Two Types of Religious Internalization and Their Relations to Religious Orientations and Mental Health

Richard M. Ryan, Scott Rigby, and Kristi King

Two types of religious internalization are conceptualized that are presumed to vary in their relative autonomy. *Introjection* represents a partial internalization of beliefs and is characterized by self-and other-approval-based pressures. *Identification* represents adoption of beliefs as personal values and is characterized by greater volition. These 2 types of internalization are compared conceptually and empirically with existing measures of religious orientation and are used to predict varied functional outcomes. Results in 4 independent Christian samples show systematic construct validities and relations with mental health and self-related outcomes. Also, evangelical teenagers are shown to be higher on both introjection and identification than controls. Results are discussed both in terms of prior approaches to the psychology of religion and the significance of internalization for personality functioning.

Prominent in almost every culture are beliefs and practices of a religious nature that represent forums for the expression of spirituality and in addition serve a variety of psychological functions. These functions include (but are not reducible to) explaining the unknown (Goodenough, 1986), protecting against the terror of death (Solomon, Greenberg, & Pyszczynski, 1991), and more generally providing a system of shared meanings and social practices (Becker, 1962; Berger, 1969). Furthermore, participation in religion can provide both support and guidance that can aid in the maintenance and enhancement of personality and mental health (Allport, 1959; Bergin, 1991).

Despite the common functions ascribed to them, however, religious belief systems vary widely in content and in the practices prescribed (Smart, 1969). In large part, specific religious beliefs are maintained through cultural transmission, in that they have continuity only through being passed on to new generations, the individual members of which must in turn adopt the transmitted beliefs and practices as their own. Put differently, religions must be internalized by cultural members both to survive and to provide any functional value to adherents.

Internalization refers to the process through which an individual transforms a formerly externally prescribed regulation or

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value into an internal one. In internalization one "takes on" the value or regulation as one's own. Numerous theories, from psychoanalytic (Schafer, 1968) to social psychological (e.g., Kelman, 1958; Perry, 1970) to sociological (Berger, 1969; Parsons, 1951) have emphasized the importance of internalization processes for the transmission and stability of culture. In addition, theories of internalization typically acknowledge that there can be varied degrees and types of internalization (Krathwohl, Bloom, & Masia, 1974; Meissner, 1981; Ryan & Connell, 1989).

Different styles of internalization are nowhere more evident than in the case of religious beliefs and practices. Religious beliefs can be rigidly and unreflectively adopted or can be flexible, leaving one open to the consideration and assimilation of new ideas (Fromm, 1950). In addition, religious systems can be adopted because of fear, guilt, or social pressures or because of their compelling contents and meanings. Thus, the manner in which religious beliefs are internalized may vary considerably, and the functional impacts of religion may differ accordingly.

In the present article we introduce a new conceptualization and measure of religious orientations based on self-determination theory (Deci & Ryan, 1985, 1991) that we apply in these studies exclusively to Christian subjects. Specifically, we postulate two types of religious internalization, which we label *introjection* and *identification*. Focusing on several types of Christian groups, we examine how variations in introjection and identification are associated with other established measures of religious orientation, namely, those of Allport and Ross (1967) and Batson and Ventis (1982), and with psychological outcomes assumed to be influenced by religious participation. We also compare college-age evangelical youths with secular college Christians to test for differences in levels of internalization.

Internalization and Self-Determination in Religion

Deci and Ryan (1985, 1991) argued that the process of internalization reflects peoples' intrinsic tendencies to assimilate and integrate external regulations into more self-determined ones and to move away from heteronomy toward autonomy

when possible. According to this model, the more fully internalized a regulation, the more the behaviors it entails are characterized by an internal perceived locus of causality (deCharms, 1968; Deci & Ryan, 1985), that is, the more one experiences behavior as volitional or self-determined. An external regulation that has been assimilated to the self in the form of identification is therefore likely to be experienced as a personal value and as something one carries out autonomously (Ryan, 1991, 1993). Put differently, regulations or beliefs associated with identification are those that the individual feels are personally chosen and valued. However, a regulation can also be internalized in the form of introjection. In introjected regulation behaviors are performed because one "should" do them, or because not doing so might engender anxiety, guilt, or loss of esteem. Thus, even though internalized, introjected styles of regulation connote considerably less experience of volition and a greater sense of internal pressure and conflict than those more fully assimilated to the self. Deci and Ryan (1985) have described introjection as an internally controlling state in which affective and self-esteem contingencies are applied to enforce or motivate an adopted value or set of actions.

The concept of varied types of internalization has been empirically explored in several domains. For example, Ryan and Connell (1989) developed a measure of internalization for academic achievement behaviors they called the Academic Self-Regulation Questionnaire. The questionnaire asked students to endorse various reasons for performing several academically relevant behaviors. Introjected reasons included wanting to gain (or not lose) the approval of self and others, or avoiding guilt or shame. More self-determined reasons included a personal sense of value or importance for school-related activities and wanting to learn more, enjoying learning activities, or both. Results showed that relative to introjected styles of regulation, more self-determined reasons predicted greater teacher-rated self-motivation on the part of the student, more positive coping styles, more sense of control over outcomes, and greater perceived competence in school. In the same article, a similar internalization scale for prosocial behaviors was also examined, and again support was found for differentiating between introjected and more self-determined styles of self-regulation. Related work has been done in the domains of personal relationships (Blais, Sabourin, Boucher, & Vallerand, 1990) and sports (Vallerand & Reid, 1990) among other areas. These studies suggest that variations in the style of internalizing or adopting beliefs or practices can have significant impact on domain-relevant behavior, attitudes, and psychological well-being.

In a particularly relevant study, O'Connor and Vallerand (1990) used Deci and Ryan's (1985) theoretical framework to assess a continuum of internalization with regard to religious practices in an elderly population. Their findings revealed that less self-determined styles of internalization were positively associated with depression and negatively associated with life satisfaction, self-esteem, and sense of meaning in life, whereas the opposite pattern was found for internalization styles characterized by greater self-determination. Conceptually, they also argued that self-determination theory's approach to religious motivation was not isomorphic with the typology of Allport (1950). However, no empirical comparison with Allport's system was reported.

In the present study we apply this previous work on internalization and self-regulation to the psychology of religion, wherein varied motivational styles of being religious have been an actively debated and researched topic of study. As one aspect of this endeavor we contrast theoretically and empirically our constructs of introjection or identification with measures of religious orientation derived from the theories of Allport (1950) and Batson and Ventis (1982), to whom we now turn.

