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Social and Individual Religious Orientations Exist Within *Both* Intrinsic and Extrinsic Religiosity

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Summary

This research presents the development of a measure of religiosity that includes social intrinsic religiosity as distinct from extrinsic religiosity and from the typical conceptualization of intrinsic religiosity as an individual orientation. Study 1 developed the measure using exploratory and confirmatory factor analysis; the results confirmed two intrinsic identity factors (individual and social) and two extrinsic benefit factors (individual and social). Correlations with previously established religiosity measures demonstrate the scales construct validity and that social intrinsic religiosity is independent from extrinsic religiosity. In Study 2, differential responding by Christian and Jewish participants was consistent with these religions' reputed cultural-theological approaches and confirmed the independence of social intrinsic religiosity. Furthermore, social intrinsic religiosity was positively correlated with prejudice towards value-violating outgroups, as would be expected from an intrinsic religiosity. These results unconfound social and extrinsic religiosity and provide empirical evidence that intrinsic religiosity can be socially as well as individually oriented.

Keywords

religious identity – factor – scale development – intrinsic – extrinsic

Introduction

There has been a tendency in the psychology of religion literature to view a social approach to one's religion as representing an extrinsic orientation, or at the least as somewhat less intrinsic. To the extent that this is true, a specific religious orientation may have been relatively neglected by researchers and therefore our understanding of the experience and consequences of religiosity and religious identity may not represent the complete picture. This paper aims to provide empirical support for the existence of an intrinsic social religiosity by developing and validating a scale that includes a subscale to measure this aspect of religiosity. We expect this dimension of religiosity to differ across religious groups and to show distinct patterns of correlation with other measures of religiosity and prejudice thus supporting its conceptualization as a dimension that it is both intrinsic but also social.

Intrinsic and Extrinsic Religious Orientation

To date, the study of religious identity is apparent in two threads of the psychology of religion literature. Recently, some researchers have approached religiosity as a social identity (e.g., Greenfield & Marks, 2007; Hogg, Adelman, & Blagg, 2010; Ysseldyk, Matheson, & Anisman, 2010). A more long-established approach to the study of religion has emphasized the individual and the intrinsic aspect of their religiosity, in particular how this is distinct from an extrinsic religious orientation (e.g., Allport, 1966; Allport & Ross, 1967). Allport and Ross' original conceptualization of the intrinsic/extrinsic distinction held that the intrinsically motivated religious person lives his religion (Allport, 1966; Allport & Ross, 1967), it is a primary life motive and an internalized value, while the extrinsically motivated person uses religion purely instrumentally, it as a means to an end rather than an internalized value that is integrated into the deeper life of the individual. These uses of religion include distraction, status, self-justification, security, sociability and solace (Allport & Ross, 1967).

   The intrinsic/extrinsic distinction has been dominant in the scientific study of religion for the last five decades (Cohen & Hill, 2007; Donahue, 1985a; Donahue 1985b). Central to this approach is the religious orientation scale (ROS; Allport & Ross, 1967), arguably the most widely used scale in the psychology of religion and the focus of numerous reviews (Donahue, 1985a; Donahue 1985b; Hunt & King, 1971; Kirkpatrick & Hood, 1990). Results using this scale show that intrinsic religiosity predicts religious commitment and

belief, purpose in life, church attendance, and orthodoxy, whereas extrinsic religiosity—of which there are two subscales, personal and social—predicts the more negative associates of religiosity such as prejudice, dogmatism, fearfulness, and anxiety. The most prejudice is seen among those people who agree with both the intrinsic and extrinsic items on the ROS (Allport & Ross, 1967).

These findings seem to suggest that there is nothing good about extrinsic religiosity; this has resulted in a body of literature which often demonizes those with an extrinsic religious orientation. The interpretation seems to have been that expressing any extrinsic motivation for your religion suggests that it is less legitimate and perhaps not reflective of a true religious identity. This served to protect religiosity from criticism; as long as you are one of the truly religious—that is, intrinsically oriented—then you are presumed to be devout, constant, and virtuous, and not prejudiced and intolerant. However, this conceptualization also suggests that if the value of religion in your life comes, even in part, from the sense of security, solace or sociability that it affords you, then you are less devout and constant in your religion.

An additional concern with the intrinsic/extrinsic approach is the diversity in the way these terms are used, and what researchers take them to mean. Furthermore, as Kirkpatrick & Hood (1990) note, researchers frequently do not specify what they mean when they refer to, or measure, extrinsic and intrinsic religiosity resulting in ill-defined constructs. Allport's original writings refer to the individual's motivation for their religion. However, the broader term of religious orientation has subsequently been used to refer to a variety of religious dimensions including motivation, experience, personality type, cognitive style, behavioral tendencies, and perhaps identity (Kirkpatrick & Hood, 1990; Hunt & King, 1971). More recently, it has been argued that Allport's model needs "both refinement and relabelling to better fit with recent theoretical evolutions in the field of motivational psychology" (Neyrinck, Lens, Vansteenkiste, & Soenens, 2010, p. 425). It is not our aim to assess which of these constructs the scale can or cannot adequately measure, though we do hope to contribute to the work of refining the constructs. For our current purposes, we see those who have an intrinsic orientation as more likely to incorporate their religious beliefs into their sense of self, their identity, than those with an extrinsic orientation.

