; Ramakhrisna, 2002, 2004) have emphasized how terrorists utilized fundamentalist networks (in this case, Islamic ones) as sources of funding and recruitment, either sympathizers of or suicide bombers. Some pesantren (Islamic boarding schools) were accused of having strong relations with terrorist networks, to the extent that Mobley (2004) described them as “the Ivy League of jihadi schools” (p. 8). This utilization of underground support allowed the terrorist network to survive and to reorganize despite large scale manhunts by the security institutions (ICG, 2007).

Apart from recruitment and funding, it has also been noted that the ideology of terrorism itself, at least partially, is rooted in fundamentalism. Ramakhrisna (2004) suggested that high-profile terrorist bombings were enflamed by more basic fundamental thinking like “American and Jews were infidels… so were Muslims who did nothing” (p. 26). Citing Yusof & Ishak’s (2004) article, he presented Al-Mukmin Pesantren as an example of encouraging a culture of hatred, in which its founder Abu Bakar Bashir likened his role of a preacher (which some have accused as promoting hatred) to “a craftsman who sells knives but is not responsible for what happens to them” (p. 25). The same finding was also asserted by Tan (2008) who noted that terrorist phenomena in Southeast Asia cannot be separated from the shift towards fundamentalism manifested by subscribing to violent Salafi jihad.

Considering this relationship between terrorism and fundamentalism, one can infer how understanding religious fundamentalism may well contribute to a better policy on terrorism. Yet, unfortunately, the conception of religious fundamentalism itself was dynamic and much remains to be learned about it. Originating in the early 20th century, the term fundamentalism was initially an “exclusive privilege” of American Christians who rejected a modern and open interpretation of the Bible. According to Kellstedt & Smidt (1991) fundamentalists were characterized by acceptance of biblical authority, salvation
through Christ, literal interpretation of the Bible, and a separatist lifestyle compared to the mainstream. The separatist lifestyle can also be considered a manifestation of militancy (opposing marginalization of religion) which was the central tenet of Almond, Sivan, & Appleby’s (1995) work.

This feature of militancy was kept central in Altemeyer & Hunsberger’s (1992) conception of fundamentalism. According to them, fundamentalism can best be understood 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).

This description of fundamentalism has been the focus of great deal of research (Krauss et al., 2006) and was used to develop the 20-item Religious Fundamentalism Scale (RFS; Altemeyer & Hunsberger, 1992) which later was revised into the 12-item RFS (Altemeyer & Hunsberger, 2004). Many studies on religious fundamentalism published in mainstream psychology journals have used this measurement of fundamentalism at least partially (e.g. Bertsch & Pesta, 2009; Galen et al., 2009; Krauss et al., 2006; Mavor et al., 2009; Rothschild, Abdollahi, & Pyszczynski, 2009; Saroglou, 2002a; Vess et al., 2009; Wrench et al., 2006).

Nevertheless, these definitions of fundamentalism which place militancy as of importance did not go unchallenged. Citing works by Frykenberg (1994) and Heilman (1994), Williamson & Hood (2005) argued that the feature of militancy was not common enough to be used as a distinguishing feature of fundamentalism. Proposing the Amish community and the Appalachia serpent handlers as cases, Hood, Hill, & Williamson (2005) suggested that it is the principle of intratextuality should be treated as the central, common feature of religious fundamentalism. According to them,

it is the sacred text and its intratextual interpretation that lead the fundamentalist to the discovery of absolute truths that are non-negotiable and that stand beyond the person as a ground of objective reality against which the person makes sense of life and interprets the meaning of personal experiences. (Williamson et al., in press).

They pictured the structure of fundamentalist thought (depicted in Figure 1) which serves as an underlying base to understand the ways fundamentalists
believe their scripture to be: (1) divine or inerrant, (2) self-interpretive, (3) privileged, (4) authoritative, and (5) unchanging. From these principles the 12-item Intratextual Fundamentalism Scale (IFS; Williamson & Hood, 2005) was built and revised into the 5-item IFS (Williamson et al., in press). One of the interesting findings on this scale was that after controlling for IFS the correlation between RFS and RWA became insignificant, suggesting that the relationship between RFS and RWA can in the large part be attributed to the intratextual way fundamentalists hold their sacred text (Williamson & Hood, 2005).