Other Approaches to Religious Orientation

Perhaps the most widely known approach to religiosity is that of Allport (1950), who distinguished between intrinsic (mature) and extrinsic (immature) religious orientations. Allport argued that the mature, or intrinsic, religious sentiment is characterized by the striving for meaning and value. By contrast his immature, or extrinsic, orientation entails a utilitarian approach to religion. The extrinsically oriented participant uses religion to protect the self, gain social standing, and find solace.

Allport and Ross (1967) created a Religious Orientations scale that assesses intrinsic and extrinsic orientations and that has been widely used in empirical studies of religion. Those who score high on the intrinsic scale have been found to be more orthodox and to ascribe more importance and value to religion than those who score high on the extrinsic orientation scale (e.g., Batson, 1976; King & Hunt, 1972; Spilka, Pelligrini, & Dailey, 1968). In addition, high scorers on the extrinsic dimension have been found to be more dogmatic and prejudiced than high intrinsics (Batson, 1976; Hoge & Carroll, 1978). The Religious Orientations Scale has also been found to correlate with mental health outcomes in some studies, with the intrinsic scale correlating positively with such outcomes and the extrinsic scale negatively (Bergin, 1991). Thus, there does seem to be some construct validity to the Religious Orientations Scale and by implication support for Allport's (1950, 1959) theory. On the less positive side, empirical analyses of Allport and Ross's measure (e.g., Hoge, 1972; Kirkpatrick, 1989) suggest that the assumed two-factor model may not be reliable and, in fact, that the extrinsic items may actually break into several relatively independent dimensions.

Batson and Ventis (1982) critically reviewed Allport's (1950, 1959) theory and the scale that operationalizes it. They suggested that although the extrinsic scale may measure a more self-oriented, utilitarian style of religiosity, the intrinsic scale may not tap what is intended. In fact, they argued that intrinsic scores may reflect a tendency to identify with religious dogma and authority in an uncritical fashion and thus may not reflect only mature orientations. They likened Allport and Ross's (1967) intrinsically religious person to Hoffer's (1951) "true believer," suggesting that such an individual can be rigid if not fanatical.

Batson and Ventis (1982) introduced an alternative operationalization of religious orientations, which they created by subjecting three scales from their own Religious Life Inventory, an orthodoxy scale, and the Allport and Ross (1967) measure to a higher order factor analysis. Together these scales formed three factors, which they labeled Religion as a Means, Religion as an End, and Religion as a Quest. The Religion as a Means

scale is essentially the same as the Allport and Ross extrinsic scale, emphasizing a utilitarian religious practice. The Religion as an End scale includes weighted scores from Allport and Ross's (1967) intrinsic scale, a doctrinal orthodoxy scale, and the Religious Life Inventory subscales that tap issues of religious influence and commitment. Finally, and most originally, Religion as a Quest assesses a self-critical, doubt-valuing, and reflective orientation to religiosity. The quest orientation was thus an attempt to measure openness to change and a nondogmatic approach to religion that Batson and Ventis felt was missing from the Allport and Ross approach. In several studies Batson and colleagues have presented evidence that the quest orientation is associated with less prejudice and rigidity and more responsiveness to the true needs of others (e.g., Batson & Gray, 1981; Batson, Naifeh, & Pate, 1978; Batson & Raynor-Prince, 1983). However, other authors have been critical of Batson's attempts at revisionism, citing inconsistent construct validity (e.g., Watson, Morris, & Hood, 1989) and failure of the quest scale to reflect religiosity (Donahue, 1985). Despite these criticisms, it is important to note that Batson and Ventis's (1982) critique of Allport and Ross (1967) is not necessarily invalidated by problems in their own alternative measures of religious orientation.

The self-determination theory conceptions of introjected and integrated styles of internalization bear both similarities and differences with respect to these previous concepts and measures. Both Allport and Ross's (1967) intrinsic and Batson and Ventis's Religion as an End constructs concern a strong commitment to religious doctrines and a personal valuing of religious practices. They would therefore be expected to strongly correlate with what is herein operationalized as identification. However, whereas our concept of identification pertains specifically to personal valuing and belief as the basis of one's participation, the Religion as an End and intrinsic constructs include other issues, such as one's having influential religious models or endorsing specific orthodoxies. Some of these elements can also accompany other styles of being religious, and thus their inclusion reduces predictive and conceptual utility.

Parallels between Allport and Ross's (1967) extrinsic and Batson and Ventis's (1982) Religion as a Means orientations with introjection are also evident, albeit with subtle differences. Both the extrinsic and means constructs entail the conception of religion not only as a way of getting certain goods or rewards for participation but also as something relatively noncentral within the individual's value system. Items such as "Although I believe in my religion. I feel there are many more important things in my life" reflect the fact that the measurement of the extrinsic and means-oriented religion confounds both lack of commitment and a utilitarian-oriented approach to religion. By contrast, our measure of introjection more specifically assesses self- and other approval as the reasons why a person embraces religion. It is then left as an empirical (rather than definitional) matter whether such approval motives underlying internalization are associated with a less full commitment.

Less parallel either conceptually or empirically are our new scales and the Religion as a Quest orientation forwarded by Batson and Ventis (1982). We would argue that although Batson intended his Quest construct to measure a self-critical, open, and flexible religious orientation, it instead largely measures religious uncertainty, doubt, and to a great extent a lack of religiosity. We thus expect it to be unrelated to either introjection or identification because it reflects an absence of internalization. Furthermore, we expect the quest orientation to be negatively associated with indices of active participation in religious practices insofar as it primarily represents a distancing of oneself from specific beliefs. It should be noted, however, that neither of our new scales replaces Batson and Ventis's scale or directly measures what they intended to assess, that is, a self-reflective religious seeking that is not bound by orthodoxy.

In sum, our new measures of identification and introjection are not so much theoretically antithetical to previous scales as they are more specific in what they measure and different in terms of the theoretical basis from which they are derived. They are thus intended to add to the understanding of the meaning of these previous approaches to religiosity by assessing religious motivations using new questions and theoretical linkages.

