

The Validation of a Spanish Version of the Multidimensional Inventory of Religious/Spiritual Well-Being in Mexican College Students

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Abstract. After the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB) was validated as a reliable instrument for the Western European context it is primarily intended in this study to translate the measure into Spanish and adapt it for the Mexican culture. Furthermore we investigate whether spirituality/religiosity has a similar impact on indicators of personality and subjective well-being in Mexico as it does in samples drawn from Western European cultures. 190 students (99 females) from public and private universities in Guadalajara, all Mexican citizens, were involved in this study. We found strong evidential support for the six factor solution of the Original MI-RSWB in this Mexican population. By mirroring previous research the measure showed a highly satisfying internal consistency ($\alpha = .91$ for the total score and $.75$ or higher for all six sub dimensions). Furthermore the total RSWB score was observed to be related with Eysenck's personality dimensions Extraversion ($r = .24, p < .01$), and Psychoticism ($r = -.28, p < .001$), although not with Neuroticism. There was also a positive correlation with Sense of Coherence ($r = .31, p < .001$). In conclusion, the dimensionality of RSWB and its associations with personality and subjective well-being was well supported in this first application within a Mexican cultural context.

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Religion and spirituality are a universal feature of human culture while their expression differs in almost every culture (Emmons & Paloutzian, 2003). Spirituality has been described as “a basic or inherent quality in all humans that involves a belief in something greater than the self and a faith that positively affirms life” (Miller, 1995, p. 257); this is especially pertinent for the field of psychology. Furthermore, a distinction is often drawn between religion and spirituality. In this view, spirituality is the lived experience of religion within a specific religious tradition, or indeed beyond the ambit of traditional religion (Nelson, 2009). However, a clear definition of religion and spirituality and therefore also a clear distinction is still missing in the literature. In most cases religiosity has been discussed as being rather linked to traditions and institutions, whereas spirituality is often described as a more individualistic kind of worldview (Pargament, 1999). Moreover, there has been substantial critique by Koenig (2008) on

religiosity/spirituality related research in mental health for confounding parameters of spirituality with parameters of psychological well-being. As noted by Zwingmann, Müller, Körber and Murken (2008), cultural background plays an important role with respect to the potential link between religiosity/spirituality and health.

This paper investigates the application of the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB) – which was developed in a Western European context – within a Mexican cultural context. In Mexican culture the Catholic Church plays a leading role in society, politics and in family life. Between 89% and 95% of the Mexicans consider themselves Catholic (Floyd, 1996). According to figures released in 2010 by the International Institute of Statistics and Geographics (Instituto Nacional de Estadística y Geografía [INEGI], 2013) 89% of the Mexican population identified themselves as members of the Catholic Church. The Mexican people's enduring bond to the Catholic Church has its roots within Mexican history (Floyd, 1996) and the Catholic Church continues to be a strong social and political influence. In effect, Catholicism practiced in Mexico cannot be seen as analogous to European Catholicism. Rather, it can be

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regarded as the convergence of disparate forms of faith which permitted the oppressed, indigenous people of Mexico to continue to express their traditional rites and practices, despite their subjugation to a foreign religious world (Bernecker, Braig, Hölz, & Zimmermann, 2004). Thus, different indigenous traditions and beliefs, based on Mexicans' cultural history, became integrated with European Catholicism. A good example is the Aztec dances on the celebration day of Mexico's indigenous saint, the Virgin of Guadalupe, or the colourful and cheerful parades on All Souls' Day. Given we know that there are major social and cultural determinates of health, an investigation of religious and spiritual aspects of health and mental health need to be examined across cultures.

This is particularly the case given that the salutogenetic influence of religiosity/spirituality on psychological well-being is increasingly acknowledged (Mayoral Sánchez, Laca Arocena, & Mejías Ceballos, 2010; Miller & Thoresen, 2003; Smith, McCullough, & Poll, 2003). Saroglou (2002) reports a positive correlation between different aspects of religiosity and the "Big Five" personality dimensions "Extraversion", "Agreeableness" and "Conscientiousness" (McCrae & Costa, 1985). Further, it was reported in Eysenck (1998) that individuals who are high in "Religiosity" are significantly more likely to be low in "Psychoticism".

