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Running head: CHRISTIANITY OR SUPERSTITION?

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Abstract

Various studies have related superstition to religion, describing the two terms synonymously. However, religion is a highly variable construct which must be measured more discriminately. In this study, superstition was examined in relation to God Concepts, motivations, locus of control, and Spiritual Well-Being. Results obtained from 151 Christian undergraduates revealed that people who are more superstitious did not relate to God imagery and tended to belong to the Extrinsic-Social, Extrinsic-Personal, and Quest motivations. They also tended to place their locus of control in luck. Intrinsically motivated Christians, on the other hand, held a traditional benevolent image of God and were not superstitious. They tended to place their locus of control in God and not in luck, and had greater Religious, Existential, and Spiritual Well-Being overall. Results indicate that religion and superstition cannot be used as synonymous terms. Specifically, Intrinsically committed Christians were found to not be superstitious at all.



Christianity or Superstition? Effects on Locus of Control and Well-Being

The New Webster's Dictionary defines religion as "recognition on the part of man of a controlling superhuman power entitled to obedience, reverence, and worship" and superstition as an "irrational fear of what is unknown or mysterious, especially in connection with religion." The latter definition described religion as part of a superstitious system with little differentiation of its own.

This line of thought can be traced in history. "For classical Roman observers like Seneca, Lucretius, and Cicero, superstitio meant erroneous, false, or excessive religious behaviors stemming from ignorance of philosophical and scientific truths about the laws of nature" (O'Neil, 1987, p. 163). In more recent times, this conceptualization is reflected in various research which related religious beliefs with superstition (Clark, 1977; LeShan, 1966). Tobacyk & Milford (1983) included traditional religious beliefs as a paranormal dimension, asserting that "religious and other paranormal beliefs originate in the same fundamental human experience and might serve similar functions" (p. 1029).

This assertion is supported by another study which found a positive relationship between church attendance and superstition (Buhrmann & Zaugg, 1983). Indeed, Harding (1922) wrote that religion is based on superstition and "may be broadly defined as composed of spirituality and pathology, the latter constituting a larger share than is commonly supposed" (p. 612).

The link between superstition and pathology is evidenced by studies relating superstition to lower self-efficacy and less effective personality functioning (Tobacyk, Nagot, & Miller, 1988; Tobacyk & Shrader, 1991). Wrightsman (1977) describes superstition as "a tendency to shift responsibility from within the individual onto outside forces beyond one's control, particularly to mystical determinants" (p. 586). This assertion was evidenced by studies relating superstition to external locus of control (Peterson, 1978; Randall & Desrosiers, 1980; Scheidt, 1973; Tobacyk & Shrader, 1991; Tobacyk & Tobacyk, 1992) which predicts pathology (Brown & Siegel, 1988; Propst, 1991; Schulz, 1980).



While studies relating superstition and pathology may describe an association between locus of control and well-being, research relating religion with superstition reveal a rather broad definition of religiosity. Some studies identified religious persons by religious affiliation only (Buhrmann & Zaugg, 1985) while other studies related religious with paranormal beliefs (Clark, 1977; LeShan, 1966; Tobacyk & Milford, 1983) based on shared themes (e.g. methods of communication such as prayer or seance are seen as similar). The lack of differentiation in the assessment of religion may yield misleading results.

Religion must be defined more discriminately. The basic premise of various religions can be radically different. Specifically, Christianity is distinctive from other religions in its foundational belief that salvation is gained through faith alone (rather than through good deeds or reincarnation as taught in many other religions). Moreover, even within a Christian population, there are major differences in ways of seeing and relating to God. Ways of seeing God have been described as religion's emphasis upon the nature and character of God, or the conceptualization of God (Gorsuch, 1967; Spilka, Armatas, & Nussbaum, 1964). Ways of relating to God have been operationalized as motivations or differing types of religious commitments (Allport, 1950; Batson & Ventis, 1982; Gorsuch & Venable, 1983). Both God concepts and motivations have been established as significant predictors of psychological adjustment (Donahue, 1985; Gorsuch, 1968; Schaefer & Gorsuch, 1991, 1992).