Internalization of Religion and Its Psychological Correlates

One of the most important questions in the psychology of religion is how religious orientations relate to mental health. Psychological theories have sometimes assumed that religion is a regressive or delusionary phenomenon (e.g., Ellis, 1985: Freud, 1927), whereas others have construed it as a positive striving often conducive to psychological integration (Fowler, 1981; James 1902/1958; Jung, 1960). The study of religious orientations has suggested that religiosity per se cannot be meaningfully related to psychological health or pathology without considering how a person is religious. Bergin (1991), reviewing the extant literature, recently concluded that, in general, there is "no correlation between religion and mental health" (p. 399). However, he also suggested that the overall null relationship is a function of the fact that divergent orientations to religion are differentially correlated with psychological outcomes. For example, in a study of Mormon students, Bergin, Masters, and Richards (1987) found Allport and Ross's (1967) intrinsic dimension to be positively associated with a number of indices of mental health, whereas the extrinsic dimension, when related to such variables, tended to be negatively correlated. Such research underscores his point that religiosity is multidimensional and that different ways of being religious have divergent

In line with self-determination theory (Deci & Ryan, 1985; Ryan, 1993) we also predict that introjection versus identification with respect to religion will be differentially associated with well-being and mental health. Deci and Ryan argued that introjection, in which there is only a partial assimilation of beliefs or behavioral prescriptions, is an internally controlling style of regulation characterized by experiences of conflict and pressure. It thus should be associated with a number of negative psychological outcomes, including self-esteem vulnerabilities (Ryan, 1982), anxiety (Ryan & Connell, 1989), and lack of self-cohesion and integration (Deci & Ryan, 1991; Ryan, 1991, 1993). Identification on the other hand should conduce toward greater identity stability, self-esteem, and a relative absence of

mental health difficulties. Although these theoretical predictions have been widely explicated, they are only beginning to be empirically examined. The study of religious internalization appears to be a ripe area for testing these speculations, because religion is both a central value and one that appears to be functionally implicated in studies of mental health (Bergin, 1991). Accordingly, we expect our two types of internalization to show divergent and largely opposing relations to adjustment and mental health, with identification associated with more positive and introjection more negative outcomes.

In a more exploratory vein, we also attempt to replicate the pattern of findings that Bergin (1991) has shown to be associated with Allport and Ross's (1967) intrinsic and extrinsic religiosity, namely, that intrinsic orientations are positively, and extrinsic negatively, related to mental-health-relevant outcomes. Similarly, we explore the possibility that Batson and Ventis's (1982) end and means orientations will relate to mental health indices in a corresponding way. Finally, we expect that the quest orientation will not be associated with more positive mental health outcomes insofar as we do not believe that it offers the functional values represented in intrinsic religiosity or identification.

In the current studies we examine self-actualization and selfesteem outcomes as positive indicators of well-being. Self-actualization, defined as the "discovery of the real self and its expression and development" (Jones & Crandall, 1986, p. 63), is particularly relevant, because in our view introjection represents regulation that is inauthentic or not self-determined, whereas identification represents greater congruence with the self (Ryan, 1993). We examine self-esteem because we believe that religious practices and values, if fully internalized, may result in an enhancement of one's feelings of worth and sense of a solid identity. We thus choose subscales reflecting self-worth and identity integration from a well-validated multidimensional measure of self-esteem (O'Brien & Epstein, 1987). Finally, in two samples we correlate religious orientations with a mental health survey, because the functional value of religion ought to be evidenced in its relationship to adjustment outcomes.

It is noteworthy that, although we conceptualize a continuum of internalization to be relevant to all religious development, the focus of the present studies is exclusively on Christian (i.e., Catholic and varied Protestant) denominations. We chose Christians because (a) they were readily available, (b) they have been the focus of most of the past research on religious orientations with which we compare our current approach, and (c) our pilot survey and interview studies suggested to us that both introjection and identification are common forms of motivation underlying Christian practices. Thus, Christians represented both theoretically and substantively relevant subjects, as well as a population of convenience in the United States.

To summarize, our investigation focuses on two types of religious internalization that are theoretically derived from self-determination theory. We proceed by constructing two scales measuring introjection and identification and presenting evidence for their validity in three varied Christian samples vis-ávis existing measures of religious orientation and (in two samples) indices of mental health. Finally, we compare a fourth sample of evangelical Christian youth with matched nonevan-

gelical Christian controls, predicting that evangelicals will be higher on both identification and introjection. We also examine relations within the evangelical sample between introjection and identification and measures of self-esteem and self-actualization.

Method

Subjects

Sample 1 consisted of 105 undergraduate students (31 men and 74 women) at a secular university who identified themselves as Christians. Subjects completed a survey of religious and orthodoxy measures. A subsample also completed additional measures as specified in the results section. The mean age of these participants was 20.5. Participation in all or part of this specific survey was voluntary, and subjects who were not Christians or who did not wish to participate were offered alternative activities. Subjects were assured of the confidentiality of their responses.

Sample 2 consisted of 151 students (47 men and 104 women) from two Christian colleges—a Protestant Christian college with a Free Methodist orientation (n = 84) and a Catholic university with a Franciscan orientation (n = 67)—completed all measures of religious orientation, mental health, and self-esteem on a volunteer basis. The mean age for these participants was 22.5. Subjects were given the surveys by faculty at the respective schools. Instructions assured subjects as to confidentiality.

Sample 3 consisted of 41 subjects who were drawn from an adult Sunday school class at an independent Protestant church located in a suburb of a major city. The mean age of these participants was 35. Subjects participated on a volunteer basis, and responses were confidential. They completed all measures of orientation, mental health, and self-esteem.

Sample 4 consisted of 342 male (149) and female (184) participants in "summer evangelical projects" in New York City. Their mean age was 17.5, with a range from 13 to 23. Denominationally, 47% classified themselves as baptists, 27% claimed nondenominational status, and the remainder reported other denominational affiliations. The subjects were brought to New York City from various parts of the country (primarily midwestern and northeastern states) by various parachurch organizations and generally were engaged in 1- to 2-week projects consisting primarily of handing out pamphlets and recruiting passersby for seminars or discussions.

A subset (n = 105) of evangelical subjects were drawn at random to establish a sample matched for age and sex with Sample 1. The purpose of this comparison group was to test for differences in introjection and integration between this behaviorally engaged group and their Christian counterparts from a secular college.

Measures

Self-Esteem and Mental Health

Multidimensional Self-Esteem Inventory (MSEI). The MSEI (O'Brien & Epstein, 1987) is a 116-item self-report measure designed to assess 11 types of self-esteem. All samples completed two subscales: global self-esteem and identity integration. Each consists of 10 items scored on a 5-point Likert scale assessing the degree to or frequency with which an item applies to a respondent. Sample items include "I nearly always have a highly positive opinion of myself" (global) and "Sometimes it's hard for me to believe that the different aspects of my personality can be part of the same person" (identity integration, reverse keyed). Scoring consists of obtaining a sum of subscale items for each subscale. Internal consistency coefficients (Cronbach alphas)

have been found to be greater than .80 for both subscales. Test-retest reliability has been greater than .75 for the two subscales over a 1-month interval (O'Brien & Epstein, 1987). Both factor analytic findings and previous research (e.g., Ryan & Lynch, 1989) support the use of separate subscales for research purposes.