Research on Religious Fundamentalism

As Altemeyer & Hunsberger (2005) beautifully noted, religious fundamentalism is a “powerful predictor of many things” (p. 386). And because it is a good predictor, studies have examined its relation to other constructs, for example support for military action (Rothschild et al., 2009), medical treatment (Jakobi, 1990; Vess et al., 2009), optimism (Sethi & Seligman, 1993), memory retrieval (Galen et al., 2009), humour creation (Saroglou, 2002a), spiritual
maturity (Olds, 2008), gender and heterosexism (Cerecedes, 2003; Helm, Berecz, & Nelson, 2001), terrorism (Armborst, 2009; Pratt, 2006, 2007; Tan, 2008; Rogers et al., 2007), forgiveness (Applegate et al., 2000; Brown, Barnes, & Campbell, 2007), and the most popular of all, prejudice (Altemeyer, 1996, 2003; Laythe, Finkel, & Kirkpatrick, 2001; Mavor et al., 2009).

While fundamentalism has been used to predict things, unfortunately few studies have been used to predict it. One of the earliest correlates was personality (e.g. Berry, 1989; Gibson, 1995; Stanley & Vagg, 1975; Streyffeler & McNally, 1998). A recent meta-analysis (Saroglou, 2002b) showed that religious fundamentalism had significant negative relation to Neuroticism and Openness to Experience but positively to Agreeableness. However, Krauss et al. (2006) found some cultural dependence on personality aspects of fundamentalism.

Another approach was that from cognitive aspects. Saroglou (2002c) found that religious fundamentalism was positively and significantly correlated to the total score of Need for Closure scale (Kruglanski, Webster, & Klem, 1993) as well as preference for order and predictability. In regard to some facets of fundamentalism, Bertsch & Pesta (2009) found correlations with IQ scores and Elementary Cognitive Task (ECT) performance. Believing one's own religion to be the only true path was found to correlate negatively with one's intelligence and performance in ECT. On the other hand, literal belief in scripture was found to be related negatively but insignificantly with IQ and ECT. Considering these findings, it is not surprising that fundamentalism and, in general, religiosity were seen as characterized by close-mindedness, either through correlation with Rokeach's (1952, 1954) dogmatism scale or authoritarianism (Duck & Hunsberger, 1999; Leak & Randall, 1995; cf. Saroglou, 2002c).

One aspect that must not be ignored in the study of fundamentalism is that of authoritarianism. This arose mainly from Altemeyer's (1981) work of right-wing authoritarianism (RWA). The 30-item RWA scale (Altemeyer, 1998) correlated highly with RFS, about .70 (Altemeyer & Hunsberger, 2005). Altemeyer (1996) also proposed that fundamentalism can be seen as authoritarianism in a religious domain, thus it is not surprising that they were very highly correlated. More or less like fundamentalism above, RWA was also thought to be a result of cognitive weaknesses. High RWAs employ double standard thinking and hold inconsistent thoughts, making them vulnerable to encountering contradictory principles. This vulnerability forces them to create defences through “insistence that all of your ideas are perfectly right.” (Altemeyer & Hunsberger, 2005; p. 389).
Researches on Cognitive Structuring

In the above descriptions, we have presented how cognitive structuring is related to religious fundamentalism. For a large part, researchers have found that the information processing strategy used (cognitive structuring vs. piecemeal processing) might lead to different impacts on decisional outcome (Wethe, 2002). One important and actively researched theme on cognitive structuring was that of individual differences on the need for cognitive structuring (e.g. Bunder, 1962; Frenkel-Brunswik, 1949; Kagan, 1972; Rokeach, 1960; Sorrentino & Short, 1986; cf. Bar-Tal, 1994). The construct itself has been labelled by different names, such as tolerance of ambiguity, openness, or desire for simple cognitive structure (Bar-Tal, 1994).

Other than names, different instruments have also been developed to measure the construct. Personal Need for Structure scale (PNS; Neuberg & Newcomb, 1993), Need for Closure scale (NFCS; Kruglanski et al., 1993), and Need for Cognitive Structure scale (NCS; Bar-Tal, 1994; Bar-Tal & Guinote, 2002) were among scales that were identified as measuring the need for cognitive structure (Wethe, 2002).