"The concept of God is a highly variable quantity" (Gorsuch, 1967, p. 187). It has been described with multiple factors based on responses to adjective ratings (Gorsuch, 1968). Eleven primary concepts of God (Benevolent, Wrathful, Omni, Guiding, False, Stable, Deistic, Worthless, Powerful, Condemning, and Caring) have been identified (Schaefer & Gorsuch, 1992). Belief in a loving and benevolent God was found to correlate with reduced anxiety. Anxiety was negatively



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related with God-images of Benevolent, Omni, Guiding, Stable, and Powerful, but it associated positively with False and Deistic views of God (Shaefer & Gorsuch, 1991). Religious motivations (Gorsuch, 1994; Gorsuch & Veneble, 1983) have been differentiated as Intrinsic (I), with religion as a central motivator in a person's life or as the meaning of life, and Extrinsic (E), in which religion is used primarily for external gains or seen as part of life. Intrinsic believers internalize their religious beliefs and live by them, whereas Extrinsics see religion as mainly utilitarian (Gorsuch & McPherson, 1989). The E motivation was further distinguished into Extrinsic-Social (Es) and Extrinsic-Personal (Ep). Extrinsic-Socials use religion for social gains (i.e., to make friends) while Extrinsic-Personals utilize religion for personal benefits (i.e., to gain comfort and peace). Batson and Ventis (1982) described an additional motivation, Quest (Q), where religion is viewed as a dynamic process of searching and questioning. Quest describes the religious sentiment of "continually raising ultimate 'whys,' both about the existing social structure and about the structure of life itself" (Batson, 1976, p. 32). It is characterized by a readiness to face existential questions, self-criticism, perception of religious doubt as positive, and an openness to change (Batson & Schoenrade, 1991).

Intrinsic motivation and religious attendance were found to have a significant positive relationship with the God concepts of Benevolent, Wrathful, Omni, Guiding, Stable, Powerful, and Caring.

Moreover, a Condemning view of God also related positively with attendance at religious meetings.

Concepts of God as False and Deistic had a significant negative relationship with I and attendance. A worthless view of God was positively related to Es and negatively related to I (Schaefer & Gorsuch, 1992). Finally, differing motivations related differently to personality functioning with I as a predictor of better adjustment (Baker & Gorsuch, 1982; Bergin, Masters, & Richards, 1987; Donahue, 1985; Koenig, Kvala, & Ferrel, 1988; Schaefer & Gorsuch, 1991). Thus, it is important to differentiate the various types of God concepts and motivations in assessing religious behavior.



The current study is designed to examine the relationships between God concepts, motivations, and superstition. As previously mentioned, superstition was found to relate to external locus of control (Peterson, 1978; Scheidt, 1973; Tobacyk & Shrader, 1991; Tobacyk & Tobacyk, 1992).

Thus, locus of control (LOC) will be assessed in relation to the three aforementioned variables.

Internal LOC will be measured by Personal control (or self control) and external control by LOC in Powerful Others (PO) and in Luck (Bennett, 1991). Among Christians, LOC in God constitute both external and internal control, as God is seen as the external Creator of all but also as the internal presence who resides within oneself. Thus, God, control will be discussed in a category of its own.

Finally, well-being will also be examined as an outcome measure. It is predicted that people's view of God (God concepts) will affect their religious and faith systems (motivations and superstition), which will influence their outlook on life (locus of control) and well-being (See in Figure 1).

It is hypothesized that 1) traditional positive conceptualizations of God will relate to Intrinsicness while negative ones will associate with Extrinsicness and Quest. Moreover, negative God Concepts will correlate with superstition. 2) Motivations will relate to superstition such that I will correlate negatively, and E and Q will associate positively. 3) Intrinsicness will also relate to locus of control in God and self, while E and Q will correlate with LOC in Powerful Others and in Luck. However, superstition will associate negatively with LOC in God and self, but positively with external control. 4) With respect to God Concepts and LOC, it is predicted that positive concepts will correlate with God and self control while negative ones will associate with external LOC. Finally, 5) superstition will relate negatively to well-being, while LOC in God and in self will relate positively to it.

A previous factor analytic study (Wong-McDonald & Gorsuch, 2000) of the same data set was published as an incremental validity study of a new scale. The participant sample and methodology are summarized below.



