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ABSTRACT

This paper describes the reliability of the Means-Ends Spirituality Questionnaire to assess preferred ways and goals of spiritual expression. The means subscales assessed thinking, feeling, acting, and relating in the area of spiritual expression. A total of 405 university students participated in this investigation. Study 1 analyzed the instrument in terms of its reliability and construct validity. Study 2 utilized the instrument to assess the relationship between spiritual means and ends as measures of well being. Ends subscales reflected a motivational model based on approach and avoidance goals and their consequences for physical and psychological health. The questionnaire was found to be a useful tool for examining how means and ends relate to spiritual experiences and confirms the utility of distinguishing between approach and avoidance goals within the framework of spiritual motivation. (Contains 7 tables and 31 references.) (JDM)



Concurrent and Discriminant Validity of the Means-Ends Spirituality Questionnaire

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The scientific community is increasingly accepting the notion that being spiritual or religious positively affects mental and physical health. The evidence is generally consistent in finding that, on average, high levels of religious involvement are moderately associated with better physical and mental health (Jarvis & Northcott, 1987; Levin & Schiller, 1987; Levin & Vanderpool, 1989; Troyer, 1988; Ellison & Levin, 1998) and on psychological well-being and satisfaction with life (Ellison & Levin, 1998). This association is consistent across gender, ethnicity, religious groups (Christian and non-Christian), cultural orientations (Western and non-Western), age, and social class. However, monolithic statements about the relationship between religion and mental health are probably not warranted. Evidence is mounting that religious involvement appears to have a beneficial role on some aspects of mental health while having an ambiguous or negative relationship on others (e.g. Smith, 1996; Ellison, 1995; Emmons, 1999). Furthermore, it is unwise to assume that the various measures of religious involvement are interchangeable. Studies have found that how one operationalizes the construct of religious involvement will affect the religious-mental health relationship (e.g. Ellison, 1995; Pressman, Lyons, Larson, & Strain, 1990). Because of such findings, research examining the religion-mental health relationship is increasingly becoming focused on identifying those aspects of religious involvement that have a salutary effect on mental health and those which do not.

In the present study, we examine religious/spiritual involvement using the theoretical constructs of approach and avoidance goal striving and their associated means or paths of religious/spiritual expression. Specifically, we take the position that not only does it matter what spiritual and religious goals one pursues, but it also matters what strategies or paths one uses to get there. Recent research in achievement motivation into the relationship between avoidance goals and measures of health and



well-being has revealed a deleterious effect using both longitudinal and retrospective methods (Elliot, Sheldon, and Church, 1997; Elliot & Sheldon, 1997, 1998). In related work, Emmons and his colleagues have taken to analyzing the spiritual and religious content in goals in an effort to undertake measurement of spirituality through a "personal strivings" construct (Emmons, Cheung, & Tehrani, 1998; Emmons, 1999).

To examine relationships between spiritual means and ends and psychological well-being, we constructed a new instrument to assess spiritual approach and avoidance goals and the means that individuals use to attain those goals. Study 1 is the analysis of the new instrument in terms of its reliability and construct validity. Study 2 utilizes the instrument to assess the relationships between spiritual means and ends and measures of well-being.

Spiritual Means & Ends

Most psychologists and sociologists, while favoring a multidimensional perspective on religiosity (Wulff, 1997), emphasize the means of spiritual/religious expression. This is reflected in a number of comprehensive measures that incorporate the four basic aspects of human experience, thoughts, feelings, action, and relating (Elkins et al., 1988; Glock, 1962; Verbit, 1970). Despite their multidimensional assessment of means, these instruments lacked a similar measure for ends or goals. Given the many goals individuals might seek in their religious or spiritual sentiment, it is desirable for a religiosity measure to incorporate a motivational framework for both means and ends.