It was found that individuals high in the need for cognitive structure will reduce uncertainty through category based processing (in which features of objects of interest are evaluated based on a pre-existing category, which may lead to omission or addition of information, depending on whether it is inconsistent or consistent with the existing ones), instead of piecemeal processing (in which features of an object of interest are evaluated individually to arrive at a conclusion; Brewer, 1998; Fiske & Pavelchak, 1986; cf. Bar-Tal, 1994). Kruglanski & Ajzen (1983) also suspected that the use of information processing shortcut can be attributed to the high need for cognitive structure. This information processing strategy is characterized by rapid, shallow processing, premature and unqualified black and white thinking, as well as over-simplified dichotomizations (Bar-Tal & Guinote, 2002).

One inherent requirement for individuals to be able to form cognitive structure is for them to be able to omit inconsistent information from and firmly adding consistent information to the existing schemas and categories. Recent studies have opened up possibilities that individuals might differ not only in their need for cognitive structure but also in their abilities to achieve it (Bar-Tal, 1994; Bar-Tal, Kishon-Rabin, & Tabak, 1997; Bar-Tal, Raviv, & Spitzer, 1999; cf. Bar-Tal & Guinote, 2002). These studies identified the conceptualization of the ability to achieve cognitive structure (AACS).

According to Bar-Tal & Guinote (2002), AACS refers to “the extent to which individuals are able to use information processing processes (cognitive structuring or piecemeal) that are consistent with their level of NCS” (p. 315).
The AACS moderates the relation between individuals’ need for cognitive structuring and the cognitive structuring strategy used (e.g. stereotyping) as a mean to achieve certainty. Depending on the individual’s NCS level, the AACS can lead either to heuristic and categorical decision making, or to piecemeal processing. In a stereotype study (Bar-Tal & Guinote, 2002), AACS was found to moderate the relation between individuals’ NCS and the stereotypical thinking used in which for high AACS higher NCS led to more stereotypical thinking. While intratextual fundamentalism was associated with submission of experience and belief toward that of literal and rigid interpretation of scripture, it was reasonable then that the AACS would moderate the relation between the need for cognitive structure and intratextual fundamentalism.

From the above description, we have seen how measures of cognitive rigidity were related to fundamentalism. Given the rationale, we suggested that not only related simple cognitive structure can also be used to predict fundamentalism (in this case, the intratextual one). Intratextuality is seen as a mean towards simple structure where experiences are interpreted and subordinated according to the scripture. It could also serve as processing shortcut. The judgment of an experience (e.g. good or bad, moral or immoral) is not valued individually and thoroughly case-per-case, but instantly through matching with what the scripture says. We also proposed that, based on the notion of AACS above, this cognitive structuring would be moderated by the individuals’ AACS. Individuals high in desire for simple cognitive structure but low in AACS were hypothesized to have lower fundamentalism compared to high desire for simple cognitive structure participants who have higher AACS. To test these proposals, we employed Structural Equation Modelling and hierarchical regression to the following hypotheses:

Hypothesis 1: Intratextual fundamentalism, among other things, is a product of the desire for simple cognitive structure

Hypothesis 2: AACS moderates the relationship between the desire for simple cognitive structure and the intratextual fundamentalism.

Methods

Participants

Participants of this study were 187 university students from two universities in Jakarta. One of the universities is a public university and the other is private. The underlying motive to obtain participants from the universities was to capture as diverse a background as possible. The majority of the participants
were female (69.5%). The mean age was 19.93 with standard deviation 0.997. About 53.5% of participants identified themselves as Moslem, 18.2% as Christian, 17.6% as Catholic, 7% as Buddhist, 1.1% as Kong Hu Cu, and the rest as other religion or refused to disclose their religion.

Instruments

The instruments used were the 10-item IFS (Putra, 2007), the NCS scale (Bar-Tal, 1994), the revised 20-item Dogmatism scale (Troldahl & Powell, 1965), the revised 15-item RWA scale (Zakrisson, 2005), and the AACS scale (Bar-Tal, 1994). All of the scales except the IFS needed to be translated into Bahasa Indonesian. The translation process was conducted by the two authors. Each author independently interpreted and translated the scales. Every single item needed to be agreed before the process could continue. The method of response was for the participants to write their answer, thus avoiding mistakes, all scales used were 7-point answer with 1 equals totally disagree and 7 for totally agree. The composite score for each instrument was the mean responses of the relevant instrument.