Methods

Participants

Since we were specifically interested on the distinctions between Christianity and superstition, this study was conducted solely with a Christian sample. One hundred sixty-three undergraduates in California, 137 from Christian colleges and 26 from churches, participated in this study. Twelve questionnaires were eliminated due to either missing data or due to the participants belonging to a nonChristian faith. The final sample ($\underline{N} = 151$) was composed of 57 males and 94 females with 100 Caucasians (66.2%), 25 Hispanics (16.6%), 11 Asians (7.3%), 9 African Americans (6%), and 6 Pacific Islanders (4%). The mean age was 21.15, ranging from 17 to 47 years with a \underline{SD} of 4.71. On the average, they had 14.26 years of education with a \underline{SD} of 1.19 years. They all professed to be Christians with 50 Baptists (33.1%), 40 Nondenominationals (26.5%), 24 Seventh Day Adventists (15.9%), 14 Pentacostals (9.3%), 9 Catholics (6%), 4 Presbyterians (2.6%), 2 Reformed (1.3%), and 8 belonging to other denominations (5.3%). On the average, they reported to be believers in their faith for 11.86 years with a \underline{SD} of 6.83, and attending worship services at least once a week ($\underline{M} = 4.9$, $\underline{SD} = 1.39$), on a scale from 1 (less than several times a year) to 7 (more than 3 times a week).

Conceptualization of God was examined with 11 items from the God Concept Adjective Checklist (Gorsuch, 1968). This measure assesses the degree to which one sees God as Benevolent, Wrathful, Omni, Guiding, False, Stable, Deistic, Worthless, Powerful, Condemning, or Caring. Each conceptualization was listed with its descriptors in parenthesis on the questionnaire. (For a list of these descriptors, see Appendix A.)

Religious motivation was measured with the I/E Revised Scale (Gorsuch & McPherson, 1989) and the Quest Scale (Batson & Schoenrade, 1991). The former scale consists of 14 items and is



designed to assess the degree in which a religious person professes to be Intrinsic or Extrinsic. I is assessed with eight items, Es is measured with three items, and Ep with three items. The Quest Scale (Batson & Schoenrade, 1991) uses 12 items to measure the extent to which one views religion as a dynamic process of searching and questioning.

Superstition was assessed with 7 items from the Superstition Scale (Noll, 1995) and 2 item from the Credulous Scales (Le et al., 1996). Together, the 9 items measures the extent in which one believes in popular superstitions such as horoscopes, omens, psychics, lucky charms, and astrology.

Locus of control was examined with the 24-item State Dependent Locus of Control Scale (Bennett, 1991). This scale measures the extent one attributes the outcome of events to influences by Self, Luck, or Powerful Others. Since this scale does not assess God control, eight additional items are added (utilizing similar wordings from the scale) to measure this dimension (e.g., "The result I want is conditional upon the actions of God"). The God control scale is listed in Appendix B.

Religious and Existential well-being was assessed with the Spiritual Well Being Scale (Paloutzian & Ellison, 1982). This 20-item scale measures one's perceived quality of life on the vertical dimension (one's sense of well-being in relationship to God) and the horizontal dimension (one's perceived life purpose and satisfaction apart from any religious reference). The sum of 10 items from the Religious Well-Being Scale (RWB) plus 10 items from the Existential Well-Being Scale (EWB) gives the total score for Spiritual Well-Being (SWB).

All measures were rated on a 5-point Likert scale, ranging from 1 (<u>strongly disagree</u>) to 5 (<u>strongly agree</u>). In addition, subjects completed a set of demographic items indicating age, gender, ethnicity, level of education, and number of years since their conversion to Christianity.



Procedure

The questionnaires were counterbalanced as odd and even forms, and were administered anonymously either in a group testing at the colleges and churches, or through self-administration.

Results

No significant difference was found between the odd and even forms. An overall multivariate test with the forms as dependent variable and all other variables as independent variables gave $\underline{R} = .09$, with $\underline{p} = .02$.

Descriptive statistics are in Table 1. Results reveal a conservative Christian sample with a traditional positive image of God, reporting a low level of superstition, and adhering mostly to the I motivation. The highest levels of LOC were God control and Personal Control. Participants also reported a high level of well-being, with RWB as the highest.