Self-Actualization Index. The Self-Actualization Index (Jones & Crandall, 1986) is a 15-item self-report measure designed to assess one's ability to fulfill one's potential. Sample items include "I do not feel ashamed of any of my emotions" and "In general I know who I am and where I am going." Respondents answer using a 4-point Likert-type scale (1 = disagree and 4 = agree). The internal consistency ($\alpha = .65$) and test-retest reliabilities over a 12-day interval (r = .69) were acceptable (Jones & Crandall, 1986). Validity has been demonstrated by a positive correlation (r = .67) with the Personal Orientation Inventory (Shostrom, 1966), a more extensive measure of self-actualization. This measure was completed by Samples 2, 3, and 4.

General Health Questionnaire (GHQ). The GHQ (Goldberg & Hillier, 1979) is a measure originally developed as a screening device for detecting the presence of nonpsychotic psychiatric disorders. Subjects report recent symptom frequency for 28 items using a 4-point Likert-type scale. The scale contains four 7-item subscales: somatic symptoms, anxiety, depression, and social dysfunction. Concurrent validity for GHQ subscales has been established through their significant associations with independent psychiatric assessments using the Clinical Interview Schedule (Goldberg, Cooper, Eastwood, Kedward, & Shepherd, 1970). This measure was completed by Samples 2 and 3.

Marlowe-Crowne Social Desirability Scale. The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) is a 33-item self-report measure that assesses the tendency of a respondent to display social desirability-oriented responses. Respondents reply either true or false to items such as "I never hesitate to go out of my way to help someone in trouble" and "I have never intensely disliked anyone." The total score represents the number of socially desirable items agreed to by the respondent. Both 1-month test-retest (r = .88) and the Kuder-Richardson Formula 20 (K.R-20) index of internal consistency (.88) are high. Scale validity has been demonstrated by a positive relationship with need for approval (Marlowe & Crowne, 1961) and a likelihood of responding to social influence (Strickland & Crowne, 1962). This measure was taken by Samples 2 and 3.

Religious Orientation Scales

Religious Orientation Scale. The Religious Orientation Scale (Allport & Ross, 1967) is a 20-item measure designed to assess one's orientation toward religion on both an intrinsic and extrinsic dimension. Subjects report agreement or disagreement on a 9-point Likert-type scale (1 = strongly disagree and 9 = strongly agree). A summary score is obtained for each dimension. Alphas for three denominational groups obtained by Thompson (1974) ranged from .93 to .81 for the intrinsic subscale and from .82 to .69 for the extrinsic scale. This measure was completed by Samples 1, 2, and 3.

Doctrinal Orthodoxy Scale. The Doctrinal Orthodoxy Scale (Batson, 1976) is a 12-item measure of agreement with statements of Christian orthodoxy. Sample items of the measure include "I believe in the existence of a just and merciful personal God" and "I believe Jesus Christ is the Divine Son of God." Subjects report agreement or disagreement with each item on a 9-point Likert-type scale (1 = strongly disagree and 9 = strongly agree). The scale has shown positive correlations with Allport's intrinsic and Batson's Religion as an End scales, negative correlations with Batson's Religion as a Quest scale, and no significant relations with Batson's Religion as a Means scale. This measure was taken by Samples 1, 2, and 3.

Religious Life Inventory. The Religious Life Inventory (Batson & Ventis, 1982) is a 27-item measure containing three subscales: external,

internal, and interactional. These subscales were developed to be used as component indices for the assessment of means, end, and quest orientations (described below). External items measure the extent to which a person's social environment influenced his or her personal approach to religion. Internal items tap the idea that religion results from internal needs and is characterized by a high degree of certainty. Items to some extent reflect the true believer (Hoffer, 1951) conceptualization. Finally, the interactional scale is intended to assess the degree to which religiosity is characterized by open-ended and self-critical searching. Construct validity for these scales is presented in Batson and Ventis (1982). This measure was taken by Samples 1, 2, and 3.

Batson and Ventis (1982) Alternative Orientations: Means, End, and Quest. Batson and Ventis applied a higher order factor analytic strategy using subscales from the Religious Life Inventory, the Doctrinal Orthodoxy Scale, and the Religious Orientation Scale (Allport & Ross, 1967) to develop three alternative measures of religious orientation, namely, means, end, and quest orientations. These orientation scores were computed in accord with procedures detailed by Batson and Ventis (1982), which include the following weighting formulas: Religion as a Means = $(9 \times \text{extrinsic}) + (-2 \times \text{intrinsic}) + (3 \times \text{external})$, Religion as an End = $(3 \times \text{intrinsic}) + (3 \times \text{external}) + (3 \times \text{orthodoxy})$, and Religion as a Quest = $(9 \times \text{interactional}) + (-2 \times \text{orthodoxy})$. The basis of their scale construction efforts are reported in Batson and Ventis (1982), and construct validities are reported in other research by Batson and colleagues.

Belief in Personal Control Scale. The Belief in Personal Control Scale (Berrenberg, 1987) is designed to test different aspects of locus of control. The scale is divided into three subscales (external control, exaggerated internal control, and God-mediated control). Because of our focus on issues of religious orientation, only the God-mediated control subscale was used. Although the use of this subscale separately is unorthodox, it seemed reasonable given its factor analytic independence, high internal consistency, and high test-retest reliabilities (.97, .97, and .90, for 1-, 2-, and 4-week intervals, respectively). This subscale contains 7 items assessing the extent to which the respondent believes he or she can control outcomes by enlisting God's help. It is thus a form of internal locus of control, albeit through a "powerful other." Sample items include "I rely on God to control my life" and "By placing my life in God's hands, all things are possible." Participants respond on a 5point scale (1 = never true and 5 = always true), and items are added for a summary score. The scale has shown discriminant validity in comparisons with Rotter's (1966) locus of control scale (Berrenberg, 1987). Samples 2 and 3 completed this subscale.