The concept of "Spiritual Well-Being" (SWB) was originally developed by Ellison and Paloutzian (Ellison, 1983) and has since then become well established, especially in the Anglo-American research context (Unterrainer, Nelson, Collicutt, & Fink, 2012). SWB was found to be positively related with various parameters of psychological health or more adequate stress coping strategies in clinical (McClain, Rosenfeld, & Breitbart, 2003; Mickley, Soeken, & Belcher, 1992) as well as nonclinical samples (Fehring, Brennan, & Keller, 1987). Based on this previous work, the concept of Religious/Spiritual Well-Being (RSWB) was further developed by an interdisciplinary clinical research group at the University Clinic in Graz, Austria, with the aim of developing a multidimensional alternative to the two-dimensional SWB-scale (existential vs. religious well-being). The total MI-RSWB score comprises six sub-dimensions, whereby existential (or immanent) well-being is measured by the scales "Hope Immanent", "Forgiveness" and "Experiences of Sense and Meaning". On the other hand "General Religiosity", "Hope Transcendent" and "Connectedness" represent the religious/spiritual (or transcendent) area of perception. Consequently, a global definition for the total RSWB can be given as "the ability to experience and integrate meaning and purpose in existence through a connectedness with self, others or a power greater than oneself" (Unterrainer, Ladenhauf,

Wallner-Liebmann, & Fink, 2011, p. 117). To date, the Original Austrian/German version of the MI-RSWB has been translated and validated in many languages, such as English (Unterrainer et al., 2012), Italian (Stefa-Missagli, Huber, Fink, Sarlo, & Unterrainer, 2014) and Bosnian (Malinovic, Fink, Lewis, & Unterrainer, in press). Highly convincing psychometric properties were consistently observed; Cronbach alpha, for example, being at least .88 or higher for the total RSWB score, and .at least .68 or higher for each of the six sub-dimensions. In line with this research the current study represents the first data derived from a Spanish version. We further observed the total RSWB score as being substantially positively related with "Extraversion" as well negatively related with "Neuroticism". However, there was no correlation with "Psychoticism" (Unterrainer, Huber, Sorgo, & Fink, 2011). Furthermore the RSWB total score was found to be positively related with Big Five personality dimensions "Extraversion", "Agreeableness", "Openness to Experience", and "Conscientiousness". Again there was a negative correlation with "Neuroticism" (see Unterrainer, Lewis, & Fink, 2014 for an overview).

Research Aims

The primary study objective is the adaptation of the MI-RSWB into the Mexican dialect of Spanish and the Mexican cultural context. Furthermore, by administering the newly developed Mexican-Spanish version of the MI-RSWB on Mexican college students it was our intention to examine the relation between dimensions of RSWB, personality and subjective well-being.

Methods

Participants and Procedure

This study is based on a convenience sample of college students from different universities of Guadalajara. Initially, we had a total of 209 subjects who we evaluated for suitability. We excluded 4 people who reported a non-active student status, 1 whose nationality was not Mexican. Furthermore 14 students were excluded for non-completion of the questionnaire. The participants were recruited from the beginning of April until the end of May 2012. In total 190 students from six universities were enrolled for this study. There were several inclusion criteria such as Mexican nationality, Spanish as mother language and an active student status at a Mexican private or public university. The students (99 female/91 male) aged between 17 and 45 years ($M = 23.52$, $SD = 4.91$) were recruited from the public (40%) and private (60%) universities of Guadalajara, Mexico. 145 (76%) of the participants considered themselves Catholic, 2 (1%) Jewish, 5 (3%)

Protestants, 13 (7%) belonged to another religious community and 25 (13%) were not affiliated with any religious community. 166 (87%) of the respondents were single, 22 (12%) married and 2 (1%) did not specify their relationship status. The participants were tested individually or in small groups at the ITESO University of Tlaquepaque, Guadalajara, a private institution run by the Jesuits.

Subjects were recruited by the first author soliciting students on various university-campuses. An information sheet explaining the aim of the study and the link to the online survey was handed out to the students. Most of the students were enrolled in psychology courses. In some cases the participants came from other fields of study, such as philosophy or educational sciences. At the beginning of the survey there was a separate instruction (see Appendix). The time needed to fill in the questionnaire was approximately 45 minutes. There was no time limit but the online survey shut down automatically after 10 minutes without any response. Ethical approval was granted by the Ethics Committee of the University of Graz, Austria. A further Mexican institutional review board approval was not needed.