It was hypothesized that positive God Concepts will relate to I while negative ones will correlate with E and Q. To test the relationships between God Concepts and motivations, zero order correlations were computed between the variables and presented in Table 2. As hypothesized, Intrinsicness related positively with traditional God images (Benevolent, Wrathful, Omni, Guiding, Stable, Powerful, and Caring) and negatively with False, Deistic, Worthless, and Condemning images. Extrinsic-Social correlated positively with concept of God as Worthless, and negatively with Guiding and Stable. Extrinsic-Personal related positively with False, Deistic, and Condemning and negatively with Omni. Finally, Quest associated positively with Deistic. Moreover, it was predicted that negative God Concepts will correlate with superstition. A significant positive relationship was found between Deistic God and superstition, but negative associations are found between



conceptualizations of God as Guiding and Stable with superstition. No other significant correlations were found between God Concepts and superstition.

With respect to the relationship between motivations and superstition, it was proposed that I will correlate negatively while E and Q will relate positively. Pearson product-moment coefficients were computed between these variables. Results were significant (p < .01) in the predicted directions, with correlations at -.51 for I, .33 for Es, .30 for Ep, and .32 for Q.

To assess the unique variance between God Concepts and motivations and between God Concepts and superstition, partial correlations were computed through hierarchical multiple regression analysis. The partial coefficient between each God Concept variable with each motivational style was calculated by removing the effects of superstition and the other motivational styles. Partial correlations between God concepts and superstition were computed by removing the effects of motivations. Because of the strong correlations between motivations and superstition, and also because Intrinsicness picked up most of the variance with God Concepts, the partial correlations between God Concepts with Es, Ep, Q, and superstition were insignificant. The significant positive partial coefficients between God Concepts and I were on images of God as Benevolent, Omni, Guiding, Stable, and Caring, while Deistic and Condemning images correlated negatively (See Table 2).

With respect to motivations and locus of control, it was postulated that I will relate to God and Personal Control, while E and Q will correlate with LOC in Powerful Others and in Luck. Zero order and partial correlations of motivations with locus of control are presented in Table 3. Partial coefficients for motivations were computed by removing the effects of the other motivational styles and superstition through hierarchical multiple regression analysis. Partial correlations for superstition were obtained by holding constant the effects of motivations. Results indicate a significant positive



partial relation between I and God control and a significant negative partial correlation between I and Luck control. Es related positively to LOC in Powerful Others while Ep had no significant partial correlations. Finally, Q had significant positive partial coefficients with LOC in Powerful Others and in Luck.

Similarly, to assess the relationship between superstition and LOC, zero order and partial correlations were computed and presented in Table 3. It was hypothesized that superstition will relate negatively with God and Personal control, but positively with external control. Except for self control, the Pearson coefficients did correlate as predicted. However, once the effects of motivations were removed, the only significant partial correlation between superstition and LOC was in Luck.

With respect to God Concepts and LOC, it was predicted that positive concepts will relate with God and self control while negative ones will associate with external LOC. Zero order and partial correlations are presented in Table 4. Partial coefficients were computed by removing the effects of motivations, superstition, and the other LOC variables. Results indicate that God control related with images of God as Benevolent, Guiding, Caring, but not Worthless. Personal control correlated positively with Benevolent, Omni, Stable, and Caring, but negatively with Deistic. LOC in Powerful Others associated with Wrathful and Condemning God, while Luck control related negatively with Benevolent, Omni, and Powerful God images. As hypothesized, significant negative correlations (p < .01) were found between superstition and well-being, with RWB at -.22, EWB at -.27, and SWB at -.27. However, once the effects of locus of control were removed by partialing, the relationships between superstition and well-being were found to be insignificant. Thus, superstition alone does not contribute enough variance to affect well-being, and the initial negative relationships maybe attributed to the effects of locus of control.



Finally, it was postulated that LOC in God and self will relate to greater well-being. Zero order and partial correlations presented in Table 5. After removing the effects of the other LOC variables, God control was found to have significant positive relationships with all three well-being variables. No significant partial correlation was found for LOC in self or in Powerful Others, while Luck control had a significant negative partial correlation with RWB.