Christian Religious Internalization Scale (CRIS). The CRIS is a 12-item measure designed to assess the degree of self-determination for Christian beliefs and practices. The measure has a format adapted from a similar measure developed by Ryan and Connell (1989) for the domains of academic achievement and prosocial behavior. Respondents indicate the degree to which various motives would be salient to them if they were to perform a religious behavior, thus measuring the orientation rather than level of one's motivation (Ryan & Connell, 1989). Responses are made on a 4-point scale (1 = not at all true and 4 = very true). Sample items on this scale include "When I turn to God, I most often do it because I enjoy spending time with Him" (identified item) and "A reason I think praying by myself is important is because if I don't, God will disapprove of me" (introjected item).

Several pilot studies of a scale development nature were accomplished in preparation for the current research. We began with a larger (n = 36) item pool, which was administered to include two large Christian college samples and adult subjects drawn from a Christian counseling center. These samples were used for factor and internal consistency analyses and to examine various structural alternatives (e.g., simplex vs. factor-based scoring). These preliminary studies indicated a reliable two-factor structure to items in the pool and the possibility for

creating a brief version that was ultimately used in the current research. Properties of the CRIS are detailed in the Results section.

Results

Sample 1 Analyses

This sample, consisting of 105 self-identified Christian students from a secular university, was used to examine (a) the internal structure of the internalization questionnaire, (b) relations between subscales assessing types of internalization and variables relevant to religious participation, (c) relations of our new scales with constructs derived from Allport and Ross (1967) and Batson and Ventis (1982), and (d) comparisons with an evangelical sample (Sample 4).

Table 1 presents a factor analysis (varimax rotation) of the 12 internalization items. Two factors emerged corresponding to the two types of internalization we call introjection and identification. Both subscales had alpha coefficients of .82 in this sample, revealing adequate reliability. Two subscale scores were created for each subject representing the mean of the six items loading on each factor. Examination of the correlation between these two subscale scores revealed no significant relation (r = .07, ns). Finally gender differences in subscale scores were examined, although no significant differences on either subscale were detected. Subsequent analyses collapsed across sex.

Eighty subjects in this sample also completed the Religious Orientation Scale, the Religious Life Inventory, an orthodoxy scale, and a measure of church attendance. Table 2 presents the correlations between introjection and identification scores and variables derived from these measures. Results show a strong relation between identification and the intrinsic and end orientations. Moderate negative correlations were obtained between identification and the extrinsic, means, and quest orientations.

Finally, higher identification scores were associated with greater church attendance and doctrinal orthodoxy.

Introjection was, as hypothesized, positively related to both extrinsic and means orientations but was unrelated to intrinsic, end, and quest orientations. Introjection was also uncorrelated with orthodoxy. In this sample introjection was positively but nonsignificantly associated with church attendance.

Sample 2 Analyses

Sample 2 (n=151) represents a combined population of Catholic and Protestant students attending nonsecular institutions. It was expected that this population would be higher on doctrinal orthodoxy (Batson, 1976) than Sample 1. This descriptive hypothesis was confirmed, t(255) = 22.09, p < .001. There were, however, no differences in orthodoxy between Protestant and Catholic students within Sample 2.

Table 1 presents factor analytic results for CRIS items, again using varimax rotation. Results are similar to those obtained in Sample 1, with six items falling on each of two factors representing introjection and identification. Alpha coefficients were .82 and .69, respectively. Subscale scores were created using the mean of the items falling on each factor. There was no significant correlation between these two subscales (r = .00, ns). Gender and religion (Catholic vs. Protestant) differences within Sample 2 were also examined. However, as in Sample 1, no differences between male and female subjects were found, nor were there differences between Catholics and Protestants on either introjection or identification.

Table 2 reports relations between CRIS subscale scores and dimensions from the Allport and Ross (1967) and Batson and Ventis (1982) scales. The pattern of results was similar to that obtained in Sample 1, with identification strongly and positively correlating with intrinsic and end orientations and moderately negatively with extrinsic and means orientations. Identifi-

Table 1
Factor Analysis (Varimax Rotation) of the Items From the CRIS in a Sample of Christian Students From a Secular College (Sample 1), Students From a Christian College (Sample 2), and Evangelical Teenagers (Sample 4)

	Sample 1 $(n = 105)$		Sample 2 $(n = 151)$		Sample 4 $(n = 342)$	
Abbreviated item content ^a		Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
Pray because I enjoy it	.84	.08	.72	04	.56	01
Turn to God because it is satisfying	.67	12	.86	10	.76	.00
Turn to God because I enjoy spending time with Him	.79	11	.79	19	.68	.01
Share my faith because God is important to me and I'd like others						
to know Him too	.69	.20	.67	.14	.70	02
Pray because I find it satisfying	.82	.09	.82	06	.75	06
Attend church because by going I learn new things	.57	.26	.61	.17	.58	.17
Share my faith because I want other Christians to approve of me	02	.73	07	.72	.31	.46
Attend church because others would disapprove if I didn't	36	.63	12	.70	24	.59
Turn to God because I'd feel guilty if I didn't	.13	.69	03	.63	.17	.67
Pray because God will disapprove if I don't	13	.75	12	.52	.09	.63
Attend church because one is supposed to go	.12	.64	.14	.57	.03	.59
Actively share my faith because I'd feel bad about myself if I didn't	.24	.52	.21	.61	20	.66
Eigenvalue of factor	3.49	2.80	3.50	2.47	3.00	2.20
% of variance	29.1	23.3	29.1	20.5	25.0	18.3

Note. Boldfaced data indicate loading of item on its target factor. CRIS = Christian Religious Internationalization Scale.

Actual items and administration format can be obtained from Richard M. Ryan.

Table 2
Correlations Between CRIS Identification (ID) and Introjection (IN) Subscale Scores and Other Measures of Religiosity and Social Desirability From Christian Students From a Secular College (Sample 1), Students From a Christian College (Sample 2), and Members of a Protestant Church (Sample 3)

	Sample 1 $(n = 80)$		Sample 2 $(n = 151)$		Sample $3 (n = 42)$	
Measure	ID	IN	ID	IN	ID	IN
Religious Orientation Scale						
Intrinsic	.77**	.03	.65**	05	.33*	29
Extrinsic	31**	.31**	35**	.29**	54**	.10
Batson's Alternative Orientations						
Religion as a means	35**	.34**	28 **	.40**	46 **	.17
Religion as an end	.78**	.12	.66**	.29**	.22	06
Religion as a quest	33**	.01	08	.08	24	.10
Doctrinal orthodoxy	.66**	03	.35**	.29**	12	02
Church attendance	.54**	.18	.36**	.24**	.22	24
God-mediated locus of control			.54**	.19*	.43**	07
Social desirability			.15	19*	.14	13

Note. CRIS = Christian Religious Internalization Scale.

cation was unrelated to Religion as a Quest in this sample. Identification was also significantly related to self-reported church attendance and orthodoxy. Introjection was significantly and positively associated with extrinsic and meansoriented religion but unrelated to the intrinsic orientation. However, a significant positive correlation did emerge in this sample between Batson and Ventis's end orientation and introjection. Introjection was also related to both attendance and orthodoxy. Table 2 also presents the correlations of identification and introjection with God-mediated locus of control and a widely used measure of social desirability. Identification was strongly related to the locus of control measure, whereas introjection was more weakly, but significantly, related as well. Social desirability was unrelated to identification and was negatively related to introjection.

