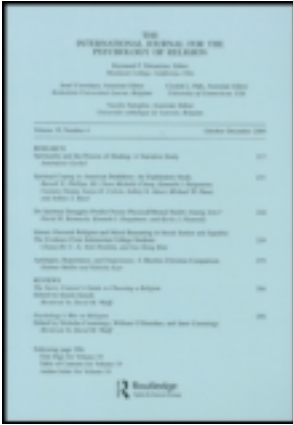


This article was downloaded by: [Copenhagen University Library]

On: 04 May 2014, At: 10:14

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



The International Journal for the Psychology of Religion

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/hjpr20>

Self-Compassion in Iranian Muslims: Relationships With Integrative Self-Knowledge, Mental Health, and Religious Orientation

Nima Ghorbani ^a, P. J. Watson ^b, Zhuo Chen ^b & Fatemeh Norballa ^a

^a Department of Psychology, University of Tehran, Iran

^b Department of Psychology, University of Tennessee at Chattanooga

Accepted author version posted online: 16 Nov 2011. Published online: 21 Mar 2012.

To cite this article: Nima Ghorbani, P. J. Watson, Zhuo Chen & Fatemeh Norballa (2012) Self-Compassion in Iranian Muslims: Relationships With Integrative Self-Knowledge, Mental Health, and Religious Orientation, *The International Journal for the Psychology of Religion*, 22:2, 106-118, DOI: [10.1080/10508619.2011.638601](https://doi.org/10.1080/10508619.2011.638601)

To link to this article: <http://dx.doi.org/10.1080/10508619.2011.638601>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Self-Compassion in Iranian Muslims: Relationships With Integrative Self-Knowledge, Mental Health, and Religious Orientation

Nima Ghorbani

*Department of Psychology
University of Tehran, Iran*

P. J. Watson and Zhuo Chen

*Department of Psychology
University of Tennessee at Chattanooga*

Fatemeh Norballa

*Department of Psychology
University of Tehran, Iran*

Although a Buddhist construct, self-compassion may have implications for understanding psychological adjustment cross-culturally. In Iranian Muslims, the Self-Compassion Scale correlated positively with integrative self-knowledge, self-esteem, and basic need satisfactions and negatively with depression and anxiety. Negative linkages with depression and anxiety continued to appear in partial correlations controlling for self-esteem, replicating a result previously observed in the United States. Integrative self-knowledge fully or partially mediated all self-compassion relationships with psychological adjustment. Integrative self-knowledge also became even more predictive of self-compassion at higher levels of an intrinsic religious orientation. These data further confirmed the cross-cultural significance of self-compassion and supported the suggestion that Muslim psychological adjustment is enhanced through sincere religious efforts to get closer to God through self-knowledge.

Research into the mental health implications of religion typically involves the use of psychological perspectives and measures to clarify religious commitments. Recent work on self-compassion demonstrates that the clarification can operate in the opposite direction. Self-

Correspondence should be sent to P. J. Watson, Department of Psychology, University of Tennessee at Chattanooga, 350 Holt Hall, Department #2803, 615 McCallie Avenue, Chattanooga, TN 37403, USA. E-mail: paul-watson@utc.edu

compassion is a Buddhist concept and “involves being troubled by and open to one’s own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness” (Neff, 2003b, p. 87). Buddhist self-compassion combines this self-kindness with recognition that suffering and inadequacy are common to the human condition. Mindful awareness is also presumed to be essential in maintaining an ongoing openness to the self’s own struggles and limitations (Neff, 2003b, 2004).

That Buddhist self-compassion can clarify the assumptions of contemporary psychology appears in the contrast it offers with the Western emphasis on self-esteem as a mental health ideal (Neff, 2003b, 2004). The problems of low self-esteem seem obvious enough, but high self-esteem may have disadvantages of its own. Among other things, research demonstrates that “over-emphasis on evaluating and liking the self may lead to narcissism, self-absorption, self-centeredness, and a lack of concern for others” (Neff, 2003b, p. 86). Self-compassion would avoid such liabilities. Self-compassionate individuals, for instance, would be less likely to make downward social comparisons in order to maintain self-esteem and would consequently show greater compassion toward others (Neff & Vonk, 2009). A more realistic attitude toward the self would also lead to less defensiveness and to greater insight into intrinsic sources of well-being that theoretically define true self-esteem (Crocker & Canevello, 2008; Deci & Ryan, 2000).