Discussion

To assess the relationships as presented in the model of relationships (Figure 1), multiple correlations of SWB, EWB, and SWB were computed to include all dependent variables, yielding significant multiple correlations (p < .01) of .82, .61, and .75 respectively. These statistics are fairly close to the reliability coefficients for the Spiritual Well-Being Scale (Paloutzian & Ellison, 1982), .96, .86, and .93 in the order given, suggesting that the model is a reasonable one.

The zero order correlations between God Concepts and motivations did relate somewhat in the predicted direction. However, once the effects of the other variables were partialled out, there were no significant relations between God Concepts with E, Q, and superstition. Results replicated previous research (Schaeffer & Gorsuch, 1992) in that E was found to be largely uncorrelated with God Concepts. It is possible that personal images of God would have meaning only for those who are religiously committed. Moreover, Donahue (1985) also found E to be basically uncorrelated with measures of religious belief and commitment, and reasoned that the result is not surprising given that E measures more an attitude toward religion rather than religiousness. It treats religion as simply one of the many influences of life or as a source of personal comfort and social support. Similarly, Q has consistently failed to correlate with measures of religiousness. It was proposed that it may not be representing a dimension of religiousness and may be best characterized as an agnosticism scale (Donahue, 1985). Thus, the idea of conceptualizing God in a personal way would have no significant



meaning for those who are not committed to their faith (i.e. E or Q). Since superstition had significant positive relations with E and Q (about .3) and a negative correlation with I (-.51), people who are more superstitious tend to belong to the E or Q motivations. In a similar vein, these people may not find God-images to be significantly meaningful.

As hypothesized, I correlated positively with God control but negatively with Luck control, indicating that those who are intrinsically committed to their faith tend to place their LOC in God and not in Luck. However, no significant relationship was found between I and Personal control. The participants rated themselves fairly high on both Intrinsicness and Personal control. Both variables are descriptive of the sample. The nonsignificant correlation may be due to the participants' interpretation of the constructs in two different ways: 1) one may see Intrinsicness as an exercise of personal control (i.e., one exercises the control over one's life by choosing to commit oneself to religion), or 2) one may see Intrinsicness as a relinquishment of personal control (i.e. by submitting Personal control to God control). The first way would produce a positive correlation while the latter would yield a negative one. If these two interpretations were equally represented in the sample, then the correlation between Intrinsicness and Personal control would be nonsignificant. As predicted, Es had a significant positive relationship with LOC in Powerful Others, while Q had significant associations with LOC in Powerful Others and in Luck. People adhering to the Es motivational style may view events in their lives as conditional upon acts of powerful people. This would explain their using religion to gain friendships and social support. The Q motivation is characterized by doubt in religion. Since Donahue (1985) had described this orientation as basically agnostic, persons with the Q style may choose to place their trust in Powerful Others and in Luck rather than in God.

With respect to superstition and LOC, only the relationship with Luck control remained significant after the effects of motivations were removed. Replicating previous research (Peterson,



1978; Randall & Desrosiers, 1980; Scheidt, 1973; Tobacyk & Shrader, 1991; Tobacyk & Tobacyk, 1992), an association between superstition and externality was also found in this study. Specifically, people who are more superstitious tended to place their LOC in Luck. The type of thought which characterizes belief in luck and in superstition contains an element of wishful thinking and a reliance on the magical, which may explain the correlation between the two.

Regarding God Concepts and LOC, results were in the predicted direction. God control correlated with positive images of God (Benevolent, Guiding, and Caring) and negatively with Worthless God. People with such conceptualizations of God place their LOC in God. Personal control associated with Benevolent, Omni, Stable, and Caring God concepts but not Deistic. Images of a kind, personal, and powerful God seem to allow individuals to place the LOC in themselves. LOC in Powerful Others correlated with Wrathful and Condemning God images. Such negative conceptualizations may direct persons to place their LOC in authority figures rather than a hurtful God. LOC in Luck related positively with Deistic God but negatively with Benevolent, Omni, and Powerful images. Seeing God as impersonal, not benevolent, and weak directly related to people believing in luck. When one could not trust in a weak and impersonal God, one may prefer to believe in luck.