Religiosity as a Social Identity

As the psychology of religion experiences a resurgence (Sedikides, 2010), there is a push towards a more social approach, focusing on examining religion as a social identity and collective experience (Graham & Haidt, 2010; Hogg et al., 2010; Silberman, 2005; Ysseldyk et al., 2010). This emphasis is consistent with social identity theory (SIT; Tajfel & Turner, 1979). Fundamental to SIT is the idea that an individual's self-concept is in part derived from their individual identity but also in part from their social identity. Two levels of self are therefore thought to exist within a person, the individual self, the "I," which focuses on individual regard and judgments, and the social self, the "we," which focuses on collective regard and judgments linked to the group. Both are critical to our overall sense of self and are considered part of our identity. Recognizing religion as a social identity acknowledges that while for some the link between the self and religion takes place more at the individual level, for others religiosity is primarily a collective identity involving membership in a social group. This approach then allows for the social aspects of religious experience to be important, internalized, and part of one's identity. This conceptualization breaks from Allport's representation of intrinsic religiosity as only personal and private and the suggestion that the social aspects of religion belong in the extrinsic domain and do not represent an intrinsic identity.

Among the most vocal of the proponents for examining the social aspects of religious identity have been researchers from non-majority religions who argue that, while Christian religions are often individualistic in their approach, this is not characteristic of all religious experiences (Cohen, Hall, Koenig, & Meador, 2005; Fischer, Ai, Aydin, Frey, & Haslam, 2010; Sampson, 2000). Religious observers have pointed out that compared to Christianity, and in particular Protestant Christianity, other religions (e.g., Judaism, Islam, Buddhism, Unitarianism) are less individualistic in their approach and are more focused on the social and collective (Cohen et al., 2005; Sampson, 2000). For example, within the Jewish tradition, many religious rituals require the presence of others, and so it has been suggested that in this way one cannot be completely Jewish alone (Sampson, 2000). This does not mean of course that more socially oriented religious behaviors such as attending church are not important for many Christians. Indeed much of the language of Christianity emphasizes the collective experience; for example, the church is often referred to as a family, or even "the body of Christ." However, proponents of the social approach emphasize the fundamental role of the collective for Judaism and other more socially oriented religions. To the extent that there are important collective

components to all religious traditions, it is critical that we recognize this as an internalized and important dimension of religiosity.

If religions vary in the extent to which their followers tend to be intrinsically motivated by social aspects of their religious identity, and if we acknowledge that a social approach is also of substance (Cohen et al., 2005; Cohen & Hill, 2007), then this social factor represents a distinct dimension of religiosity that should be measureable along with other dimensions of religiosity. However, research exploring religious social identity empirically, often measures it with single items (e.g., Greenfield & Marks, 2007) or by modifying scales developed for other identities (e.g., Ysseldyk, Matheson, & Anisman, 2011). Additionally, as it stands, the religious orientation scale (Allport & Ross, 1967) does not assess this intrinsic social component. There have been efforts to improve upon the scale, including refining the items (Genia, 1993; Gorsuch & McPherson, 1989; McFarland, 1989), further theorizing of the concepts (Cohen, et al., 2005) as well as their content and structure (Hunt & King, 1971; Kirkpatrick, 1989), and the addition of the dimension of quest for meaning (Batson, 1976). However, these improvements have not investigated, or addressed the need to measure, social intrinsic religiosity. Although items on the extrinsic subscale include individual behaviors (e.g., prayer for protection), more emphasis is given to the social behaviors (e.g., church attendance). On the other hand and more importantly, the items on the intrinsic subscale refer almost exclusively to individual or personal behaviors such as meditation and prayer, with no mention of social or group behavior. Indeed, although Allport proposed both intrinsic and extrinsic orientation as unitary constructs (Allport, 1966; Allport & Ross, 1967), research has demonstrated that the extrinsic subscale consists of two components—personal and social—while the intrinsic subscale is still characterized as a single personal and private construct (Genia, 1993; Gorsuch & McPherson, 1989; Kirkpatrick, 1989). So, this most commonly used religiosity scale does not assess the social aspects of religiosity other than its extrinsic benefits. Therefore, the current investigation aims to provide initial evidence for a social intrinsic factor of religiosity as well as a means to measure it.

Combining Intrinsic and Social Dimensions of Religiosity in a New Approach

The current approach and scale builds on the religious orientation scale concept by adding items to assess social intrinsic religiosity, thereby combining the important work from decades of research in the intrinsic/extrinsic religiosity

paradigm with the more recent consideration of the meaningful social aspects of religiosity. We propose two distinct dimensions of religiosity: the intrinsic/extrinsic dimension and the individual/social dimension. Intrinsic religiosity is internalized by the religious person and so it is part of their identity. Rather than seeing this as a unitary construct as it has been until now, we suggest that some religious people experience and express this religious identity more individually and others more socially. On the other hand, extrinsic religiosity is less an identity and more a use of religion in which some people use religion for individual benefits and some for social benefits. In this way, the two dimensions of religiosity—individual/social and intrinsic/extrinsic—are crossed to form four religiosity types. Three types are well established in the literature (Allport, 1966; Allport & Ross, 1967): the individually intrinsic, the socially extrinsic, and the personally extrinsic. The fourth type—socially intrinsic—is novel. Developing items to measure this new dimension in the context of the three established types ensures that we capture what is unique to each and so the resulting framework permits assessment of a greater range of religious experience than the religious orientation scale currently can. Furthermore, establishing intrinsic social religiosity as a distinct factor will confirm that it is a construct independent from extrinsic religiosity and will help to unconfound the meaning of social and extrinsic in the religion literature.

Study 1

The aim of Study 1 was to develop and provide initial validation for a scale that includes intrinsic social religiosity in addition to the more established dimensions of religiosity. We expected the new social intrinsic religious dimension to behave quite differently from the established dimensions. For example, we expect it to show a distinct pattern of correlation with other measures of religiosity, specifically that as an intrinsic orientation it will correlate positively with religious identity measures such as centrality, but as a social orientation it will also correlate with socially focused religious behaviors such as church involvement.