Relations between religious orientations and types of religious internalization and mental health outcomes, self-esteem, and self-actualization are examined in Table 3. Identification was significantly associated with all of these outcomes, correlating positively with global self-esteem, identity integration, and self-actualization and negatively with the GHQ total score and subscale scores for depression, anxiety, social dysfunction, and somatization. Also as revealed in Table 3, introjection was negatively associated with global self-esteem, identity integration, and self-actualization and positively associated with the GHQ total score and its anxiety, depression, and somatization subscales.

Table 3 also contains results for orientation scores derived from Allport and Ross (1967) and Batson and Ventis (1982). The intrinsic and end subscales from these respective surveys were correlated systematically with mental health and adjustment outcomes, whereas there were few associations for the extrinsic, means, or quest dimensions. The exception to this latter statement is that self-actualization was negatively associated with an extrinsic and means orientation to religion.

Sample 3 Analyses

A smaller sample (n = 42) of adult members of a protestant church was given the same measures administered to subjects in Sample 2. This church sample was comparable in orthodoxy with Sample 2, t(188) = 1.43, ns, but more orthodox than Sample 1, t(147) = 12.83, p < .001. This sample also differed considerably from the other samples in age, income, and other demographics because it consisted of both adults (mean age = 35) and nonstudents. The sample size was insufficient for factor analytic study, but indices of internal consistency for identification and introjection suggested adequate reliability ($\alpha = .79$ and .64, respectively). In this sample, identification and introjection were marginally correlated with one another (r = .30, p < .10).

Table 2 presents correlations between the various orientations scales and the internalization variables. A pattern of relations similar to those previously observed in Samples 1 and 2 was obtained, although relations were less strong in magnitude and significance levels. Identification was significantly and positively associated with the intrinsic orientation of Allport and Ross (1967) and with God-mediated locus of control. Identification related negatively to extrinsic and means orientations. Introjection was not associated with other orientation scores.

Table 4 examines the orientation and internalization indices in relation to adjustment outcomes. A number of significant correlations are apparent, with introjection being associated with more negative outcomes on global self-esteem, identity integration, self-actualization, GHQ mental health total score, and GHQ subscale scores for anxiety, depression, and social dysfunction. Identification was associated with more positive mental health on several variables including identity integration, self-actualization, GHQ total score, and GHQ subscale scores for depression and anxiety. The orientation scores from Allport and Ross (1967) and Batson and Ventis (1982) were also examined in relation to these outcomes. The one significant

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

Table 3 Correlations of Three Assessments of Religious Orientations With Mental Health and Self-Esteem Outcomes in a Christian College Sample (N = 151)

	CRIS		Allport and Ross		Batson and Ventis		
Measure	Identification	Introjection	Intrinsic	Extrinsic	Means	End	Quest
General Health							
Questionnaire (GHQ)							
Anxiety	− .21*	.16*	−.1 6*	.05	.05	19 *	.13
Depression	36 **	.16*	−.23 **	.08	.06	24**	.10
Somatization	21*	.20*	15	.08	.07	15	.08
Social dysfunction	31**	.15	15	04	03	14	04
GHO total	31 **	.20*	20*	.04	.03	22*	.09
Multidimensional Self-Esteem Inventory							
Global self-esteem	.38**	25**	.25**	12	12	.24**	04
Identity integration	.34**	22**	.21**	14	14	.22*	05
Self-actualization	.40**	27 **	.43**	34**	34**	.28**	.08

Note. CRIS = Christian Religious Internalization Scale.

correlation that emerged was between intrinsic orientation and identity integration.

Sample 4 Analyses

Sample 4 consisted of 342 Christian youths who had gathered for summer evangelical projects in New York. In addition to taking the CRIS survey, these subjects also completed the Self-Actualization Index (Jones & Crandall, 1986) and the global self-esteem and identity integration subscales of the MSEI.

Preliminary analyses examined sex and age differences within this sample on the CRIS. Results revealed age-related effects on both introjection and identification, with older subjects having higher integrated orientation scores, F(1, 321) = 20.81, p < .001, and lower introjection scores, F(1, 321) = 6.12, p < .05. There were no sex differences, nor any Age × Sex

interactions on either introjection or identification. The correlation between introjection and identification was not significant (r = .01, ns).

Correlations between CRIS scores and the dependent measures of self-actualization and self-esteem are reported in Table 5. Results show that, within the evangelical group, introjection was uncorrelated with these variables, whereas identification was positively associated with self-actualization and self-esteem.

It was hypothesized that youths volunteering to engage in evangelical work would show greater religious internalization than subjects from a less outwardly involved sample. Specifically, we predicted that evangelical youths would report both higher introjection and identification than a comparable sample drawn from a secular university. To test these hypotheses 105 subjects matched for age and sex with subjects from Sample 1 were drawn from the evangelical group (Sample 4). Sample 4

Table 4
Correlations of Three Assessments of Religious Orientations With Mental Health and Self-Esteem Outcomes in a Protestant Church Sample (N = 42)

	CRIS		Allport and Ross		Batson and Ventis		
Measure	Identification	Introjection	Intrinsic	Extrinsic	Means	End	Quest
General Health							
Questionnaire (GHQ)							
Anxiety	39*	.55**	28	.18	.16	22	.17
Depression	33*	.60**	13	.09	.09	04	.15
Somatization	11	.10	.12	03	03	.08	.27
Social dysfunction	27	.32*	24	.18	.18	19	01
GHQ total	37*	.54**	19	.14	.13	13	.19
Multidimensional Self-Esteem Inventory							
Global self-esteem	.28	50**	.17	10	12	.10	18
Identity integration	.43**	39*	.36*	22	25	.23	30
Self-actualization	.33*	49**	.17	17	23	07	15

Note. CRIS = Christian Religious Internalization Scale.