The Intratextual Fundamentalism Scale was initially developed by Paul Williamson and Ralph Hood (2005) and based on the five attitudes fundamentalists are supposed to have toward their sacred texts: 1) divine or inerrant, 2) self-interpretive, 3) privileged, 4) authoritative, and 5) unchanging. This scale was designed to focus only on the centrality of text, the attitude towards the text, and the process of deriving religious beliefs. The version used in this study was developed by Putra (2007) from the 5-item IFS and was extended to be a 10-item scale in an effort to accommodate religious life in Indonesia, particularly Muslims. Sample items included 1) My religion’s scripture is definitely above other religions’ scriptures; 2) God has given his words through my religion’s scripture as a complete and perfect guidance; 3) There is only one guidance to the truth, that is my religion’s scripture, people who don’t follow my religion’s scripture will not find the truth. As reported by Putra (2007), the reliability of the scale was 0.955.

The NCS scale was intended to measure individuals’ desire for certainty concerning a given topic (Bar-Tal, 1994). It consists of 20 items reflecting preference for structured and clear-cut situations (e.g. I think that every problem has a clear-cut solution, I prefer things to be predictable and certain). Individuals high in NCS would prefer category-based processing to reduce uncertainty, rather than individuating process. Previous reliability has been shown to be 0.88 (Bar-Tal, 1994) and 0.86 (Bar-Tal & Guinote, 2002).

The Dogmatism scale was initially developed by Rokeach (1954) to provide a value-free measure for Adorno et al. (1950) authoritarianism. According to
Eckhardt (1991), dogmatism is characterized by a closed mind, intolerance toward ambiguity, and stereotyped thinking, suggesting some suitability with our latent variable of the DSCS here. In this study, the Dogmatism scale used was the 20-item short version developed by Troldahl & Powell (1965). Sample items included

1) Man on his own is a helpless and miserable creature;
2) There are two kinds of people in this world: those who are for the truth and those who are against the truth; and
3) Most people just don’t know what’s good for them.

The split-half reliability of the instrument has been estimated statistically to be around 0.79 (Troldahl & Powell, 1965).

The Right-wing Authoritarianism scale used here was the one developed by Zakrisson (2005). The scale consists of 15 items and, compared to the original scale (Altemeyer, 1998), has shorter items, less extreme wording, and less reference to specific groups (e.g. homosexuals). The underlying argument to place RWA as reflection of DSCS was that the RWA was developed from the theory of authoritarianism, which is inseparable from conservatism and was related to rigidity, black-and-white thinking, intolerance for conflicting ideas, and closed mindedness (Heiser, 2005). The instrument had previous reliability varying from 0.72 to 0.80 (Zakrisson, 2005) and includes items such as 1) There are many radical, immoral people trying to ruin things; society ought to stop them; and 2) It is better to accept bad literature than to censor it (reversed).

The AACS scale was developed by Bar-Tal (1994), based on the notion that individuals might differ not only in their need for cognitive structure but also in their ability to achieve it. The scale consists of 24 items that measure: (1) the ability to achieve certainty in the correctness of made decisions, (2) the ability to adopt clear-cut solution, (3) the ability to structure life. Samples of the items were: (1) I have no problem in meeting deadlines and (2) Only seldom do I doubt my beliefs. Previous reliability has been reported to be 0.83 (Bar-Tal, 1994) and 0.82 (Bar-Tal & Guinote, 2002).

Results

In general, all of the instruments except the RWA showed good reliability. For the purpose of increasing reliability in the remaining analysis of this study as well as data reduction, we employed Confirmatory Factor Analysis to each scale and chose eight items with the highest significant loadings. For RWA,
however, there were seven, not eight, items of significant loadings. Table 1 gives the Cronbach's Alpha before and after the CFA was conducted as well as the items included for each scale after the CFA. Table 2 which follows, lists the Goodness of Fit for each respecified scale.