   To develop the Social and Individual Religiosity (SIR) scale, we utilized a two phase/sample approach. In the first phase, a scale-development sample completed a pool of potential items for the SIR and the data was subject to initial exploratory factor analysis in order to reduce the number of items and explore the structure of the subscales. In addition, this sample completed established measures of religiosity to assess the convergent/divergent validity of the SIR. A second confirmatory phase sample of participants completed the retained

items making up the SIR and the data was subject to a confirmatory factor analysis to validate the subscale's structure. Both studies and their procedures were approved by an Institutional Review Board prior to data collection.

Method

Participants

We recruited 118 participants online as an initial scale-development sample. Recruitment was via email to community religious groups, professional list-serves, and snowball sampling of colleagues and friends; we asked only those who considered themselves at least moderately religious to participate. The email invitation included information about the purpose of the study and how long participation would take; the participants' voluntary decision to partici-pate was inferred informed consent. Fifty-seven percent were Christian, 17% Jewish, and the remaining 26% identified with another religion (including Muslim, Buddhist, Unitarian, Bahá'í, Hindu and "other not listed"). Seventy-five percent were female. The racial/ethnic self-identification of participants was diverse: 68% White, 11% African American, 10% Asian, and 11% self-identified with another group. Age also was diverse: 27% percent were 18-21, 27% were 22-29, 21% were 30-39, 7% were 41-49, 12% were 51-59, and 6% were 60-69. Twenty-one participants did not provide one or more demographic items but were included in the analysis.

The second confirmatory sample consisted of 183 Christian University undergraduates who participated in return for partial course credit. A pre-amble described the study and its procedures and we inferred participants' informed consent from their subsequent decision to participate in the study. Eighty-three percent self-identified as African American, 6% were African, 7% Caribbean, and 4% were of another ethnicity. Seventy-seven percent were female and 90% were 18-21 with all but one person in the remaining 10% aged 22-29. All participants provided all demographics.

Measures

The Social and Individual Religiosity (SIR) Scale Items

Two theoretical axes guided the initial development of the SIR scale items: individual versus social orientation and extrinsic versus intrinsic orientation. We developed potential items to populate the resulting four types of religi-osity in a number of ways. This included using qualitative data collected in a pilot study as well as previously validated identity scale items. Specifically, we modified items from the Collective Self-esteem Scale (CSES; Luhtanen &

Crocker, 1992) subscales to refer to religious group. The CSES taps into four distinct components of social identity self-evaluation: membership self-esteem, private collective self-esteem, public collective self-esteem, and importance to identity. A benefit of the CSES is that it is worded in such a way that it can be used for any social identity and it is therefore widely used and well validated. In addition, the centrality subscale of the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton, & Smith, 1997) was reworded so that the questions asked about the person's relationship with God. Finally, we used pre-existing religiosity measures as the basis for some scale items (e.g., Allport & Ross, 1967; Hilty & Morgan, 1985; Worthington et al., 2003). This resulted in a pool of 85 items with which participants rated their agreement along a 7-point scale from 1 = *strongly agree* to 7 = *strongly disagree*. The questions cover a number of aspects of religious identity and motive including importance, centrality to sense of self, and related behaviors, as well as extrinsic (nonidentity) aspects of religious experience.

Other Religiosity Measures

Participants in the development sample completed several validated measures of religiosity and religious behavior. The religious orientation scale (ROS; Allport & Ross, 1967) was used to measure intrinsic (α = .78) and extrinsic religiosity (personal α = .73, social α = .88). The religious commitment scale (Worthington et al., 2003) assessed both interpersonal commitment such as going to church (α = .83) and intrapersonal commitment such as religious contemplation (α = .89). We also assessed behavioral commitment using the religious involvement inventory (Hilty & Morgan, 1985) with the term church replaced with the more broadly applicable term "place of worship" (α = .88). A reduced version of the CSES importance subscale (Luhtanen & Crocker, 1992)[1] specifying religious group was included (α = .63), as were two items assessing strength of religiosity (α = .68). Finally, typical demographic questions were also included.

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1 Two items from the CSES importance subscale are retained in the final version of the SIR. Therefore, we measure identity importance with a reduced version of the CSES subscale not including these two items.

Results

Initial Exploratory Factor Analysis

All items were sufficiently normally distributed with skewness scores less than two and kurtosis scores less than seven (West, Finch, & Curran, 1995). In addition, the data was evaluated to be appropriate for factor analysis with a highly significant Bartlett's Test of Sphericity (χ^2 (3403) = 7799, p < .001) and a Kaiser Meyer Olkin (KMO) test of sampling adequacy of .66 which exceeds the recommended minimum value of .60 (Kaiser, 1974; Tabachnick & Fidell, 2001). We used principal components analysis (PCA) with varimax rotation to identify the items to retain on the final scale. Orthogonal rotations do not allow the factors to correlate, which forces those aspects of each factor that are unrelated to other factors to emerge. Consequently, orthogonal rotations, of which varimax is the most common, are often the rotation of choice in instrument development for their ability to minimize the complexity of the factors (Tabachnick & Fidell, 2001), even if the final factors may correlate. All questionnaire items were initially included for PCA and the maximum number of factors with Eigenvalues above one was requested (Guttman, 1954; Kaiser, 1970). Examination of the resulting output, in particular the Screeplot (Cattell, 1966), suggested that four meaningful and interpretable factors were present. We used PCA again, this time specifying extraction of four factors. Subsequently, we examined the loading of each item and removed any items with a loading of less than .40 on a single factor, or with loading on two factors within .15 of each other. We removed items sequentially and a rotated factor matrix generated after each removal, until we reached a solution that retained forty-four items across four factors.