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

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

Table 5 Correlations Between CRIS Identification and Introjection Subscale Scores and Self-Actualization and Self-Esteem in an Adolescent Evangelical Sample

	CR	IS
Measure	Identification	Introjection
Self-actualization	.38*	04
Identity integration	.25*	04
Global self-esteem	.15*	03

Note. n = 342. CRIS = Christian Religious Internalization Scale. * p < .01.

was large enough to produce such matching, because same-sex and same-age subjects corresponding to each of the participants in Sample I were available. The matching procedure was done by research assistants unaware of CRIS scores.

Analyses of variance revealed support for both hypotheses. The evangelical youths scored higher than secular college Christians on both introjection, F(1, 202) = 36.27, p < .001, and identification, F(1, 202) = 109.78, p < .001. Total score means on introjection were 11.13 (SD = 3.56) and 13.88 (SD = 2.88) for subjects from Sample 1 and their matches from Sample 4, respectively. Corresponding means for identification were 17.88 (SD = 3.96) and 22.42 (SD = 1.81).

Discussion

Internalization refers to the processes by which cultural beliefs and practices are adopted by the individual and then enacted in the absence of immediate external contingencies or constraints (Ryan, Connell, & Deci, 1985). Religious beliefs and activities represent a particularly interesting domain in which to examine internalization because they vary culture to culture and are often central to participating individuals' systems of values and social identities. It is the centrality of religion in cultural and psychological life that led to the hypothesis that the manner in which it is internalized would have implications for mental health and adjustment.

In this research two types of internalization were examined, introjection and identification. Both the definitions and operationalization of these two types of internalization were derived from self-determination theory (Deci & Ryan, 1985, 1991; Ryan, 1993), which describes internalization in terms of an underlying continuum of autonomy. In this conception introjection represents a form of internalization in which beliefs and practices are maintained through contingent self-approval, guilt, and esteem-related anxieties. As a result introjection is theorized to be associated with conflict and pressure. Identification represents a form of internalization in which there is a more internal perceived locus of causality (deCharms, 1968) or sense of volition with regard to the adopted practices and beliefs. In identification, the individual experiences more personal value for the activities and sees them as emanating from himself or herself to a greater extent than in introjection.

Introjection and identification were operationalized with a brief questionnaire that formed two distinct and reliable factors. These factors were systematically related to existing measures of religious orientation, namely, those of Allport and Ross (1967) and Batson and Ventis (1982). Correlational studies in three Christian samples provided evidence that identification was closely associated with Allport and Ross's dimension of intrinsic religiosity and with what Batson and Ventis called the Religion as an End orientation. Introjection was moderately related to extrinsic religiosity and Religion as a Means but was suggested to measure something more specific than either of these constructs. Batson and Ventis's Religion as a Quest was unrelated to either type of internalization. Both identification and introjection were generally associated with greater church attendance and doctrinal orthodoxy, though this was particularly true of identification.

Substantial evidence was also obtained linking these two forms of internalization with mental health and well-being. Identification tended to be positively associated with psychological adjustment, whereas introjection, when predictive, related negatively to such outcomes. This pattern of findings supports the arguments of Bergin (1991), who suggested that religiosity per se is unrelated to psychological well-being but that different types of religiosity can either facilitate or inhibit mental health. We conclude, along with Bergin, that if one is religious, it matters how one is religious.

Batson and Ventis (1982) criticized Allport and Ross's (1967) intrinsic orientation construct as failing to distinguish between dogmatic and authentic religiosity. A similar critique could be leveled against our concept of identification. Our items tapping identification largely reflect both a commitment to and a positive embracing of Christian practice, but it is not clear from our data that this embrace is particularly reflective or self-critical. We hope that further study of religiosity will find ways of further distinguishing the "true believer" from the integrated, authentic participant. Despite these caveats, religiosity characterized by identification seems to conduce toward mental health and thus appears to provide the positive functions often attributed to religion, whereas introjected religiosity does not.

As previously noted, this study was restricted to Christians, and no claim is made for generalizability of these findings to other religions. We would argue that different types of internalization are potentially measurable (through different methods) in most religious cultures, and we are currently exploring this possibility. However, introjection in the form of guilt and approval dynamics is readily observed in Christianity, which made this an apt religion for the current conceptualization.

Another limitation of this research is its largely correlational nature. That different types of religiosity are associated with different outcomes does not confirm that these outcomes are caused by them, nor does such a simple model seem theoretically compelling. We suggest that the types of social environments that conduce toward introjection versus identification may also impact on psychological well-being in other ways and that this may account for some of the variance in the relations between CRIS and mental health variables. In addition, we suspect that the influence of religious orientations on adjustment is greater the more central religion is in a person's life. The interaction between centrality and orientation in the prediction of functional outcomes awaits further study.

Clearly, there is much more to be explored in this realm. Part

of the purpose of studying religiosity through a new theoretical lens is not so much to replace or contradict existing work on religious orientations but rather to bring the additional implications of self-determination theory to bear on this important domain of cultural life. Because self-determination theory specifies the social—environmental factors that facilitate internalization, as well as some characteristics that accompany variations in types of internalization, findings that support its application to religion also implicate new directions for inquiry into the transmission and functions of various types of religious motivation.

References

- Allport, G. W. (1950). The individual and his religion. New York: Macmillan.
- Allport, G. W. (1959). Religion and prejudice. Crane Review, 2, 1-10.
 Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5, 432-443.
- Batson, C. D. (1976). Religion as prosocial: Agent or double agent? Journal for the Scientific Study of Religion, 15, 29-46.
- Batson, C. D., & Gray, R. A. (1981). Religious orientation and helping behavior: Responding to one's own or to the victim's need? *Journal of Personality and Social Psychology*, 40, 511-520.
- Batson, C. D., Naifeh, S. J., & Pate, S. (1978). Social desirability, religious orientation, and racial prejudice. *Journal for the Scientific Study of Religion*, 17, 31-41.
- Batson, C. D., & Raynor-Prince, L. (1983). Religious orientation and complexity of thought about existential concerns. *Journal for the Scientific Study of Religion*, 22, 38-50.
- Batson, C. D., & Ventis, W. L. (1982). The religious experience: A socialpsychological perspective. New York: Oxford University Press.
- Becker, E. (1962). The birth and death of meaning. New York: Free Press.
- Berger, P. L. (1969). A rumor of angels. Garden City, New York: Doubleday.
- Bergin, A. E. (1991). Values and religious issues in psychotherapy and mental health. *American Psychologist*, 46, 394-403.
- Bergin, A. E., Masters, K. S., & Richards, P. S. (1987). Religiousness and mental health reconsidered: A study of an intrinsically religious sample. *Journal of Counseling Psychology*, 34, 197–204.
- Berrenberg, J. L. (1987). The Belief in Personal Control Scale: A measure of God-mediated and exaggerated control. *Journal of Personality Assessment*, 51, 194–206.
- Blais, M. R., Sabourin S., Boucher, C., & Vallerand, R. J. (1990). Toward a motivational model of couple happiness. *Journal of Personality and Social Psychology*, 59, 1021-1031.
- Crowne, D. P., & Marlowe, D. (1964). The approval motive. New York: Wiley.
- deCharms, R. (1968). Personal causation: The internal affective determinants of behavior. San Diego, CA: Academic Press.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), Nebraska Symposium on Motivation: Perspectives on motivation (Vol. 38, pp. 237–288). Lincoln: University of Nebraska Press.
- Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology*, 48, 400-419.
- Ellis, A. (1985). The case against religion: A psychotherapist's view, and the case against religiosity. Austin, TX: American Atheist Press.