Measures

A Mexican-Spanish translation of the *Multidimensional Inventory of Religious/Spiritual Well-Being* (MI-RSWB; Unterrainer et al., 2012) was undertaken. In keeping with the Austrian-German original, the Mexican-Spanish version consists of 48 items and six subscales ("Hope Immanent", "Forgiveness", "Experiences of Sense and Meaning", "Hope Transcendent", "General Religiosity" and "Connectedness") with eight items each. The items are answered on a six point likert scale from 1 (*totally disagree*) to 6 (*totally agree*).

As a first step of the translation process, each of the 48 items were carefully translated using the Committee translation method (Harkness & Shoua-Glusberg, 1998) from the original German version of the scale as well as from the English version with the support of several Mexican native speakers with full command of English language. As a result 39 items were accepted as being fully equivalent. For the remaining 9 items different translations were discussed and finally one taken over because of more clear and explicit wording. Some slight changes suggested only by both Mexican translators were incorporated to the new Mexican-Spanish version. In addition a back-translation was completed from Spanish to English by an independent professional translator with no prior knowledge of the original version (e.g., Cha, Kim, & Erlen, 2007; Mayoral Sánchez et al., 2010; van de Vijver & Hambleton, 1996). The re-translated version showed a high degree of

similarity to the source English version. Discrepancies were discussed and finally the translation was rated by an independent Mexican colleague. According to van de Vijver and Hambleton (1996), there are three types of biases that occur when it comes to cross-cultural translation. The first one mentioned as "construct bias" might occur when the construct underlying an instrument shows non-negligible differences across cultures. In our case a successful avoidance of ethnocentric tendencies was gained by employing a multicultural, multilingual team with an expertise in the construct under study. The second type is named as "method bias", a generic term for validity-threatening factors related to instrument administration, e.g. social desirability. According to Lucio, Reyes-Lagunes and Scott (1994) there is a need within Mexican culture to project a good impression or positive image. To avoid this problem a high degree of anonymity was provided during the examination by conducting the study online. To avoid communication problems between the administrator and the test subjects, an information sheet with detailed instructions was handed out to the participants. The last source of anomalies in instrument translations mentioned by van de Vijver and Hambleton (1996) is the "item bias" or differential item functioning. It refers to instrument anomalies at the item level such as poor wording, inappropriateness of item content in a cultural group, and inaccurate translation. This point was addressed by collaborating with bilingual and bicultural and monolingual Mexican colleagues.

The total list of items for the new Mexican-Spanish version of the scale can be found in the Appendix. However, in order to elucidate the different sub-dimensions, the original English marker items are given as examples: General Religiosity: "My faith gives me a feeling of security"; Connectedness: "I have experienced the feeling of being absorbed into something greater"; Forgiveness: "There are things which I cannot forgive" (coded reversely); Experiences of Sense and Meaning: "I have experienced true (authentic) feelings"; Hope Immanent: "I view the future with optimism"; Hope Transcendent: "I often think about the fact that I will have to leave behind my loved ones" (coded reversely); (Unterrainer et al., 2012).

The Eysenck Personality Questionnaire (PEN-scale)

Is a reliable measure of the three personality dimensions "Psychoticism", "Extraversion", and "Neuroticism". The three psychometric scales (P, E and N) are based on a biological theory of personality (Barrett, Petrides, Eysenck, & Eysenck, 1998). The "Psychotic" personality can be described as: solitary, troublesome, cruel, and inhumane; "Neuroticism": anxious, worrying and moody; and "Extraverted": sociable, sensation seeking,

carefree and optimistic (Maltby & Day, 2004). The Instrument has been validated in several cultures. For our study the Spanish Revised Short Version (EPQ-RA), consisting of 24 items (α between .78 and .63), was used (Sandin, Valiente, Chorot, Olmedo, & Santed, 2002). The items have to be answered on a dichotomous scale (yes-no).

Sense of Coherence (SOC)

Can be described as “a personal disposition towards perceiving life experiences as understandable, manageable and meaningful” (Virués-Ortega, Martínez-Martín, del Barrio, & Lozano, 2007, p. 486). This might also relate to coping strategies in the face of traumatic events. SOC has shown itself to be a predictor of self-reported and objective health in a variety of contexts (Antonovsky, 1987). To gather the general factor, which consists of the three sub-dimensions “Comprehensibility” “Manageability” and “Meaningfulness”, the Spanish version of the “Orientation to Life Questionnaire” (OLQ-13) with Cronbach’s α of .80, in the original from Antonovsky (1987), was used (Virués-Ortega et al., 2007). The items have to be answered on a seven point likert scale (ranging from “very often” to “seldom or never”).