To improve usability of each resulting subscale, we dropped items that were overly redundant from a face validity standpoint. The final four-factor solution included 24-items, explained 59% of the variance, with all items loading above .40, and with a simple structure (Thurstone, 1947) (see Table 1). Following convention, we confirmed this solution with an alternative (principle axis factoring) extraction and an alternative (promax) rotation (Pett, Lackey, & Sullivan, 2003). These 24-items make up the final Social and Individual Religiosity (SIR) scale.

Factor one includes items which refer to a personal relationship with God and private individual prayer practices. Factor two items refer to membership to a religious group, connections with others of the same faith, and group worship. Factor three reflects religiosity as a means to positive self-related benefits such as comfort and purpose, but makes no reference to God, faith or religious group. Finally, factor four includes those items which reference specific

others (friends and family) and place of worship attendance as a commitment to these social relationships, with no reference to God or faith. Based on the wording of the items that loaded on each factor, and in keeping with our a priori theory, the four factors were identified as follows. Factor one: Individual Intrinsic Religiosity; factor two: Social Intrinsic Religiosity; factor three: Personal Benefits of Religiosity; and factor 4: Social Benefits of Religiosity.

These four factors form the basis of four subscales that are the averaged index of the items loading on that factor. Cronbach's alphas for the subscales were, Individual Intrinsic Religiosity, α = .91, Social Intrinsic Religiosity, α = .85, Personal Benefits of Religiosity, α = .84, and Social Benefits of Religiosity, α = .61. We further assessed reliability using split-half reliability analysis and Spearman-Brown coefficients ranged from .70 to .88. Scores on Individual Intrinsic Religiosity and Social Intrinsic Religiosity were positively correlated, $r(118)$ = .30, p = .001 (see Table 2), supporting the notion that religious identity and orientation often includes both individual and social dimensions and that those dimensions contain interrelated as well as independent aspects. However, the correlation is not so strong as to suggest that the two are a proxy for one another, supporting the need for a measure of social intrinsic religiosity.

Confirmatory Factor Analysis

To further validate the structure of the SIR, a CFA was performed using LISREL (2011). This CFA tested model fit by imposing the four-factor solution from the development sample on the confirmatory sample, allowing them to correlate, and assessing how well the conceptual structure fit the second data set. All 24-items in the SIR were sufficiently normally distributed and the data appropriate for factor analysis (χ^2 (3240) = 9423, p < .001; KMO = .88). We used a variety of indices to assess model fit (Byrne, 1998; Hu & Bentler, 1999; Ullman, 2001). The normed chi-square value was 2.04 with values between two or three indicating reasonable fit. The RMSEA was .081 corresponding to adequate fit, furthermore the 90% confidence interval for the RMSEA was .072 to .090, which is quite narrow and suggests good precision of the RMSEA value. The NNFI was .92 and the CFI was .93, both exceeding the .90 cutoff for acceptable/ practical fit (Bentler, 1992) and approaching the 0.95 cutoff for superior fit (Hu & Bentler, 1999). Thus, all indicators showed acceptable fit of the proposed four-factor model.

The four factors of the SIR are formed by considering two dimensions-intrinsic/extrinsic and individual/social. Therefore, to rule out plausible alternative model structures, we tested the data for fit with the alternative two-factor models. Models that could theoretically account for the data include a two-factor model with the factors of just intrinsic and extrinsic, both

TABLE 1　　*Factor loadings for exploratory factor analysis with varimax rotation of the SIR subscales in the development sample (Study 1)*

Item		Factor 1	Factor 2	Factor 3	Factor 4
1.	I have a strong commitment to my relationship with God	**.84**	.29	.03	−.07
2.	I frequently feel close to God during private worship	**.83**	.05	.12	−.05
3.	My relationship with God is an important reflection of who I am	**.82**	.34	.09	−.10
4.	Private individual prayer is one of the important and satisfying aspects of my faith	**.79**	−.01	.21	.04
5.	My faith is focused mostly on my personal relationship with God	**.76**	−.27	.02	−.05
6.	Praying alone in silence is important for my own faith	**.74**	.18	.07	.03
7.	I often pray privately in places other than a place of worship	**.72**	.26	.07	.14
8.	Overall, my relationship with God has very little to do with how I feel about myself (R)	**.64**	.20	.03	−.13
9.	I am a cooperative participant in the religious group I belong to	.15	**.81**	.02	−.14
10.	My religious identity is tied to which religious group I belong to	−.01	**.74**	−.00	.01
11.	Belonging to a religious group is an important part of my self–image	.16	**.74**	.10	.11
12.	I feel a strong sense of being connected with other people of my faith group	.29	**.72**	.11	.03
13.	I would attend religious services even if I were out of town and not at my usual place of worship	.06	**.70**	.03	.11
14.	The religious group I belong to is an important reflection of who I am	.11	**.68**	.10	.08
15.	I prefer to express my faith with other people / by being with other people	.04	**.60**	.02	−.04
16.	I feel I don't have much to offer the religious group I belong to (R)	.11	**.55**	−.08	.06

TABLE 1   *Factor loadings for exploratory factor analysis with varimax rotation of the SIR subscales in the development sample (Study 1) (cont)*