The low reliability of the RWA raised some questions. RWA has been shown to be high in reliability (see Altemeyer, 1996); nevertheless there were also cases where the reliability was quite poor, for example: .43 in South Africa (Altemeyer, 1996) and .50 in Romania (Krauss et al., 2006). In our case, the low reliability can probably be explained as a consequence of rewording.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach’s Alpha</th>
<th>Items after CFA</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>On Standardized Items</td>
<td></td>
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<tr>
<td></td>
<td>Before the CFA</td>
<td>After the CFA</td>
</tr>
<tr>
<td>NCS</td>
<td>0.848</td>
<td>0.793</td>
</tr>
<tr>
<td>Dogmatism</td>
<td>0.728</td>
<td>0.692</td>
</tr>
<tr>
<td>RWA</td>
<td>0.466</td>
<td>0.755</td>
</tr>
<tr>
<td>AACS</td>
<td>0.811</td>
<td>0.829</td>
</tr>
<tr>
<td>IFS</td>
<td>0.904</td>
<td>0.928</td>
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<tr>
<th>Scales</th>
<th>Goodness of Fit Statistics</th>
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<tr>
<td></td>
<td>$\chi^2$</td>
</tr>
<tr>
<td>NCS</td>
<td>20.73</td>
</tr>
<tr>
<td>(Sig. = 0.29)</td>
<td>(Sig. = 0.73)</td>
</tr>
<tr>
<td>Dogmatism</td>
<td>17.96</td>
</tr>
<tr>
<td>(Sig. = 0.59)</td>
<td>(Sig. = 0.92)</td>
</tr>
<tr>
<td>RWA</td>
<td>22.46</td>
</tr>
<tr>
<td>(Sig. = 0.07)</td>
<td>(Sig. = 0.36)</td>
</tr>
<tr>
<td>AACS</td>
<td>23.69</td>
</tr>
<tr>
<td>(Sig. = 0.17)</td>
<td>(Sig. = 0.59)</td>
</tr>
<tr>
<td>IFS</td>
<td>22.62</td>
</tr>
<tr>
<td>(Sig. = 0.02)</td>
<td>(Sig. = 0.15)</td>
</tr>
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</table>
The 15-item RWA scale used in this scale was the revised scale that has less extreme words and less reference to prejudiced groups (Zakrisson, 2005). The rewording was conducted because it was argued that in contemporary individualistic society dependence on authority was something very unlikely to be made public. Therefore, the items were softened to make it more subtle but still capture the essence of authority submission and conventionalism. The case, however, is probably different in Indonesia which is a communal society with high adherence to tradition, convention, and authoritative figures, which in turn may have led to the low reliability of the scale.

The Proposed Model

To answer Hypothesis 1, and subsequently Hypothesis 2, we utilized Structural Equation Modeling that related the Desire for Simple Cognitive Structure (DSCS) and the Intratextual Fundamentalism (IF). The NCS, the Dogmatism, and the RWA were reflecting the latent variable DSCS while the IF was reflected by the IFS. For each measurement variable, we used the average from the respective scale.

The use of a single indicator was justified according to items parcelling technique (see Sass & Smith, 2006). The error variance for IF was set to be 0.2142, based on the calculation method described in Brown (2006) and the data of previous reliability of IFS that was never below 0.9 (therefore the error was estimated to be 0.1) and standard deviation of the instrument in this study which was 1.46371.

Fig. 2. DSCS-RF Model and its standardized parameters.
The model above fitted the data perfectly well ($\chi^2 = 0.78$, Sig. = 0.38; RMSEA = 0.0, Sig. = 0.48; AGFI = 0.98; NFI = 0.99). One interesting aspect of the model above is the error correlation between RWA and IFS that was significant. In fact, if this error correlate had been removed the model would have poor fit ($\chi^2 = 26.10$, Sig. = 0.00; RMSEA = 0.25, Sig. = 0.00; AGFI = 0.67; NFI = 0.75). Parameters in the model can be considered meaningful following the suggestion from Chin (1998; c.f. Hoe, 2008) that suggested for a parameter to be considered for discussion, its standardized value should be at least 0.2 or ideally above 0.3.