The Structure-of-Religiosity-Test (S-R-T)

Is an instrument designed for the multidimensional assessment of the “Centrality” (Intensity) as well as a variety of manifestations of religiosity (Huber & Huber, 2012). In this study we exclusively applied the “Centrality” scale (“C” scale) which refers to content of religiosity such as “Cognitive interest”, “Ideology”, “Prayer”, “Experiences” and “Church attendance”. The “C” scale consists of 10 items and can be used to differentiate between highly religious, religious and non-religious individuals. The scale shows a highly convincing internal consistency of Cronbach alpha = .94. The items have to be answered on a six point likert scale (ranging from “never” to “very often” and “absolutely nothing” to “very much”, respectively).

Furthermore the participants had to respond to two single items “Intensity of Religiosity” (IOR) and “Intensity of Spirituality” (IOS) - on a four-point likert scale from *not religious/spiritual* to *very religious/spiritual*. Sociodemographic variables such as sex, age, religious affiliation and relationship status were assessed by means of a purposely designed questionnaire.

Statistical analysis

In order to gain initial scale characteristics for a Spanish version of the MI-RSWB, exploratory factor analysis (principal component analysis (PCA) with varimaxrotation)) and reliability analysis were conducted. The internal consistency of the factors is calculated using Cronbach’s alpha. Furthermore, Pearson’s correlation statistics was performed to test the relationships between the RSWB dimensions, personality factors and subjective well-being; α -level of significance is set to .05.

Results

As a first step, in order to investigate the psychometric properties of the newly developed Mexican-Spanish Version of the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB-MS), factor analysis was conducted. As the prerequisites for a factor analysis with KMO of .89 and Bartlett’s Test of Sphericity with $\chi^2_{(1128)} = 5677.57, p < .001$, were fulfilled, a PCA factor analysis with varimaxrotation (limiting the factors to be extracted to six, based on theoretical considerations) showed a six-factor solution accounting for 58.98% of the variance. As revealed in Table 1 the strongest factor (eigenvalue: 9.32; 19.41% explained variance) was “Hope Immanent”, followed by “General Religiosity” (eigenvalue: 6.39; 13.30% explained variance), “Forgiveness” (eigenvalue: 4.87; 10.15% explained variance), “Connectedness” (eigenvalue: 3.03; 6.31% explained variance), “Hope Transcendent” (eigenvalue: 3.01; 6.28% explained variance) and “Experiences of Sense and Meaning” (eigenvalue: 1.69; 3.52% explained variance).

Table 1. Six factor solution for the MI-RSWB Spanish version

	Eigenvalue	% of Variance	Cumulated %
Hope Immanent	9.318	19.41	19.41
General Religiosity	6.385	13.30	32.71
Forgiveness	4.872	10.15	42.863
Connectedness	3.030	6.31	49.18
Hope Transcendent	3.014	6.28	55.45
Sense and Meaning	1.692	3.52	58.98

Notes: PCA Factor analysis with VARIMAX rotation ($n = 190$).

As shown in Table 2, all of the MI-RSWB-MS sub-dimensions as well as the total score, turned out to be normally distributed with respect to their skewness and kurtosis, except for "Experiences of Sense and Meaning". However, by means of the Kolmogorov-Smirnov test, we identified two more scales that displayed deviations from normality. The Kolmogorov-Smirnov test revealed "Forgiveness", "Experiences of Sense and Meaning" and the total RSWB score to deviate from the normal distribution (refer to Table 2). In line with the Austrian-German and English versions of the MI-RSWB, these dimensions tend to be negatively skewed due to a preference of respondents agreeing to these items. Furthermore, as revealed in Table 2, women scored higher than men for the total amount of RSWB ($p < .01$) as well as for "General Religiosity" ($p < .01$) the "Forgiveness" dimension ($p < .01$). These findings mirror results, which have been reported for the English as well as for the original Austrian-German version of the scale (Unterrainer et al., 2012; Unterrainer & Fink, 2013).