Item		Factor 1	Factor 2	Factor 3	Factor 4
17.	I am religious mostly because it helps me secure a better life on earth	.05	.05	**.88**	−.01
18.	I am religious mostly because it gives me a stronger sense of self	.07	−.09	**.84**	.13
19.	I am religious mostly because it is a source of comfort to me	.11	.04	**.79**	.16
20.	I am religious mostly because it gives life purpose	.29	.25	**.70**	.03
21.	I go to my place of worship because family does	−.00	−.17	−.00	**.85**
22.	I go to my place of worship because it's something I have always done	.00	−.09	.10	**.79**
23.	It is important to me that my faith is compatible with the faith of my family and friends	−.07	.18	.03	**.55**
24.	My religious beliefs are somewhat shaped by the beliefs of others like me in my life	−.02	.16	.11	**.44**

incorporating individual and social items but not distinguishing between them. Secondly, a two-factor model with the factors of individual and social, both incorporating intrinsic and extrinsic items but not distinguishing between them. The two-factor model with intrinsic and extrinsic factors had a normed chi-square of 2.78, a RMSEA of 0.12 (90% confidence interval 0.11; 0.13), the NNFI was 0.87, and the CFI was 0.88. The two-factor model with individual and social factors had a normed chi-square of 2.68, a RMSEA of 0.11 (90% confidence interval 0.10; 0.12), the NNFI was 0.88, and the CFI was 0.89. Therefore, neither model reached acceptable fit according to most of the standard indices; additionally the confidence interval for the four-factor structure did not overlap the confidence interval of either of the two-factor alternatives, indicating that fit was reliably superior. As a final assurance of our model's superior fit we calculated the AIC of all three models and compared them, the smallest value represents the model with the best fit (Hu & Bentler, 1995). The

four-factor model's AIC was 464.35, which is smaller than either the intrinsic/extrinsic two-factor model AIC of 1035.31 and the individual/social two-factor model AIC of 2026.76.

Construct Validity

To assess the convergent and discriminant validity of the SIR and to confirm that social intrinsic religiosity is distinct from extrinsic religiosity, we examined the bivariate correlations between the four subscales and preexisting measures of religiosity (see Table 2) using the data collected with the scale-development sample. Theoretical expectations suggest that scores on the Individual Intrinsic Religiosity and Social Intrinsic Religiosity subscales should relate to established measures of religious identity, while scores on the Personal Benefits of Religiosity and Social Benefits of Religiosity subscales should not be meaningfully related to identity measures. Furthermore, if individual and social religious identities are distinct ways of experiencing religiosity, scores on the Individual Intrinsic Religiosity and Social Intrinsic Religiosity subscales should relate to religious behaviors differently. That is, we would expect to see

TABLE 2   *Descriptive statistics of the SIR subscales and correlation coefficients with other measures of religiosity using the development sample (Study 1)*

		1	2	3	4
1.	SIR: Individual Intrinsic Religiosity	.			
2.	SIR: Social Intrinsic Religiosity	.30**	.		
3.	SIR: Personal Benefits of Religiosity	.26**	.16	.	
4.	SIR: Social Benefits of Religiosity	−.05	.04	.17	.
5.	Strength of religiosity	.60**	.83**	.41*	−.10
6.	Importance of religious identity	.33**	.75**	.21*	.09
7.	ROS: Intrinsic religiosity	.63**	.55**	−.06	−.11
8.	ROS: Extrinsic religiosity (social)	−.43**	.16	.01	.22*
9.	ROS: Extrinsic religiosity (personal)	.13	−.09	.41**	.24*
10.	Religious commitment (overall)	.55**	.58**	.01	.17
11.	Intrapersonal religious commitment	.61**	.47**	.13	−.08
12.	Interpersonal religious commitment	.32**	.59**	−.16	−.10
13.	Place of worship involvement	.34**	.57**	−.07	−.08
M		5.34	4.44	4.02	3.36
SD		1.35	0.97	1.07	1.19

significant correlations between Social Intrinsic Religiosity and socially ori-
ented religious behaviors.

As expected, scores on the Individual Intrinsic Religiosity and Social Intrinsic
Religiosity subscales correlated positive and significantly with strength of reli-
giosity, the shortened forms of the religious group importance subscale of col-
lective self-esteem (which is quite similar in content to identity centrality),
overall religious commitment, and intrinsic religiosity. Thus, an internalized
religiosity can be either individual, or social, or both, as reflected in convergent
relationships with other internalized/identity measures. Conversely, Personal
Benefits of Religiosity and Social Benefits of Religiosity scores correlated far
less strongly, or not at all, with existing measures of identity, suggesting that
these extrinsic benefits are notably distinct from more internalized religious
identities.

Scores on the Individual Intrinsic Religiosity subscale did not correlate with
the extrinsic personal religiosity subscale of the religious orientation scale and
correlated negatively with its extrinsic social religiosity subscale. Scores on
the Social Intrinsic Religiosity subscale did not correlate with either extrinsic
personal religiosity or extrinsic social religiosity. Thus, both SIR intrinsic com-
ponents of religion are distinct from, or unrelated to, the extrinsic orientation
toward religion as conceptualized by Allport (Allport, 1966; Allport & Ross,
1967). Critically, this provides additional evidence supporting the distinction
between social intrinsic religiosity and the extrinsic benefits of the social con-
text of religion.

While scores on both Social Intrinsic Religiosity and Individual Intrinsic
Religiosity subscales correlated with religious commitment overall, interper-
sonal commitment is more strongly correlated with Social Intrinsic Religiosity
than Individual Intrinsic Religiosity, $z(99) = 2.95$, $p < .001$, and intrapersonal
commitment is more strongly correlated with Individual Intrinsic Religiosity
than Social Intrinsic Religiosity, $z(99) = -1.64$, $p = .05$. Furthermore, place
of worship involvement was more strongly correlated with Social Intrinsic
Religiosity than with Individual Intrinsic Religiosity, $z(99) = 2.30$, $p = .002$.
Thus, not only do the individual and social intrinsic subscales reflect different
patterns of commitment, but critically, they show differential association with
religious behaviors.

Study 2

The aim of Study 2 is to provide further validation of the SIR by assessing its
predictive validity in regards to intergroup prejudice and by examining how

participants of different religious groups who differ in their orientations respond to the items on the SIR.