Since the model confirmed our first hypothesis, the next question was whether the ability to achieve cognitive structure will moderate this relation. According to Bar-Tal (1994) and Bar-Tal & Guinote (2002), individuals’ level of AACS would moderate their ability to achieve certainty (for example through stereotype and prejudice) in which, given that NCS level is high, high AACS would lead to simple processing while low AACS would not.

To test this theory in our model, we utilized hierarchical regression. The predictors were the DSCS, the AACS, and the interaction of DSCS-AACS. The scores of DSCS were the latent scores obtained from the SEM Model in Figure 2 while the AACS scores were the standardized ones to follow the suggestion from Cohen et al. (2003).

First, the latent scores of DSCS were entered as independent variable, then the $z$-score of AACS as moderator, and finally the DSCS-AACS interaction. The dependent variable in the equation was the latent scores of IF extracted from the model in Figure 2. The coefficients of the equation in final step ($R^2 = .106; F$-value $= 7.202; \text{Sig.} = 0.000$) are displayed in Table 3.

Table 3. Regression coefficients DSCS and AACS toward IF with interaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>t-value</th>
<th>Significance</th>
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<tbody>
<tr>
<td>DSCS</td>
<td>.411</td>
<td>4.125</td>
<td>.000</td>
</tr>
<tr>
<td>AACS</td>
<td>.082</td>
<td>.802</td>
<td>.424</td>
</tr>
<tr>
<td>Interaction</td>
<td>.205</td>
<td>2.163</td>
<td>.032</td>
</tr>
<tr>
<td>Constant</td>
<td>1.974</td>
<td>19.922</td>
<td>.000</td>
</tr>
</tbody>
</table>
The coefficients show that the IF was significantly predicted by the DSCS and the interaction between DSCS-AACS but not by AACS. To have a visual description for the interaction in the equation, we used the plotting technique described in Cohen et al. (2003) with the DSCS as the horizontal axis and the IF as the vertical. The AACS used in the equation was one standard deviation above and below the mean. The respective resulting equations for low- and high-AACS participants were:

\[ Y' = 0.206X + 1.893 \]

and

\[ Y'' = 0.616X + 2.056. \]

These equations are depicted visually in Figure 3.

The figure confirmed our hypothesis that AACS moderated the relation between the DSCS and the IF. One interesting aspect of the picture was that both low- and high-AACS participants had positive regression coefficient, meaning higher DSCS led to higher IF regardless their level of AACS. The

Fig. 3. Interaction plot of DSCS and AACS.
AACS seemed to have influence merely on the steepness of the lines. This was in contrast with Bar-Tal & Guinote’s (2002) finding that showed low AACS led to less stereotyped thinking as the cognitive structuring (NCS) getting higher. In this study, however, the interaction effect was that the increase of IF as a function of DSCS among participants with low AACS was not as significant as ones of high AACS.

Discussion

This study was intended to test two hypotheses: (1) Intratextual fundamentalism is a product of simple cognitive structure and, given that the first hypothesis true, (2) AACS moderates the relation between the desire for simple cognitive structure (DSCS) and intratextual fundamentalism (IF). To answer these hypotheses, Structural Equation Modeling and hierarchical regression were used. The regression analysis was conducted because it was argued that continuous variable must not be dichotomized (Irwin & McClelland, 2001, 2003; Maxwell & Delaney, 1993), therefore the multisample approach using SEM (Byrne, 1998) cannot be utilized.

The SEM analysis confirmed our hypothesis that intratextual fundamentalism is, among other things, a product of desire for simple cognitive structure. It also showed that our theoretical groundwork to relate NCS, Dogmatism, and RWA as reflections of a latent variable DSCS were reasonable. The three measured variables had significant factor loadings toward the latent.