As depicted in Table 3, the psychometric quality (i.e. internal consistency) can be considered as "good" for the dimensions "General Religiosity", "Forgiveness", "Hope Immanent", "Experiences of Sense and Meaning" and the total RSWB scale, as well as at least "acceptable" for the scales "Hope Transcendent" and "Connectedness". Thus all of the subscales showed satisfying internal consistencies (Cronbach's α) similar to the English version of the MI-RSWB (Unterrainer et al., 2012) as well as to the Original Austrian-German Version (Unterrainer & Fink, 2013). All subscales of the MI-RSWB-MS correlate significantly and positively with the total scale and almost all of them with the subscale for "General Religiosity" (at least $p < .01$). There is only one exception, "Hope Transcendent" (see Table 1). Furthermore, "General Religiosity" and "Experiences of Sense and Meaning" showed the strongest correlations with the MI-RSWB-MS total score.

As revealed in Table 4, dimensions of RSWB turned out to be significantly correlated with Eysenck's

Table 2. Descriptive statistics of the Mexican Spanish version of the Multidimensional Inventory of Religious/Spiritual Well-Being (MI-RSWB-MS; $n = 190$).

	Female ($n = 99$)		Male ($n = 91$)		Total ($n = 190$)		min	max	F_{Gender}	$Z_{skewness}$	$Z_{kurtosis}$	Normal distribution [#]
	M	SD	M	SD	M	SD						
GR	33.38	10.36	28.42	11.81	31	11.33	8	48	1.69**	-2.04	-2.28	.21
FO	37.21	8.17	33.41	9.02	35.38	8.78	8	48	1.87**	-1.71	-2.43	.01*
HI	34.37	7.86	33.75	7.65	34.07	7.74	15	48	.36	-1.26	-2.04	.10
CO	29.66	7.81	28.13	8.11	28.93	7.98	9	48	.07	-.15	-.15	.39
SM	36.35	8.27	34.41	8.66	35.41	8.49	10	48	.60	5*	-.61	.01*
HT	31.15	8.35	30.53	8.19	30.84	8.25	8	48	.17	-.81	-.21	.24
RSWB	202.14	33.42	188.92	32.97	195.81	33.77	121	267	1.20**	.85	-2.57	.02*

Note: * $p < .05$; ** $p < .01$. GR = General Religiosity; FO = Forgiveness; HI = Hope Immanent; CO = Connectedness; SM = Experiences of Sense and Meaning; HT = Hope Transcendent; RSWB = Religious/Spiritual Well-Being; M = Mean; SD = Standard deviation; min = minimum score; max = maximum score; # Kolmogorov-Smirnov-test.

Table 3. Internal consistencies Cronbach's alpha and inter-correlations between the subscales and the total scale of the MI-RSWB-MS.

Dimensions	GR	FO	HI	CO	HT	SM	RSWB
Item n	8	8	8	8	8	8	48
α (MI-RSWB-MS; $n = 190$)	.94	.86	.81	.75	.77	.86	.91
General Religiosity		.36***	.51***	.59***	-.18*	.57***	.78***
Forgiveness			.27***	.11	.40***	.31***	.65***
Hope immanent				.45***	-.13	.77***	.74***
Connectedness					-.17*	.62***	.68***
Hope Transcendent						-.20**	.16*
Experiences of sense and meaning							.80***
Total: Religious/Spiritual Well Being							

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; GR = General Religiosity; FO = Forgiveness; HI = Hope Immanent; CO = Connectedness; SM = Experiences of Sense and Meaning; HT = Hope Transcendent; RSWB = Religious/Spiritual Well-Being.

personality dimensions "Extraversion" ($p < .01$) and "Psychoticism" ($p < .01$), as well as with "Sense of Coherence" ($p < .001$) and "Centrality of Religion" ($p < .001$). There was no significant correlation with "Neuroticism". Additionally, "Intensity of Religiosity" ($p < .01$) and "Intensity of Spirituality" ($p < .001$), were found to be strongly related with the MI-RSWB-MS scale. In accordance with former research, "Extraversion" turned out to be substantially correlated with three of the MI-RSWB-MS sub-dimensions, namely "Hope Immanent" ($p < .01$), "Forgiveness" ($p < .001$) and "Experiences of Sense and Meaning" ($p < .01$) as well as with the total RSWB-score ($p < .01$). "Neuroticism" did not show significant correlations with the total score, however it turned out to be weakly negatively connected with "Hope Transcendent" ($p < .01$) and "Forgiveness" ($p < .05$). "Psychoticism" was negatively correlated with four of the six subscales: "General Religiosity", "Forgiveness", "Hope Immanent", "Experiences of Sense and Meaning" (for all $p < .01$) and the total score of RSWB ($p < .001$).