When intrinsic social religiosity is viewed as a socially oriented but internalized religiosity, this generates predictions in particular in the area of intergroup judgments such as prejudice. Social identity theory processes begin with self-categorization into an ingroup formed around defining characteristics and prototypical attributes of the group (Hogg, Terry, & White, 1995). The importance of defining characteristics to the meaning of the ingroup suggests that outgroups that are relevant to these defining characteristics will be more likely to be the targets of discrimination and prejudice. For religious ingroup identity, the defining characteristics relate to belief in God and religiously based principles and beliefs. Therefore, if one's religious identity is important to the self, then prejudice toward outgroups that violate the defining characteristics of the religion (e.g., atheists and homosexuals) benefit self-esteem, whereas prejudice towards other outgroups (e.g., race), does not. Generally, intrinsic religiosity is either unassociated or negatively associated with racial prejudice (Batson, Flink, Schoenrade, Fultz, & Pych, 1986; Donahue, 1985a; Herek, 1987; Hunsberger & Jackson, 2005) and positively associated with anti-gay prejudice (Herek, 1987; Hunsberger & Jackson, 2005; Laythe, Finkel, & Kirkpatrick, 2001). In contrast, research suggests that extrinsic religiosity is associated with being generally prejudiced towards all outgroups. People with an extrinsic religious orientation demonstrate intolerance for all kinds of outgroups including racial and ethnic outgroups as well as homosexuals, people with a mental illness, and religious outgroups (Altemeyer & Hunsberger 1992; Batson, 2005; Donahue, 1985a; Kirkpatrick, 1993; McFarland, 1989; Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009). So, we expect that intrinsic religiosity, both the established individual orientation and our novel social orientation, will relate to prejudice toward identity defining relevant outgroups, such as atheists and homosexuals, but not toward other outgroups unrelated to the defining characteristics of religious identity, such as racial outgroups. Furthermore, the two extrinsic factors are not expected to differentially relate to these two types of outgroups in the same way.

Many Christians, especially those in Western societies, place particular importance on the individual experience of religion (Fischer et al., 2010; Sampson, 2000), whereas other religions, such as Judaism, are often characterized as less focused on the individual approach by comparison (Cohen et al, 2005; Cohen & Hill, 2007; Sampson, 2000). Therefore, people who follow more socially oriented religious traditions, such as Judaism, are expected to score higher on Social Intrinsic Religiosity than those from more individualistic religions, such as Christianity. Conversely, those from more individualistic

religions are expected to score higher on Individual Intrinsic Religiosity than those from more socially oriented religious traditions.

Method

Participants

The predictive validity sample consisted of 285 participants who were recruited online via Amazon's Turk, which is an increasingly widely-used platform among social scientists as a source of high quality data (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). The Turk listing included information about the purpose of the study and how long participation would take; the participants' voluntary decision to participate was inferred informed consent. The study and its procedures were approved by an Institutional Review Board prior to data collection. Sixty-nine percent were Christian, and 31% were Jewish. Eighty-five percent self-identified as White, 6% were Black, 4% Hispanic, 3% Asian, and the remaining participants chose not to disclose their ethnicity. Fifty-six percent were female, and age was diverse: 12% percent were 18-21, 31% were 22-29, 25% were 30-39, 19% were 41-49, 8% were 51-59, 4% were 60-69, and 1% were 70-79. All participants provided all demographics.

Measures

The Social and Individual Religiosity (SIR) Scale

Participants completed the final 24-item version of the SIR that consists of four subscales: Individual Intrinsic Religiosity (α = .93), Social Intrinsic Religiosity (α = .90), Personal Benefits of Religiosity (α = .76), and Social Benefits of Religiosity (α = .75). Participants rate their agreement along a 7-point scale from 1 = *strongly agree* to 7 = *strongly disagree*.

Measures of Prejudice

Participants completed the modern racism scale (McConahay, 1986; α = .88) and the attitudes towards homosexuals scale as a measure of prejudice towards homosexuals (Altemeyer & Hunsberger, 1992; α = .95). Since there is no well-established measure of attitudes toward atheists, we used a simple feeling thermometer item asking participants to say how cold or warm they felt towards atheists as a group. We used the same feeling thermometer scale to assess feelings towards Whites and Blacks thus allowing a difference score to be calculated representing preference for the ingroup Whites.

Results

In general, the two extrinsic subscales of the SIR relate to racial prejudice, whereas the two intrinsic subscales do not relate to racial prejudice but do relate to prejudice towards groups relevant to the defining characteristics of religion (i.e., homosexuals and atheists) (see Table 3). In particular, on the White-Black feeling difference index, a greater preference for Whites correlates with both extrinsic subscales but neither of the intrinsic subscales. Likewise, the modern racism scale does not correlate with either of the intrinsic subscales but does correlate with Personal Benefits of Religiosity. Thus, extrinsic religiosity predicts racial prejudice, however intrinsic religious identity—whether it is individual or social in nature—does not. This replicates previous findings concerning intrinsic religiosity, and is consistent with Social Intrinsic Religiosity indeed being intrinsic.

TABLE 3　*Correlations between the SIR subscales and measures of intergroup prejudice using the predictive validity sample (Study 2)*

	Individual Intrinsic Religiosity	Social Intrinsic Religiosity	Personal Benefits of Religiosity	Social Benefits of Religiosity
Modern Racism Scale	−.06	.04	**.20**[*]	.11
White-Black feeling difference	.09	.07	**.13**[*]	**.20**[**]
Prejudice towards homosexuals	**.34**[**]	**.25**[**]	.16[*]	.11
Negative feelings toward Atheists	**.28**[**]	**.15**[*]	.14[*]	−.03

Note. Correlations for the modern racism scale and White-Black difference score are based on White participants only $N = 240$, all other correlations are for the total sample $N = 285$.[2] Boldfaced correlations are those that are consistent with expected identity versus experienced benefits hypotheses, and whether the prejudices are religiously related.