Approach-Avoidance Personal Goals

A substantial body of research supports the notion that people's short-term and long-term personal concerns, strivings, and goals are important factors in determining health and well-being (Emmons, 1998; Koenig, 1997; Brunstein, 1993; Cantor, Norem,



Langston, Zirkel, Fleeson, & Cook-Flannagan, 1991; Elliot, Sheldon, & Church, 1997; Elliot & Sheldon, 1997; Elliot & Sheldon, 1998). Personal goals may be defined as clearly expressed, personally important objectives that individuals pursue in their daily lives; they are self-regulatory systems that provide individuals with a sense of purpose, structure, and identity (Emmons, 1989; Elliot, et al. 1997). A focus of recent research has been toward identifying characteristics of personal goals that relate to physical and mental health variables. In particular, Elliot and his colleagues have demonstrated that avoidance personal goals are positively related to physical symptomatology (Elliot & Sheldon, 1998) and negatively related to subjective well-being (Elliot, et al. 1997; Elliot & Sheldon, 1997).

In Study 1 we evaluated the reliability and construct validity of the Means-Ends Spirituality Questionnaire and tested the new measure against modified versions of Allport's Intrinsic/Extrinsic (I/E) orientation scales and Batson's Quest (Q) scale. Using factor analysis, we explored possible latent variables underlying means and ends domains. In Study 2 we examined specific means and ends with respect to measures of well-being and satisfaction with life. We asked whether relationships exist between spiritual means and ends with measures such as anxiety, positive and negative affect, self-esteem, self actualization, and satisfaction with life. In both studies we examined the relationships between means and ends and criterion variables controlling for religious/spiritual salience (i.e., importance of religion/spirituality in one's life).

STUDY 1

Method

Description of Item Development of Means-Ends Questionnaire (M-E SQ)¹

Early work on the questionnaire proceeded in a number of phases, the first of which began with over 1700 statements reflecting means and ends of



religious/spiritual expression. See Yip, Ryan & Fiorito (1998) and Bailie, Fiorito and Ryan (1998) for a more detailed description of item development and content analysis. Phase 2 analysis (results not shown) indicated that the final questionnaire consisting of a means scale containing 18 items and an ends scale containing 25 items, met psychometric criteria. For the means scale, there were four items in the action domain, six items in the feelings domain, three items in the relating domain, and five items in the thoughts domain. For the ends scale, there were, in various combinations, 22 items reflecting content in the ordinary realm and eight items in the unseen or metaphysical realm, 14 items reflecting approach goals and 11 items reflecting avoidance goals, and 11 items reflecting autonomous (self-determined) goals and nine reflecting extrinsic (externally regulated or controlled) goals. Items were scaled on a 7-point Likert scale in which 1 = Not at all descriptive of me and 7 = Perfectly descriptive of me (See the Appendix for the M-E SQ).

<u>Participants</u>

A total of 405 university students (142 males, 263 females) participated in the study. Ages ranged from 17 to 53 (\underline{M} = 21.2 years) and approximately 89.4% responded that they were not married. Ethnicity was 75.6% Caucasian, 6.7% Asian American, 3.7% Hispanic, 6.9% Mexican American, and the remaining 7.1% were African American, American Indian, and Other. Of religious affiliation, 57.5% of respondents checked a Christian denomination, 10.6% checked a non-Christian denomination (Buddhist, Islamic, Jewish, other), and 22.9% checked either atheist, agnostic, unsure, or none.

<u>Measures</u>

M-E SO: Avoidance and Approach Goals Measure

An index of the degree to which a participant indicated adoption of an avoidance goal (or approach goal) was calculated by summing the scores of the avoidance goals



and dividing by the number of avoidance items to get a mean avoidance score. An approach index was calculated in the same way.

Spiritual ends measures. In addition to separate approach and avoidance indexes, mean scores on each of the six ends domains were calculated, approachordinary, avoidance-ordinary, approach-unseen, and avoidance-unseen. Scores on items in each domain were summed, divided by the number of items in that domain, and a mean score obtained.

Spiritual means measures. Scores on items within each of the four means domains (actions, feelings, relating, thoughts) were summed, divided by the number of items in that domain, and a mean domain score calculated. Additionally, a second means measure was obtained by using the factors extracted from all the means items from an exploratory factor analysis. These factors then became variables reflecting spiritual means latent constructs.