The "Centrality" scale of the *Structure-of-Religiosity-Test* (S-R-T) was positively correlated with all of the MI-RSWB-MS subscales ($p < .001$) except for "Hope Transcendent". In addition, "Sense of Coherence" showed positive associations with all of the MI-RSWB-MS sub-dimensions except for "Connectedness" (at least $p < .05$). And finally, both the "Intensity of Spirituality" and the "Intensity of Religiosity" items turned out to be strongly related to different facets of the MI-RSWB-MS (see Table 4).

Discussion

In order facilitate cross-cultural research on religion and spirituality, the Multidimensional Inventory of Religious/Spiritual Well-Being (MI-RSWB) was translated into the Spanish language and administered within a Mexican culture. The original Austrian-German

version of the MI-RSB (Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, & Fink, 2010) had been developed based on a European religious/spiritual context and therefore from a scale validation perspective, it was of particular interest to apply the measure in a different socio-cultural context. Furthermore we intended to contribute to this ongoing discussion, namely how to address both religiosity and spirituality most adequately, as for instance on the one hand they have been conceptualized as completely distinct from each other, while on the other hand it is argued that it is not possible to investigate the one without considering the other (Pargament, 1999).

In order to be able to accept equivalence for a translated or adapted test version the items must have the same meaning and general wording. Moreover, there must be corresponding response categories, identical instructions, similar psychometric properties, and appropriate norms (van Widenfelt, Treffers, De Beurs, Siebelink, & Koudijs, 2005). The main result shows that the psychometric properties of the original MI-RSWB scale were very well replicated. All RSWB sub-dimensions, as well as the whole scale, displayed a highly satisfying level of internal consistency (see Table 2). Furthermore the new Mexican/Spanish version of the MI-RSWB meets all the other criteria, as mentioned above. Gender differences in RSWB dimensions were found as female respondents scored significantly higher for the RSWB sub-dimensions "Forgiveness" and "General Religiosity" as well as for the total MI-RSWB-MS score. This finding is consistent with the results of previous research (e.g., Rivera-Ledesma & Montero-López 2007; Saroglou, 2002; Unterrainer et al., 2010).

Based on the fact that only students were investigated, the sample was too homogenous to show any "Age" effects. Although the students from public and private universities were fairly equally distributed in

Table 4. Religious/Spiritual Well-Being in relation to personality, subjective well-being and centrality of religiosity/spirituality

	<i>n</i>	GR	FO	HI	CO	SM	HT	RSWB
<i>Personality Factors</i>								
Extraversion	173	.10	.26***	.26**	.05	.25**	.00	.24**
Neuroticism	173	.01	-.14*	-.09	.10	-.04	-.25**	-.10
Psychoticism	173	-.35**	-.22**	-.26**	-.10	-.24**	.12	-.28***
C-Scale	177	.81***	.34***	.30***	.48***	.37***	-.03	.63***
SOC	181	.15*	.27***	.33***	-.05	.19**	.29***	.31***
IOR	190	.34***	.20**	.12	.26***	.21**	-.02	.32***
IOS	190	.37***	.32***	.35***	.42***	.51***	.04	.54***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; GR = General Religiosity; FO = Forgiveness; HI = Hope Immanent; CO = Connectedness; SM = Experiences of Sense and Meaning; HT = Hope Transcendent; RSWB = Religious/Spiritual Well-Being; C-Scale = Centrality Scale; SOC = Sense of Coherence; IOS = Intensity of Spirituality; IOR = Intensity of Religiosity.

the sample, it should be noted that there are very considerable social inequities in Mexico which must also be taken into account. For instance there was a significant, negative correlation between years of schooling and religious coping (reported by socially isolated elderly Mexicans). This means that the higher the education level, the less religion was used as a coping strategy (Rivera-Ledesma & Montero-López, 2007).