2　Correlations including racially relevant attitudes were calculated using this reduced sample because the full sample included minorities who would not be expected to show racism or a preference for Whites. The pattern of results reported for prejudice towards homosexual and feelings towards atheists here is generally replicated in the reduced Whites-only sample with two exceptions: the prejudice towards homosexuals index is significantly correlated with *Social Benefits of Religiosity* though less strongly than it is with either the individual, $z(237) = 2.04$, $p = .04$ or social intrinsic, $z(237) = 1.69$, $p = .09$, subscales. Secondly, the attitude toward Atheists measure did not significantly correlate with the Personal Benefits of Religiosity.

In contrast, Social Intrinsic Religiosity is related to prejudice towards atheists and homosexuals, which are outgroups formed based on characteristics relevant to religiosity. No relationship was observed between being religious for social benefits and prejudice toward atheists or homosexuals, again highlighting the distinction between the intrinsic and extrinsic factors. The prejudice towards homosexuals index was somewhat correlated with Personal Benefits of Religiosity, though less strongly than it is with either Individual Intrinsic Religiosity, $z(285) = 2.95$, $p < .001$, or Social Intrinsic Religiosity, $z(285) = 1.37$, $p = .08$, subscales. This overall pattern of correlations supports the idea that a social religiosity can indeed be an intrinsic and internalized identity and so it relates to prejudice only when the outgroup is relevant to the defining characteristics of religious identity.

Suggestive Criterion Group Differences

As a further test of the validity of the SIR's conceptual structure, in particular the distinction between the intrinsic social and individual components, we ran a series of independent samples *t*-tests on all four subscales of the SIR comparing Christian and Jewish participants. There was a significant difference between Christians and Jews on Social Intrinsic Religiosity, $t(283) = -2.98$, $p = .003$, $d = .38$; as expected, Jews scored higher ($M = 4.88$, $SD = 1.27$) than Christians ($M = 4.40$, $SD = 1.28$). There was also a significant difference between Christians and Jews on Individual Intrinsic Religiosity, $t(283) = 4.91$, $p < .001$, $d = .59$; this time, the pattern reversed as predicted, so that Christians scored higher ($M = 5.65$, $SD = 1.07$) than Jews ($M = 4.90$, $SD = 1.43$). There was also a significant difference between Christians and Jews on the Social Benefits of Religiosity, $t(283) = -4.18$, $p < .001$, $d = .60$, and Jews scored higher ($M = 4.14$, $SD = 1.39$) than Christians ($M = 3.43$, $SD = 1.27$). There was no significant difference for Personal Benefits of Religiosity between Jews ($M = 4.24$, $SD = 1.32$) and Christians ($M = 4.46$, $SD = 1.22$).

Follow-up analysis examined the difference between scores on the Social Intrinsic Religiosity and Individual Intrinsic Religiosity *within* the two religions. Jews scored almost the same on the two subscales, $t(87) = 0.09$, $p = .93$, $d = .01$, while Christians scored significantly higher on Individual Intrinsic Religiosity, $t(197) = 15.44$, $p < .001$, $d = 1.07$. Likewise, examining the difference between scores on the Social Benefits of Religiosity and Personal Benefits of Religiosity Jews again scored almost exactly the same, $t(87) = 0.67$, p = .50, $d = .07$, while Christians were significantly higher on Personal Benefits of Religiosity, $t(197) = 10.12$, $p < .001$, $d = .83$.

These group findings suggest that Christians are more individually religious than they are social and more individual than Jews, whereas Jews are

equally individually and socially religious but are more social than Christians. This validates the SIR by confirming past findings that Christians, on average, tend to have more individualistic orientations to religious identity (Fischer et al., 2010), as well as further supporting the independence of social-religious identity from individual identity. Furthermore, examining these group differences makes it clear that the value of the SIR lies not only with the conceptual distinction of the factors, but with the ability to assess the greater range of religious identity, practice, and experience of a broader range of individuals.

Discussion

Religious experience can manifest itself as individual and social identity, and it can provide benefits that are individual and social. Accordingly, the Social and Individual Religiosity (SIR) scale developed here assesses two dimensions of religious identity and experience: individual/social identity and intrinsic/extrinsic motivation or benefit. The result is a scale with four components: individual faith identity (Individual Intrinsic Religiosity), religious group or social identity (Social Intrinsic Religiosity), personal benefits of religion (Personal Benefits of Religiosity), and social benefits of religion (Social Benefits of Religiosity) which emerged from exploratory factor analysis, and which we verified through confirmatory testing on a separate sample. The SIR was able to assess variability both within one religion (Christian, in the CFA) and between two religions (Christian and Jewish, in the predictive validity sample).

The current findings validate the existence of an intrinsic social aspect of religious identity. This factor was distinct from the other three factors in the SIR as well as existing extrinsic religiosity scales. Furthermore, Social Intrinsic Religiosity scores were associated with importance of identity measures and with behavioral measures such as religious involvement and commitment. Those who have a social religious identity are more group oriented in their expression and experience of their religiosity, they feel particularly connected to others of their religious group, they report more interpersonal religious commitment behaviors, and are more involved in their place of worship. Critically, their religious identity appears no less internalized. This shows that a socially oriented religiosity can be intrinsically important to the self rather than merely deriving from extrinsic benefit and thus provides clear evidence against confounding social and extrinsic religiosity. In other words, Allport's original conceptualization of extrinsic social religious orientation does not fit neatly onto an intrinsic/extrinsic motivational framework, where extrinsic implies behavior performed not for its own sake (Neyrinck, et al., 2010).