- Fowler, J. W. (1981). Stages of faith: The psychology of human development and the quest for meaning. New York: Harper & Row.
- Freud, S. (1927). The future of an illusion. Standard Edition, 21, 5-56. Fromm, E. (1950). Psychoanalysis and religion. New Haven, CT: Yale University Press.
- Goldberg, D. P., Cooper, B., Eastwood, M. R., Kedward, H.B., & Shepherd, M. (1970). A standardized psychiatric interview suitable for use in community surveys. *British Journal of Preventive and Social Medicine*, 24, 18-23.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139-145.
- Goodenough, E. R. (1986). The psychology of religious experiences. Lanham, MD: University Press of America.
- Hoffer, E. (1951). The true believer. New York: Harper.
- Hoge, D. R. (1972). A validated intrinsic religious motivation scale. Journal for the Scientific Study of Religion, 11, 369-376.
- Hoge, D. R., & Carroll, J. W. (1978). Determinants of commitment and participation in suburban Protestant churches. *Journal for the Scientific Study of Religion*, 17, 107-127.
- James, W. (1958). The varieties of religious experience. New York: New American Library. (Original work published 1902)
- Jones, A., & Crandall, R. (1986). Validation of a short index of self-actualization. Personality and Social Psychology Bulletin, 12, 63-73.
- Jung, C. G. (1960). On the nature of the psyche. Princeton, NJ: Bollingen.
- Kelman, H. C. (1958). Compliance, identification and internalization, three processes of attitude change. *Journal of Conflict Resolution*, 2, 51-60.
- King, M. B., & Hunt, R. A. (1972). Measuring the religious variable: Replication. Journal for the Scientific Study of Religion, 11, 240-251.
- Kirkpatrick, L. A. (1989). A psychometric analysis of the Allport-Ross and Feagin measures of intrinsic-extrinsic religious orientation. Research in the Social Scientific Study of Religion, 1, 1-31.
- Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1974). Taxonomy of educational objectives, handbook: Volume 2. Affective domain. New York: David McKay.
- Marlowe, D., & Crowne, D. P. (1961). Social desirability and response to perceived situational demands. *Journal of Consulting Psychology*, 26, 79–83
- Meissner, W. W. (1981). *Internalization in psychoanalysis*. Madison, CT: International Universities Press.
- O'Brien, E. J., & Epstein, S. (1987). The Multidimensional Self-Esteem Inventory. Odessa, FL: Psychological Assessment Resources.
- O'Connor, B. P., & Vallerand, R. J. (1990). Religious motivation in the elderly: A French-Canadian replication and an extension. *Journal of Social Psychology*, 130, 53-59.
- Parsons, T. (1951). The social system. Glencoe, IL: Free Press.
- Perry, W. G. (1970). Forms of intellectual and ethical development in the college years. New York: Holt, Rinehart & Winston.
- Rotter, J. (1966). Generalized expectancies for internal vs. external control of reinforcement. *Psychological Monographs*, 80 (1, Whole No. 609).
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Per*sonality and Social Psychology, 43, 450-461.
- Ryan, R. M. (1991). The nature of the self in autonomy and relatedness. In G. R. Goethals & J. Strauss (Eds.), Multidisciplinary perspectives on the self. New York: Springer-Verlag.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy and the self in psychological development. In J. Jacobs (Ed.), Nebraska Symposium on Motivation: Developmental perspectives on motivation (Vol. 40, pp. 1-56) Lincoln: University of Nebraska Press.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and

- internalization: Examining reasons for acting in two domains. Journal of Personality and Social Psychology, 57, 749-761.
- Ryan, R. M., Connell, J. P., & Deci, E. L. (1985). A motivational analysis of self-determination and self-regulation in education. In C. Ames & R. E. Ames (Eds.), Research on motivation in education: The classroom milieu (pp. 13-51). San Diego, CA: Academic Press.
- Ryan, R. M., & Lynch, J. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. *Child Development*, 60, 340-356.
- Schafer, R. (1968). Aspects of internalization. Madison, CT: International Universities Press.
- Shostrom, E. L. (1966). *Manual for the Personal Orientation Inventory*. San Diego, CA: Educational & Industrial Testing Service.
- Smart, N. (1969). The religious experience of mankind. New York: Scribner.
- Solomon S., Greenberg J., & Pyszczynski, T. (1991). A terror management theory of social behavior: The psychological functions of self-esteem and cultural worldviews. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 24, pp. 93–159). San Diego, CA: Academic Press.

- Spilka, B., Pelligrini, R. J., & Dailey, K. (1968). Religion, American values and death perspectives. Sociological Symposium, 1, 57-66.
- Strickland, B. R., & Crowne, D. P. (1962). Conformity under conditions of simulated group pressure as a function of the need for social approval. *Journal of Social Psychology*, 58, 171-181.
- Thompson, A. D. (1974). Open-mindedness and indiscrimination [sic] antireligious orientation. *Journal for the Scientific Study of Religion*, 13, 471-477.
- Vallerand, R. J., & Reid, G. (1990). Motivation and special populations: Theory, research and implications regarding motor behaviour. In G. Reid (Ed.), *Problems in movement control* (pp. 159–197). New York: Elsevier Science.
- Watson, P. J., Morris, R. J., & Hood, R. W., Jr. (1989). Interactional factor correlations with means and end religiousness. *Journal for the Scientific Study of Religion*, 28, 337–347.

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