<u>Salience Measure</u> From Peterson and Roy (1985), three questions were asked regarding the salience or importance of religious or spiritual faith. A salience score was determined by summing scores for the three questions.

<u>Criterion Measures</u> To assess the construct validity of the M-E SQ, the following criterion measures were used: Intrinsic and Extrinsic religious orientations were assessed by Feagin's (1964) 12-item Intrinsic and Extrinsic (I-E) Scales and Quest orientation was examined by the 12-item Quest Scale developed by Batson and Schoenrade (1991).

Procedure

Participants were always given a demographic questionnaire (with the salience questions) first, followed by, in randomized order, the M-E SQ, the I-E Questionnaire and the Quest Scale.



Results

Before analyses (SPSS, version 6.1), items were keyed so that higher scores indicated higher levels of the variables. Responses to negative items were reversed. Domains of the M-E SQ will hereafter be referred to as subscales.

Internal Consistency

Cronbach's alphas of each of the subscales of the M-E SQ ranged from 0.78 to 0.95. Mean scores, standard deviations, and Cronbach's alpha for each M-E SQ subscale are presented in Table 1. Each item correlated most strongly and positively with its own subscale. Item-total correlations for the subscales ranged from 0.51 to 0.87 with an overall average of 0.68.

Factor Analysis of the M-E SQ

Two principle components factor analyses were performed, one on the means items and one on the ends items to discern the optimum number and nature of the latent constructs underlying means and ends. To be identified as loading on a particular factor, a loading of .50 or greater was used. Oblique rotation was used successfully on both means and ends items.

Means Items Two factors emerged with eigenvalues over 1.0. This two-factor solution accounted for 61.6% of the variance. Table 2 shows factor loadings, percent of variance accounted for, and communalities for the five ends factors. Both factors consist of means items reflecting multiple means subscales. Factor 1 was interpreted as reflecting a generally 'devotional' construct where the traditional expressions of religious/spiritual worship predominate. Factor 2 was interpreted as reflecting a more 'transformational' character of expression, i.e. engaging in means that have a life changing emotional and cognitive quality.



Ends Items Initial exploratory principle components analysis yielded a five-factor solution accounting for 68.1% of the variance. Table 3 shows factor loadings, percent of variance accounted for, and communalities for the five ends factors. The five factors corresponded very well with the ends subscales. An exception to this was Factor 1, which consisted of five items reflecting the approach goals-unseen reality-autonomous orientation subscale and appeared to reflect a desire to obtain a relationship with God.

Relationship between Means and Ends Subscales and Spiritual/Religious Measures

We computed Pearson product-moment correlations to determine the relationship between means and ends and intrinsic, extrinsic, quest and salience measures (see Table 4). All of the means subscales correlated significantly with intrinsic and extrinsic orientations and with salience, indicating M-E SQ has good concurrent validity with traditional measures of religious/spiritual orientations. The means subscales of 'relating' and 'thought' showed weak but significant relationships with quest, but in opposite directions. Participants pursuing avoidance goals were more likely to report an extrinsic orientation while those pursuing approach goals were more likely to report an intrinsic orientation. The exception was the unseen reality dimension. Participants reporting adopting both approach and avoidance unseen goals were more likely to report an intrinsic or extrinsic orientation but not a quest orientation.

The four major M-E SQ subscales, Devotional and Transformational means and Approach and Avoidance Indexes, were significantly correlated with Salience and each other. Given these interrelationships, we conducted a simultaneous multiple regression analysis to examine the ability of each of the M-E SQ subscales to predict the outcome variables while controlling for the other variables (see Table 5).



Inspection of the beta coefficients reveals some interesting changes from the correlation coefficients between M-E SQ Subscales and the concurrent validity measures. The devotional means index had beta coefficients in essential agreement with its correlation coefficients differing only in their magnitude. The transformational means index, however, had beta coefficients for the Intrinsic and Extrinsic orientations reduced substantially, with the Extrinsic coefficient reduced to non-significance. Interestingly, the beta coefficient between the Transformational Means and the Quest orientation increased significantly, indicting that this means factor is highly predictive of this orientation.