Since Allport first suggested the intrinsic and extrinsic religiosity distinction, the implicit assumption has often been that significant religious experience is inherently individual and that social motivations are perhaps less valid (Cohen et al., 2005). Intrinsic religiosity represents valuing religion because of the meaning it gives your life (Allport, 1966). The current findings show that meaningful religious experience can stem from either an individual faith identity or a religious group identity or both. This is supported by the pattern of group differences, which were conceptually consistent with the literature concerning the orientation of religious cultures, in particular Jewish and Christian approaches to religion and religious practices.

This reconceptualization of intrinsic religiosity as comprising both/either an individual and a social orientation is a critical contribution to the research. Allport's intrinsic/extrinsic conceptualization of religious orientation has been central to the field since its introduction in the 1960's. Decades of research since have confounded social and extrinsic religiosity with the consequence of at worst demonizing, and at best sidelining, social orientations to religion. Validation of a social intrinsic religiosity changes the interpretation of what, under Allport's scheme, it means to be intrinsically religious and acknowledges a wider variety of religious experience. Therefore, this paper is an important step towards refining Allport's model.

The current findings reaffirm the existence of an individual intrinsic religious identity consistent with previous scales and findings (Allport, 1966; Allport & Ross, 1967). Individuals endorsing these items focus on their individual relationship with God and private prayer is important to them. They are the religious people Allport described as having internalized their religion. Consistent with this view, the Individual Intrinsic Religiosity correlated highly with strength of identification and behavioral measures including strength of religiosity, intrinsic religiosity, intrapersonal commitment, and was less correlated with interpersonal commitment and negatively correlated with extrinsic religiosity.

Finally, these findings replicated the existence of two extrinsic uses of religion suggested by Allport. The Personal Benefits of Religiosity and Social Benefits of Religiosity parallel Allport's personal extrinsic and social extrinsic orientations and show little association with religious commitment or identity measures. Both extrinsic dimensions describe people who use their religion for some self-satisfaction ends, whether that is security and solace, or sociability and belonging (Allport & Ross, 1967). Those with more extrinsically oriented religiosity may appear quite religious on the surface, however current and prior findings show that their religion is less internalized or central to the self. Also replicating Allport and Ross' (1967) findings, the individual intrinsic

subscale of the SIR did not relate to racial prejudice, and consistent with its intrinsic nature, neither did the social intrinsic factor. This supports the suggestion that the Social Intrinsic Religiosity subscale, although social, is indeed intrinsic. Furthermore, both of the intrinsic subscales correlated with prejudice towards outgroups relevant to the defining characteristics of the religious ingroup: atheists and homosexuals, just as would be predicted within Social Identity Theory (Tajfel & Turner, 1979). This is further validation that Social Intrinsic Religiosity is intrinsic and internalized.

It is important to emphasize the conceptualization and validation of social intrinsic religiosity as indeed intrinsic. We do not simply argue that a social approach to religion is not necessarily extrinsic (i.e., merely a means to an end), but rather that it is, for some, intrinsic. This is important because of what it means to be intrinsic in one's religious orientation. Allport's description was that intrinsic religious motivation applied to the "constant, devout, internalized" (Allport & Ross, 1967, p. 432), those who live their religion. In the field of motivational psychology, intrinsic refers to behaviors performed without external incentive (Neyrinck, et al., 2010). Consequently, for the intrinsically oriented, their religion guides them in all the ways that we know important identities do, including informing their sense of self, their behavior, their attitudes, and their judgments of others. We agree wholeheartedly with Allport's description of what it means to be intrinsically religious; however, the data presented here confirms that his approach needs to be expanded to include those who experience and express their religion in a more collective way.

Future research should examine relationships between the SIR and judgmental and behavioral outcomes. For example, individuals for whom religion is an intrinsic identity should garner self-esteem partly from this identity; however, they may base this self-esteem on different perceptions and outcomes depending on whether they are social or individual in their focus. The self-esteem of individuals with socially focused religious identities is linked to other group members and so they may, under some circumstances, be more likely to demonstrate ingroup versus outgroup biases. In particular, research suggests that social identity processes are more apparent under conditions of identity threat (Burris & Jackson, 2000). Future research should examine the association of socially oriented intrinsic religiosity and prejudice towards different kinds of outgroups (e.g., religiously related versus unrelated) under conditions of identity threat, since it may be that such a threat is necessary to clearly see the relationship between these constructs. Alternatively, the self-esteem of those with more individually focused religious identities is more likely based on the person's perceptions of their relationship with God, the

quality of their prayer and faith and so forth. In contrast, the people for whom religion is extrinsic use their religion for additional nonreligious ends, so socially oriented extrinsic religious people might demonstrate higher needs to belong, needs for affiliation, and perhaps even higher conformity. Alternatively, individually oriented extrinsic people might demonstrate higher levels of self-focused needs and self-seeking behaviors (i.e., self-awareness; selfishness).

Research should also consider the role that culture plays in the extent to which someone experiences their religion in an individual or social manner. In this paper we focused on Christianity as representative of an individually focused religion and Judaism as prototypical of a socially oriented religion. Of course these are broad conceptualizations and there are nuances within any religion. In particular, it would be interesting to examine how Christians in an individualistic vs. collectivist culture differ in the extent to which their religion is individually intrinsic or socially intrinsic.

The psychology of religion literature has generally framed the social component of religious experience as motivated by extrinsic benefits. The Social and Individual Religiosity (SIR) scale establishes a meaningful intrinsic social expression of religion, which is distinct from extrinsic religious benefits. Consequently, the SIR adds one critical factor over and above previous measures of religious identity and this crucial addition is the identification of an independent social intrinsic religiosity, which allows a broader, more specific and more comprehensive assessment of the religious experience of diversely religious and diversely motivated range of individuals.

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