Confirming previous research, zero order correlations point to a negative relationship between superstition and well-being (Tobacyk, Nagot, & Miller, 1988; Tobacyk & Shrader, 1991). However, once the effects of locus of control were removed, there were no significant relationships between the two constructs. Thus, the unique contribution of superstition to well-being is unclear, perhaps it is due to the perception of uncontrollableness that previous research has related superstition with less effective personal functioning.



Concerning the relationship between LOC and well-being, God control contributed significantly to Religious, Existential, and Spiritual Well-Being, while Luck control takes away from Religious Well-Being. Placing one's LOC in God leads to greater well-being overall, while trusting in luck lessens one's perceived relationship with God. Personal control did not correlate with well-being. It is possible that the participants relied more on God rather than on self with respect to well-being.

In conclusion, religion is a highly variable construct which must be measured more discriminately. Foundational beliefs of many religions may differ in significant ways. Even among one religion, there are many distinctive beliefs and ways of relating to God. This study has shown that among conservative Christians, those who are Intrinsically committed tend to conceptualize God in the traditional benevolent way while those with E or Q motivations may not relate to God imagery. Similarly, superstition did not associate with God Concepts, indicating a definite distinction between people who are superstitious and Christians belonging to the Intrinsic motivation. The correlations between superstition and motivations indicate similarities between people who are more superstitious with those adhering to the Extrinsic and Quest motivations, but not with those belonging to the Intrinsic style. It has been theorized that the internalization of God's love obliterates the need for magical control over a threatening world (Loder, 1989). Moreover, contrary to Buhrmann and Zaugg's finding (1983), church attendance was found to correlate negatively with superstition $(\underline{r} = -33, \underline{p} < .01)$. Thus, results from this study indicate that people who attend worship services tend to not be superstitious. Furthermore, locus of control was found to differ greatly between Intrinsic Christians and persons who are more superstitiously, Extrinsically, or Quest oriented. Finally, people with their LOC in God reported greater overall well-being than the other groups. Thus, results from this study indicate that religion and superstition cannot be described synonymously. In fact, Intrinsically committed Christians were not found to be superstitious at all.



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Footnotes

¹For exploratory purposes, 18 items from the Personal God Scale (Noll, 1995) were also administered (≈ = .84). This scale measures the extent one believes that one can form a personal relationship with God. Zero order correlations were significant at p < .01. Belief in a personal God related positively with Intrinsicness (.69) but negatively with Extrinsicness (-.45 for Es, and -.29 for Ep) and Quest (-.22), illustrating that those belonging to the I motivation tended to believe that God is personable, those adhering to E and Q may not.

² Superstition was found to relate negatively ($\underline{r} = -.42$, $\underline{p} < .01$) to belief in a personal God (Noll, 1995). Thus, people who are more superstitious do not tend to perceive God as personable. Also, see footnote 1.



Table 1

Means, Standard Deviations, Ranges, and Number of Scale Items^a (N = 151)

Scale	<u>M</u>	<u>SD</u>	Range No.	Items
GOD CONCEPTS				
Wrathful God	3.12	1.46	1.00-5.00	1
Benevolent	4.79	0.53	1.00-5.00	1
Omni	4.75	0.62	1.00-5.00	1
Guiding	4.68	0.72	1.00-5.00	1
False	1.28	0.90	1.00-5.00	1
Stable	4.64	0.79	1.00-5.00	1
Deistic	1.25	0.65	1.00-5.00	1
Worthless	1.19	0.70	1.00-5.00	1
Powerful	4.70	0.76	1.00-5.00	1
Condemning	1.58	0.99	1.00-5.00	1
Caring	4.70	0.72	1.00-5.00	1
SUPERSTITION	1.46	0.64	1.00-4.00	9
MOTIVATIONS				
Intrinsic	3.94	0.69	1.75-5.00	8
Extrinsic-Social	2.00	0.68	1.00-4.00	3
Extrinsic-Personal	2.94	0.78	1.33-4.33	3
Quest	2.83	0.52	1.42-4.17	12

(table continues)



Scale	<u>M</u>	<u>SD</u>	Range No. I	tems
LOCUS OF CONTROL				
God	3.80	0.66	1.63-5.00	8
Personal	3.70	0.64	1.50-5.00	8
Powerful others	2.63	0.66	1.00-4.00	8
Luck	1.96	0.73	1.00-4.00	8
WELL-BEING				
Religious	4.38	0.60	1.90-5.00	10
Existential	4.05	0.62	1.90-5.00	10
Spiritual (Total)	4.22	0.56	1.90-5.00	20

Note. ^aAll measures were rated on a 5-point Likert scale, ranging from 1 (<u>strongly disagree</u>) to 5 (<u>strongly agree</u>).