The Approach Index, like the Transformational Means, had beta coefficients for the Intrinsic and Extrinsic orientations reduced substantially, with the Intrinsic coefficient reduced to non-significance. Again, the beta coefficient between the Approach Index and the Quest orientation was increased significantly. The beta coefficients for the Avoidance Index, as compared to its correlational coefficients, were reduced for both the Intrinsic and Extrinsic orientations, with the Intrinsic coefficient reduced to near zero. The beta coefficient for the Quest orientation was reduced and remained non-significant.

STUDY 2

Method

<u>Participants</u>

A total of 210 university students (89 males, 121 females) participated in the study. Ages ranged from 17 to 51 (\underline{M} = 21.2 years). Ethnicity was 80.0% Caucasian, 6.7% Asian American, 4.3% Hispanic, 3.8% Mexican American, and the remaining 5.3% were African American, American Indian, and Other. Of religious affiliation, 62.9% of respondents checked a Christian denomination, 7.2% checked a non-Christian



denomination (Buddhist, Islamic, Jewish, other), and 30.0% checked either atheist, agnostic, unsure, or none.

Measures

M-ESQ As used in the first study.

Salience Measure As used in the first study.

Criterion Measures To assess the discriminant validity of the M-E SQ, the following outcome measures were used: satisfaction with life (SWL) (Diener, E., Emmons, R., Larsen, R., & Griffin, S., 1985), global self-esteem (SE) and identity integration (ID) from the Multidimensional Self-esteem Inventory (O'Brien, E. J. & Epstein, S., 1988), positive (PA) and negative (NA) affect from the PANAS Scales (Watson, D., Clark, L.A. and Tellegen, A., 1988), anxiety (ANX) from the Revised NEO (Costa, R.T., & McCrae, R.R.), and self-actualization (SA) (Jones, A., & Crandall, R., 1986).

Social Desirability To assess the tendency of participants to respond in a socially desirable manner, the approach subscale of the Crowne-Marlowe Scale (1964) was used.

Procedure

Participants were always given a demographic questionnaire (with the salience questions) first, followed by, in randomized order, the M-E SQ and the criterion measures.

Results

The Relationship between M-E SQ Scales and Criterion Measures

Before analyses items were keyed as in Study 1. Pearson product-moment correlations were computed to examine the relationships between the M-E SQ subscales and the criterion measures (see Table 6). The Avoidance Index was the M-E SQ subscale that correlated most frequently and significantly with the criterion measures. It was negatively correlated with global self-esteem, identity integration, positive affect,



self-actualization, and satisfaction with life. It was positively correlated with anxiety and negative affect. The Approach Index was positively correlated with positive affect only. Both means factors, Devotional and Transformational, were correlated with positive affect and self-actualization. The Devotional means factor was also correlated with global self-esteem.

The four major M-E SQ subscales, Devotional and Transformational means and Approach and Avoidance Indexes, were significantly correlated with Salience and each other. Given these interrelationships, we conducted a simultaneous multiple regression analysis to examine the ability of each of the M-E SQ subscales to predict the outcome variables while controlling for the other variables (see Table 7). Inspection of the beta coefficients for the Avoidance Index revealed no substantial change in the original relationships observed in the Pearson correlations. The other three major M-E SQ subscales revealed only minor changes from the correlational findings in their ability to predict the criterion variables. An examination of the social desirability scores revealed no indication that participants were responding in a socially desirable fashion.

Discussion

The purpose of the present study was twofold: 1) to evaluate the reliability and construct validity of a multidimensional spirituality questionnaire and 2) to evaluate the ability of the questionnaire to predict measures of psychological well-being. The M-E SQ was designed to assess both means of spiritual expression as well as the goals individuals may strive to attain both in the world of everyday life (ordinary realm) and the unseen or metaphysical realm alleged by many religious and spiritual traditions.