Among possible explanations for the predictive ability of DSCS towards IF was that of a fundamentalist’s need and preference for certainty, predictability, and orderliness. Saroglou (2002c) borrowed Rokeach’s (1954, 1960) concept of dogmatism to suggest that religiosity (we argued the same can be applied as well to fundamentalism considering the overlapping nature of the two constructs) was characterized by subordination of peripheral belief to that of central belief, instead of strict isolation of belief-disbelief system. It was safe to assume that fundamentalists utilize their doctrinal belief or intratextuality to provide higher structures to make sense of their lower, more earthly experience and belief. This became evident mainly from the research on religious coping. In the case of illness, religious beliefs provide a meaning in which the suffering was rationalized and understood (Koenig, McCullough, & Larson, 2001). The suffering itself isn’t discredited or separated from the superior religious understanding, instead it is explained in the framework of the belief, providing a simple structure to see the world.
Another interest in the resulting model was the significant error correlate between RWA and IFS. Since RWA was designed to capture the covariation of submission, dominance, and conventionalism (Altemeyer, 1981), then there was good indication that it related to religious fundamentalism (in this study, the intratextual one) in aspects other than simple structuring. In fact, Altemeyer (1996) has claimed that religious fundamentalism (RF) can usually be seen as an extension of right-wing authoritarianism. This somewhat hard-to-distinguish conceptualization between RWA and RF has also been shown by Krauss et al. (2006) that found the two constructs had similar personality correlates and were indistinguishable via exploratory factor analysis. Further studies are suggested to examine how RWA resulted in high fundamentalism: what factors other than simple cognitive structuring, if any, contribute to the relation, or is it merely that high RWA “automatically” become fundamentalist when they come to religious domain.

The second hypothesis concerning AACS moderation was supported by hierarchical regression. The equation showed that, other than the DSCS, it wasn’t AACS per se that significantly predicted intratextual fundamentalism but the interaction between AACS and the DSCS. It was also shown that regardless of the level of AACS, higher desire for simple cognitive structure led to higher fundamentalism. This was in contrast to Bar-Tal & Guinote’s (2002) finding but not necessarily exceptional. Previous findings have revealed potential domain-specific influence in the research of cognitive complexity and structuring. Religious or existential topics seem to have different effect than that of non-existential or faith-unrelated topics. Heiser (2005) cited work from Batson & Raynor-Prince (1983) that suggested even people of intrinsic religiosity think less complexly in religious topics. He also presented the work of Pancer, Jackson, Hunsberger, & Pratt (1995) that found low- and high religiosity people differ only in non-existential topics but not in existential ones. Hunsberger, Pratt, & Pancer (1994) also suggested the same using fundamentalism instead of religiosity. They found no integrative complexity difference between low and high fundamentalist. Since this study was on intratextuality which is strongly related to one of religious faith, this domain-specific difference can probably explain the absence of negative regression coefficient on low-AACS participants. Considering the concept of peripheral and central belief above, non-existential topics that are not contradictory with that of central belief might not need to be forcibly subordinated and integrated to the fundamentalist beliefs, therefore enabling them to be processed complexly. On the contrary, existential topics seem to tap directly into the fundamentalist core belief, hindering them to be processed complexly. The topic of
existential and non-existential can also be meaningful if one considers the characteristic of the sample who were Indonesian. As Mujani (2003) noted, Indonesians are religious and adhere devotedly to religious norms and teachings. This, in turn, might explains why low- and high-AACS both led to higher intratextual fundamentalism, which conceptualizes one’s attitude towards the sacred scripture.

Another possible explanation was one related to *scholarly distance theory* (Lehman & Shriver, 1968). This theory posits that, in an academic domain, the distance of oneself to one’s own subject under scrutiny determines the level of critical thinking toward the subject. Psychology researchers, compared to physics researchers for example, are predicted to have more critical thinking toward religion because it is closer to psychology research area than that of physics. As Beit-Hallahmi & Argyle (1997) expresses it,

> The reason, in psychological terms, is that the natural sciences apply critical thinking to nature; the human sciences ask critical questions about culture, tradition, and beliefs. The mere fact of choosing human society of behavior as the object of study reflects a curiosity about basic social beliefs and conventions and a readiness to reject them. Physical scientists, who are at a greater scholarly distance, may be able to compartmentalize their science and religion more easily. (p. 181)

The question remains, can scholarly distance theory be applied to lay people as well? In other words, do people who learn more about religion think more complexly about it than those who study less? Altemeyer & Hunsberger (2005) have provided glimpses of this possibility by asserting that people of high RWA usually have little experience in encountering differences. If this had been true and could be applied to religious fundamentalism, then we could have expected that people who have more contact with the complexity of religious ideas would show less difference in complexity of thinking between existential and non-existential topics.

**References**


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