Zero Order and Partial Correlations of God Concepts with Motivational Styles and Superstition. Table 2

			MOT	MOTIVATIONS					SUPER	SUPERSTITION
GOD CONCEPTS	Intr	Intrinsic	Extrin	Extrinsic-Social	Extrinsi	Extrinsic-Personal	∂	Quest		
	Li	partial	I	partial	Ī	partial	ij	partial	Ĭ	partial
$\overline{\mathbf{R}}^{\mathtt{a}}$.49**		.28		.32		.30		.40.	
Benevolent	.28**	.25**	12	03	08	.03	04	9.	11	.03
Wrathful	.16*	.16	08	05	04	.01	90.	.11	04	.03
Omni	.31**	.26**	14	03	16*	05	04	90.	12	90.
Guiding	.36	.30	19*	08	11	.0	05	.07	16*	.02
False	19*	11	.11	.01	.17*	80.	.11	.03	.11	00.
Stable		.20*	21**	09	14	00.	11	.01	16*	.01
Deistic	35**	23**	.11	09	.23**	60.	.19•	.07	.25**	90:
Worthless	22**	15	.23**	.13	.14	.01	.15	90:	.07	09
Powerful	.19	.15	05	.00	10	04	00.	.07	12	03
Condemning	27	20*	.14	.02	.20	.10	80.	02	.10	06
Caring	.22**	.24**	11.	08	02	.05	40.	60:	00.	.11

^aR is the multiple correlation coefficient of overall tests for each dependent variable with God Concepts.

 $^{+}$ p = .05. * p < .05. * p < .01.

Table 3

Zero Order and Partial" Correlations of Motivational Styles and Superstition with Locus of Control Measures.

				LOCUS OF CONTROL	CONTROL			
	Ü	God	Per	Personal	Powerful	ıl Others	Luck	×
	Ħ	partial	H	partial	Ħ	partial	H	partial
$\mathbb{R}^{\mathfrak{b}}$.44		.17		.42		 49.	
MOTIVATIONS								
Intrinsic	.42**	.32**	.02	90.	26**	90	55**	26**
Extrinsic-Social	23**	09	.13	.14	.32**	.17*	.34**	04
Extrinsic-Personal	15	.03	.00	.02	.15	05	.35**	90.
Quest	05	.11	.03	.01	.32**	.18	.37**	.13+
SUPERSTITION	25**	05	90	08		.12	.52"	.23**

*Partial correlations for Motivations reflect product-moment coefficients with effects of other Motivational styles and Superstition partialled out. Partial correlations for Superstition reflect product-moment coefficients with effects of Motivation removed.

^bB is the multiple correlation coefficient of overall tests for each Locus of Control measure and includes all partialled variables.

 $^{+}$ p = .05. * p < .05. * p < .01.

Table 4

Zero Order and Partial^a Correlations of God Concepts with Locus of Control.

				LOCUS OF	CONTROL			
GOD CONCEPTS	0	Cod	Personal	onal	Powerf	ul Others	Lu	Luck
	Li	partial	ī	partial	Ħ	partial	ы	partial
\mathbb{R}^{b}	65:		.35		.54**		 69:	
Benevolent	.39**	.19**	.26**	.23**	07	.01	35**	17*
Wrathful	.21**	.15	01	03	.17	.17*	01	90.
Omni	.32**	.10	.20*	.18*	09	.01	37**	20**
Guiding	.43**	.23**	.13	.11	09	.01	33**	09
False	15	05	12	11	03	10	.16*	9.
Stable	.31**	.14	.16*	.15*	12	02	30**	08
Deistic	33**	14	18*	15*	.12	00.	.40	.14
Worthless	31**	20**	13	14	.10	.02	.23**	.03
Powerful	.20	.04	.12	60.	.04	.12	25**	18*
Condemning	16*	04	10	12	.25**	.20*	.23**	.03
Caring	.34**	.19*	.19*	.18*	09	06	25**	11

"Partial correlations reflect product-moment coefficients with effects of other locus of control variables removed. B is the multiple correlation coefficient of overall tests with the effects of motivations and superstition removed.