In Study 1, correlations between the M-E SQ subscales and the more frequently used measures of religiosity, Intrinsic-Extrinsic Orientation and Quest Orientation, indicated good concurrent validity. The means subscales correlated much more



strongly with the Intrinsic orientation than the Extrinsic one, although all correlations were highly significant. The only means subscale to correlate significantly and positively with the quest orientation was 'thoughts' which is consistent with the description of this orientation as an open-ended dialogue with the fundamental existential questions of life. All four means subscales correlated highly with Salience, indicating that respondents who make spirituality an important part of their lives also respond strongly to the means subscales.

The correlations between the ends subscales and the other religiosity measures indicated that respondents who pursued approach goals were much more likely to be Intrinsically oriented than Extrinsically oriented while the opposite was true for respondents who pursued avoidance goals. Participants who scored high on the Quest orientation were much more likely to pursue self-determined approach goals in the ordinary realm than any other goals. The ends subscales provide a differential perspective on the Intrinsic, Extrinsic and Quest orientations that may prove useful in research linking these more traditional measures of religiosity with goals and, perhaps, the measures of psychological well-being associated with these goals, as revealed in Study 2.

In Study 2, the M-E SQ subscale that had the strongest and most consistent relationship with the well-being criterion measures in both the correlational and the multiple regression analyses was the Avoidance Index. This subscale had five highly significant negative correlations with self-esteem, identity integration, positive affect, satisfaction with life, and self-actualization along with significant positive correlations with anxiety and negative affect. These relationships were also found in the multiple regression analysis in which the three remaining subscales (Devotional and Transformational means and Approach Index) and Salience were held constant. The



Avoidance Index appears to be an excellent predictor of a lack of psychological well-being, at least as measured by the study's criterion variables. The three remaining major M-E SQ subscales, Devotional and Transformational means and Approach Index, each had not unexpected relationships (both correlational and predictive) with some positive well-being measures, but at present none of these subscales appears as promising in its ability to predict psychological well-being as the Avoidance Index.

These findings are consistent with previous studies on approach and avoidance goals in general and their association with physical and mental health (Elliot, Sheldon, and Church, 1997; Elliot & Sheldon, 1997, 1998). Additionally, the fact that only the Avoidance Index was a good predictor of psychological well-being underscores the necessity to carefully operationalize one's measure of religiosity.

Future studies are planned that use more sophisticated analyses such as path analysis to examine the direct and indirect relationships between M-E SQ subscales, both means and ends, on more refined measures of psychological well-being, such as Ryff and Keyes' Well-Being Scales (1995).



Footnote

1. The decision to use the terms "spiritual or spirituality" rather than the term "religious" in the M-E SQ was made deliberately. Although we acknowledged that differences have been reported in participants who identify themselves as spiritual versus those who identify themselves as religious, a recent empirical study (Zinnbauer, et al. 1997) found 74% of participants defined themselves as both religious and spiritual while 93% of the sample rated themselves as spiritual. We thought the term "spiritual" would more adequately capture the vast majority of participants responding to the questionnaire.

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Table 1Descriptive Statistics for All Variables

Variable	M	SD	Alpha	
Means				
Actions	3.90	1.69	.82	
Feelings	4.38	1.60	.87	
Relating	3.11	1.86	.82	
Thoughts	4.76	1.35	.80	•
Ends				
Approach-Ordinary	4.73	1.62	.90	
Avoidance-Ordinary	2.08	1.01	.78	
Approach-Unseen	4.78	1.96	.95	
Avoidance-Unseen	3.23	1.92	.89	
Approach Index	4.95	1.40	.94	
Avoidance Index	2.39	.97	.84	

Note. N = 405



Table 2.Principle Components, Oblique Rotated Factor Matrix, for the Means-Ends Spirituality Questionnaire for the MEANS Scale