Regarding personality factors, the expected positive correlations between the "Extraversion" factor and the MI-RSWB-MS dimensions were observed (see Table 3). This finding is consistent with results gathered from the Austrian-German version of the scale (Unterrainer et al., 2014). Moreover, Saroglou (2002) also reported a permanent positive correlation between "Extraversion" and "Religiosity". For "Psychoticism" no significant correlation with the total score of the MI-RSWB scale was expected in view of the outcome in an Austrian student sample (Unterrainer, Huber, Sorgo, Collicutt & Fink, 2011; see also Unterrainer & Lewis, 2014 for an enhanced discussion). In contrast to this, Saroglou (2002) reported religion as negatively related with "Psychoticism". This finding was supported in the current study, since the students who attained a higher religious/spiritual score turned out to be low on Psychoticism (see Table 3). "Neuroticism" was shown to be related negatively but quite weakly with only two subscales of the MI-RSWB-MS scale. In previous research employing the Austrian-German MI-RSWB, no noteworthy relations to the "Neuroticism" scale could be found. However, this stands a bit in contrast to another study (Unterrainer et al., 2010), where we observed RSWB dimensions as being substantially negatively correlated with "Neuroticism" among the "Big Five" personality factors. Furthermore Unterrainer et al. (2010) found the RSWB total score as positively related with the Big Five personality dimensions "Extraversion", "Agreeableness", "Openness to Experience", and "Conscientiousness", which is in line with the findings of a significant connection between increased RSWB and high "Extraversion" and low "Psychoticism" in the current study.

The high correlation observed between the "Centrality" scale ("C" scale) and "General Religiosity" (see Table 3) can be explained with reference to the more institutionalized concept of the "General Religiosity" subscale. Furthermore, as assumed, a strong positive association between "Sense of Coherence" and the MI-RSWB-MS score was confirmed, which adds support to the positive connection between religion, spirituality and various factors of psychological well-being and subjective well-being (Cornah, 2006). However, it has to be noted that these findings have also been heavily criticized as being over-interpreted or even ideologically driven (Sloan, Baghiella, & Powell, 1999).

With respect to the two single items "Intensity of Religiosity" and "Intensity of Spirituality", significant positive correlations with various dimensions of the MI-RSWB-MS emerged. Notably, the sub-dimension "Hope Transcendent" continues to be problematic because it did not exhibit any positive correlation with the other MI-RSWB-MS sub-dimensions nor with the MI-RSWB-MS total score (see Table 1). This is consistent with previous studies, as the "Hope Transcendent" scale has consistently been shown to be the poorest predictor of the MI-RSWB total score (Unterrainer et al., 2012). This problem needs to be addressed in future revisions of the MI-RSWB measure. Nevertheless, the new Mexican version of the MI-RSWB scale has displayed convincing psychometric properties similar to other scale validations.

However, there are several limitations to be noted for this study. First of all, our initial results are based on a rather small, convenient student sample and there was only one point of measurement. Therefore further research is needed in order to confirm these initial results, especially by employing enhanced samples which are more representative of the general Mexican population. This concerns, in particular, different age groups, since RSWB was observed to slightly increase with age (Unterrainer et al., 2014). As religiosity and spirituality have been heavily discussed as important resources for coping with stress or a disease, further research in clinical surroundings is highly recommended. Additionally, a more qualitatively oriented approach might be helpful in order to learn more about distinct belief systems in the Mexican population. So far, it is concluded that the Mexican-Spanish version of the MI-RSWB-MS can be regarded as a valid and reliable instrument for the multidimensional assessment of religious/spiritual well-being.

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Appendix

Instrucción:

Por favor tenga en cuenta lo siguiente mientras contesta esta encuesta:

1. Encontrará muchas preguntas referidas a sus creencias religiosas/espirituales y constantemente se encontrará con la palabra 'Dios'.
2. Sus respuestas solo serán utilizadas con fines de investigación y su información permanecerá completamente anónima.
3. Esta investigación es completamente independiente de cualquier grupo religioso y la información (en ninguno de los casos) será compartida con dichos grupos.
4. Si se siente incómodo con la utilización del término 'Dios', siéntase libre para cambiarlo a un término que usted encuentre adecuado, como por ejemplo 'poder supremo'.
5. Es también posible responder el cuestionario aunque usted tenga creencias agnósticas o ateístas – el cuestionario toma estas creencias en consideración.

Por favor responda rápido e intente no reflexionar mucho en ninguna de las preguntas. Es también importante responder a todas y cada una de las preguntas; de no responder en su totalidad la encuesta no se podrá evaluar correctamente.