 $^{\dagger}p = .05. p < .05. p < .01.$



Table 5

Zero Order Correlations and Partial^a Correlations of Locus of Control with Well-Being

Measures.

			WEI	LL-BEING		
LOCUS OF	Reli	gious	Exis	stential	Spir	ritual
CONTROL	<u>r</u>	partial	<u>r</u>	partial	<u>r</u>	partial
God	.43**	.26**	.39**	.30**	.45**	.31**
Personal	.09	.06	.08	.07	.09	.07
Powerful Others	15	03	19*	14	19*	09
Luck	42**	20**	30**	05	39**	13

^aPartial correlations reflect product-moment coefficients with effects of other locus of control measures removed.



p < .05. p < .01.

Appendix A

God Concept Descriptors

These descriptors are taken from the Schaefer & Gorsuch (1992) study, which established the 11 primary God concept factors with salient factor loadings of the descriptors. The adjectives with the highest loadings for each factor are presented here. They were also presented similarly in the questionnaire for the participants.

Primary Factors: Descriptors with Salient Factor Loadings

Benevolent: Merciful, loving, and forgiving.

Wrathful: Punishing, sharp, and stern.

Omni: All powerful, all present, and all knowing.

Guiding: Gentle, helpful, and supporting.

False: Unfaithful and not important.

Stable: Fatherly and firm.

Deistic: Impersonal, inaccessible, and mythical.

Worthless: Weak and cold.

Powerful: Not feeble

Condemning: Avenging, critical, and cruel.

Caring: Charitable and considerate.



Appendix B

God Control Scale

- 1. God is able to sway things so that I will get the result I desire.
- 2. The result I want is conditional upon the actions of God.
- 3. God is not able to influence my getting the result I desire.^a
- 4. Success at getting the result I desire depends on God.
- 5. God must do something if I am to obtain the result I desire.
- 6. God has little effect on whether or not I get the result I desire.^a
- 7. The is nothing God can do to affect that I will get the result I desire.^a
- 8. God controls whether of not I will get the result I desire.

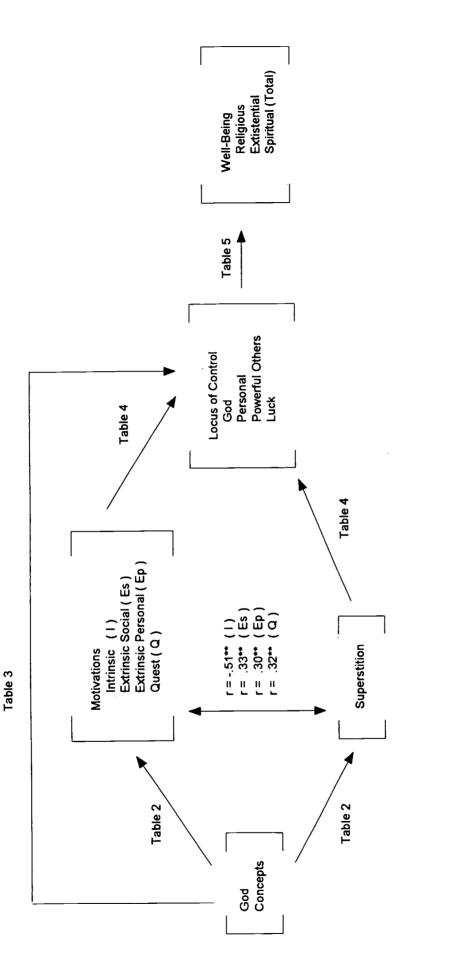
Note. areverse scoring



Figure Caption

<u>Figure 1.</u> Model of relationships integrating God Concepts, motivations, superstition, locus of control in the prediction of well-being.





Outcome Outlook on Life Religious & Faith Systems Knowledge of God

** p < .01



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