	Factor and Item	<u>1</u>	2	
1. Devotiona	l Means			
A1	I attend spiritual services.	.84		
Af6	I engage in spiritual activities (for example, prayer, meditation, spiritual reading).	.79		
Af7	I pray as part of my spiritual practice.	.85		
F1	I do not experience an absolute trust in God.	.66		
F5	I feel a deep sense of well being when I am engaged in spiritual activity.	.67		,
Ff7	I feel the presence of God in my everyday actions.	.81		
R2	I participate in group prayer.	.80		
Rf5	I attend a community of faith as part of my spirituality.	.85		
T1	I center my intentions around God's principles.	.80		•
2. Transform	national Means			
Af5	I perform works of charity as part of my spiritual practice.		.55	
F2	I have spiritual experiences where I am overcome with wonder and reverence.		.75	
F4	I have spiritual experiences where I feel transformed and reborn into a new life.		.67	
Ff6	I feel joy when I am in touch with the spiritual side of life.		.78	
T2	I reflect on the deeper meaning of spiritual principles.		.70	
Tf6	I think about spiritual principles.		.84	
Tf7	In my spirituality I ponder the meaning and purpose of life.		.78	
	I think about ways of becoming a		.67	
Tf8	better person.			

Note. The items are numbered with the letter indicating the domain (A=actions, F=feelings, R=relating, T=thoughts), the number indicating the item number of the domain.



Table 3.Principle Components Factor Analysis, Oblique Rotated Factor Matrix for the Means-Ends Spirituality Questionnaire for the ENDS Scale

Factor an	d Item	<u>1</u>	. <u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
1. Relationship	with the Divine		_		_		
APU1AU	A primary benefit I seek in being spiritual is to achieve eternal peace with God.	.86					
APU2AU	One motive in my being spiritual is to experience the presence of God.	.89					
APU3AU	A main objective in my spiritual practice is to align my will with that of God's.	.89					
APU4AU	In being spiritual I want to feel unconditionally loved by God.	.85		•			
APU5AU	A primary purpoise in my being spiritual is to know and love God.	.91		•			•
APO3EX	In being spiritual I want to obtain the knowledge to guide and direct others.	.77			•		
APO5EX	In being spiritual I want to influence the lives of others.	.77					
2. Protecting A	gainst Social Loss						
AVO2EX	I am spiritual in order to avoid being criticized by my peers.		.79				
AVO3EX	I am spiritual in order to not lose the respect of others.		.76				
AVO5EX	I am spiritual in order to avoid losing social standing in my community.		.72				
AVO8EX	In being spiritual I want to avoid being disliked by others.		.78				
3. Seeking a Be	etter Self						
APO1AU	A primary purpose in my being spiritual is to become a better person.			.77			
APO4AU	One thing I want to obtain in being spiritual is happiness and fulfillment.			.81			
APO6AU	One benefit I seek in being spiritual is to feel more positive about myself.			.84			
APO10AU	One thing I seek in being spiritual is to sort out what is really valuable in life from what is not.			.80			
APO12AU	One thing I want to achieve in being spiritual is peace of mind.	l		.82			
APO14AU	One thing I want to find in being spiritual is meaning and purpose in life.			.79			
APO16AU	One reason for me to be spiritual is to make the world a better place for my having been here.			.71			
4. Protecting A AVO1AU	gainst Metaphysical Punishment One goal for me in being spiritual is to feel less guilty.				.59		



Table 3 Continued

<u>Factor an</u>	<u>d Item</u>	1	2	<u>3</u>	4	<u>5</u>
AVU2EX	One of my primary motives in being spiritual is to avoid being punished for my sins by God.				.87	
AVU4EX	An important reason for my being spiritua is to avoid eternal damnation.	1 .			.81	
AVU5EX	One reason for my being spiritual is to avoid the wrath of God.				.88	
5. Avoiding Lif	e's Ordinary Challenges					
AVO4AU	In being spiritual I want to avoid the difficulties of life.					78
AVO6AU	In being spiritual I want to avoid facing					81
AVO7AU	the fundamental questions of life. In being spiritual I want to avoid making decisions for myself.					67
Total eigenvalue Percent of total var	iance	8. 36.6	3.3 13.6	2.5 9.8	1.3 5.3	1.0 4.2

Note. The items are numbered with the letters indicating the domain: AP=approach goal; AV=avoidance goal; O=ordinary realm; U=unseen realm; AU=autonomous; EX=extrinsic



Table 4Pearson Correlations Between Means and Ends Subscales and Intrinsic, Extrinsic, Quest, and Salience Variables in Study 1