List of Items

Nr.	Dim.	Item
1	GR	Mi Fe me brinda el sentido de seguridad.
7	GR	Es posible para mí encontrar satisfacción en conversaciones íntimas con Dios.
13	GR	Seré capaz de superar todos los problemas con la ayuda de Dios.
19	GR	En ciertos momentos de mi vida, me siento muy cerca de Dios.
25	GR	Con la ayuda de Dios, seré feliz de nuevo.
31	GR	Sé que Dios es misericordioso.
37	GR	Disfruto asistir a eventos religiosos.
43	GR	Siento la presencia de Dios en la naturaleza.
2	FO	Hay cosas que no puedo perdonar.*
8	FO	Hay gente que odio.*
14	FO	Hay personas a las que nunca seré capaz de perdonar.*
20	FO	Hay ciertas cosas que la gente no debería de perdonar.*
26	FO	Si alguien me lastima, normalmente busco venganza.*
32	FO	El pensamiento de ver a mis enemigos sufrir me satisface.*
38	FO	Hay personas que merecen ser maltratadas.*
44	FO	He perdonado a aquellos que me han herido.
3	HI	Veo al futuro con optimismo.
9	HI	Creo que las cosas mejorarán en el futuro.
15	HI	Pienso que mi vida va en la dirección correcta.
21	HI	Pienso que tendré más experiencias buenas que malas en el futuro.
27	HI	Creo que viviré mi vida en el futuro tal y como la he imaginado.
33	HI	Tengo una imagen precisa de cómo debe de ser mi futuro.
39	HI	Mi futuro parece ser extremadamente incierto.*
45	HI	Creo que el futuro tiene grandes desafíos para mí.
4	CO	He tenido la sensación de ser absorbido por algo superior.
10	CO	Creo que renaceré después de la muerte.
16	CO	Hay personas con las que siento una conexión supranatural.
22	CO	He tenido experiencias en las que me he dado cuenta que nada muere en realidad.
28	CO	Creo en la existencia de la vida después de la muerte.
34	CO	He experimentado cosas que no puedo expresar con palabras.
40	CO	He estado en contacto con cosas que irradian una energía sobrenatural.
46	CO	Creo que tendré acceso a experiencias en el futuro a las cuales pocas personas tienen acceso.
5	HT	Regularmente pienso en el hecho de que tendré que dejar a mis seres queridos (después de la muerte).*
11	HT	Haría cualquier cosa por prolongar la vida de los que amo.*
17	HT	Es difícil para mí pensar que mis seres queridos un día dejaran de vivir.*
23	HT	Tengo mucho miedo de ser olvidado después de mi muerte.*
29	HT	Haría cualquier cosa por prolongar mi vida.*
35	HT	Tengo miedo de lo que me sucederá después de mi muerte.*
41	HT	Toda esperanza se acaba con la muerte.*
47	HT	Temo ser culpado por mis errores después de la muerte.*
6	SM	He experimentado verdaderos (auténticos) sentimientos
12	SM	He sentido afecto profundo.
18	SM	He vivido la experiencia de una amistad verdadera.
24	SM	Experimento con frecuencia franqueza y honestidad.
30	SM	He experimentado cosas que me gustaría experimentar una y otra vez.
36	SM	He tenido muchas experiencias que me han afectado profundamente.
42	SM	He tenido la experiencia de estar tan involucrado/a en algo, que me olvido de todo lo que me rodea.
48	SM	He tenido una o más experiencias en las que el sentido de la vida se me ha mostrado claramente.

Notes: Nr. Item number in the Questionnaire; Dimensions: GR = General Religiosity; FO = Forgiveness; HI = Hope Immanent; CO = Connectedness; HT = Hope Transcendent; SM = Experiences of Sense and Meaning, likert scale: 1 totally disagree – 6 totally agree. Items marked with * have be to coded inverse.

Dimensión / Dimension	Numero de pregunta / Item number
Religiosidad en General - General Religiosity (GR)	1,7,13,19,25,31,37,43
Perdón - Forgiveness (FO)	2*,8*,14*,20*,26*,32*,38*,44
Esperanza Inmanente - Hope Immanent (HI)	3,9,15,21,27,33,39*,45
Conectividad - Connectedness (CO)	4,10,16,22,28,34,40,46
Esperanza Transcedente - Hope Transcendent (HT)	5*,11*,17*,23*,29*,35*,41*,47*
Experiencias de Razon y Significado - Experiences of Sense and Meaning (SM)	6,12,18,24,30,36,42,48

Notes: * = reverse coded