Variable	Intrinsic	Extrinsic	Quest_	Salience
Means				
Actions	84***	.33***	12*	.81***
Feelings	.80***	.29***	04	.82***
Relating	.78***	.28***	16**	.76***
Thoughts	.73***	.23***	.15**	.70***
Devotional Means	.88***	.37***	14**	.87***
Transformational Means	.72***	.19***	.13**	.72***
Ends				
Approach-Ordinary-Autonomous	.52***	.33***	.25***	.49****
Approach-Ordinary-Extrinsic	.68***	.28***	05	.67***
Approach-Unseen-Autonomous	.73***	.41***	07	.73***
Avoidance-Ordinary-Autonomous	s .08	.40***	.10	.10
Avoidance-Ordinary-Extrinsic	.02	.36***	.06	.02
Avoidance-Unseen-Extrinsic	.40***	.29**	12*	.41***
Approach Index	.74***	.42***	.08	.72***
Avoidance Index	.25***	.44***	14	.27***

Note. n = 405



^{*}p < .05, **p < .01, ***p < .001

Table 5Standardized Regression Coefficients Showing Relationships Between Means Latent Variables and Approach and Avoidance Goals and Intrinsic, Extrinsic, and Quest Orientations

Outcome Variable	Devotional Means	Transformational Means	Approach Index	Avoidance Index	Salience
Intrinsic Extrinsic Quest	.47*** .44*** 45***	.09* 09 .49***	.07 .22** .37***	01 .32*** .01	.34*** 31*** 39
Salience	.72***	.16***	.04	.01	

Note. n = 205



^{*}p < .05; **p < .01; ***p < .001;

Table 6Pearson Correlations Between Means and Ends Subscales and Criterion Variables in Study 2

M-E SQ				n Variable			
Subscales	Anx	GSE	Id	PA	NA	SWL	SA
Means							2044
Actions	11	.18**	.13	.27***	12	.13	.22**
Feelings	04	.15*	.03	.28***	03	.10	.13
Relating	05	.07	.01	.18**	06	.02	.09
Thoughts	06	.06	01	.30***	04	.02	.20**
						-	
.	0.6	1.44	00	0.4***	06	10	1 //*
Devot.	06	.14*	.08	.24***	06	.10	.14*
Transf.	08	.11	.01	.32***	06	.06	.20**
					<u></u>		
Ends							
Approach Ord.	.04	10	07	.17*	.08	05	.07
Approach Un.	.08	.04	.06	.17*	.04	.05	.04
Approach On. Avoid. Ord.	.30***	.0 4 23**	.00 19**	16*	.29***	17*	43***
Avoid. Un.	.23**	18**	14*	09	.14*	11	26***
Avoid. Un.	.23	10	T. 	07	.17	11	.20
Approach Index	.10	01	01	.18**	.10	01	.06
Avoid. Index	.24***	23**	19**	16*	.27***	<i>-</i> .17*	42***

Note 1. N = 210

Note 2. Anx.=anxiety, GSE=global self esteem, Id=Identity Integration, PA=positive affect,

NA=negative affect, SWL=satisfaction with life, SA=self-actualization, Devot.=devotional means, Transf.=transformational means, Approach Ord.=approachordinary, Approach Un.=approach-unseen, Avoid. O.=avoidance-ordinary, Avoid. Un.=avoidance-unseen, Avoid.=avoidance.

Note 3. *p < .05, **p < .01, ***p < .001



Table 7 Standardized Regression Coefficients Showing Relationships Between Means Latent Variables and Approach and Avoidance Goals and Outcome Variables

Outcome Variable	Devotional Means	Transformational Means	Approach Index	Avoidance Index	Salience
Satisfaction w/Life	.43**	.002	12	18*	19
Global Self Esteem	.37*	01	22	24**	.02
Identity Integration	.35*	13	07	22**	07
Positive Affect	.17	.27**	.06	24**	14
Negative Affect	11	.02	.25*	.24**	26
Anxiety	04	04	.27*	.19*	30*
Self-actualization	.26	.11	08	52****	14



Note. n = 205 *p < .05; **p < .01; ***p < .001; ****p < .0001



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