Relative to the Western focus on self-esteem, therefore, a “culture shift which recognized the value of self-compassion . . . would encourage a kinder, less self-absorbed, less isolated, and more emotionally functional populace” (Neff, 2003b, p. 96). Research does in fact confirm that self-compassion predicts broadly better psychological functioning (e.g., Neff, 2003a; Neff, Hsieh, & Dejjitterat, 2005; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007).

SELF-COMPASSION IN A MUSLIM SOCIETY

Although Buddhist in its origins, self-compassion presumably has cross-cultural significance. Studies already demonstrate that self-compassion predicts relative adjustment in Thailand, Taiwan, the United States, and the Netherlands (Neff, Pitsitsungkagarn, & Hsieh, 2008; Neff & Vonk, 2009). The present project sought to expand the analysis of self-compassion to the Muslim cultural context of Iran.

Whether and how self-compassion might predict Iranian mental health is a potentially noteworthy question in the development of a Muslim psychology of religion. The Qur’an makes it clear that God demands personal righteousness and that grievous sin will be punished in the afterlife. Muslim practices also seem to require a patience, endurance, and discipline that at least intuitively seem more suggestive of self-judgmental attitudes than of self-kindness. At the same time, however, the Muslim is to achieve a spiritually essential form of self-control by submitting to and getting closer to God, who the Qur’an frequently describes as merciful. Verse 37:53 says, for example, “Say: ‘O creatures of God, those of you who have acted against your own interests should not be disheartened of the mercy of God. Surely God forgives all sins. He is all-forgiving and all-merciful’” (Ali, 1993).

For the Muslim, therefore, the quest to get closer to a merciful God will presumably make an internal sense of compassion more readily available to the self. Older (Haque, 2004) and more recent (Motahhari, 2000) Islamic thought further argues that the individual is to pursue

this quest through self-knowledge (Ghorbani, Watson, Rezazadeh, & Cunningham, 2011). In short, a Muslim opportunity to nurture the psychological benefits of self-compassion may occur through a sincere religious commitment to get closer to a merciful God through self-knowledge. This investigation tested that possibility.

EVALUATING SELF-COMPASSION IN MUSLIM IRAN

In general terms, this project attempted to answer two questions. First, in Islamic Iran, would Buddhist Self-Compassion have implications about the theoretically important issue of self-esteem that are similar to those observed elsewhere? Second, would the relevance of self-compassion to the Iranian cultural context be apparent in linkages with religious and psychological variables that reflect Muslim commitments?

With regard to the first question, previous research demonstrates that self-compassion correlates positively with self-esteem and negatively with depression and anxiety. Moreover, negative linkages with depression and anxiety remain significant in partial correlations after controlling for self-esteem (Neff, 2003a), thus confirming the advantages of self-compassion beyond those of self-esteem. Self-compassion also displays direct associations with a personal sense of autonomy, competency, and relatedness that theoretically define a “true” form of self-esteem that is based upon satisfaction of basic intrinsic needs rather than upon a potential self-absorption (Deci & Ryan, 1995, 2000; Neff, 2003a). Similar patterns of relationship should presumably appear in Iran as well.

With regard to the second question, the intrinsic religious orientation and self-knowledge served as variables that were relevant to Muslim commitments. Research interest in religious orientation began with Allport’s pioneering efforts to differentiate between adaptive and maladaptive forms of faith (Allport & Ross, 1967) and has a long history in the psychology of religion (Hood, Hill, & Spilka, 2009). An intrinsic orientation theoretically represents a sincere form of faith in which religion serves as the ultimate motivation in a believer’s life. Extrinsic motivations reflect instead the use of religion as a means to other ends. With an extrinsic personal orientation, those other ends involve the achievement of psychological well-being. An extrinsic social motivation, in contrast, involves the use of religion to satisfy socially related desires. Numerous Iranian and Pakistani investigations confirm that the intrinsic and extrinsic personal motivations operate as largely adaptive forms of Muslim faith, whereas the extrinsic social orientation has a tendency to predict maladjustment (Ghorbani, Watson, & Khan, 2007).

The philosophy of Mortazā Motahharī (2000) illustrates the importance of self-knowledge within the Iranian cultural context. A prominent ideologist of the Iranian Revolution (Nikazmerad, 1980), Motahharī stressed how self-knowledge is critical in the Islamic cultural construction of the “Perfect Man” (*ensān-e kāmel*). More specifically, he argued that the Qur’an demands self-knowledge on the assumption that “one can find the source of the mystery of the world not in the phenomenal [i.e., not in the material] world, but in one’s heart, which is its source and in which the true mystery (the Truth) is found” (Shimamoto, 2008, p. 30). Hence, Motahharī’s and earlier Islamic thought (Haque, 2004) suggest that a sincere or intrinsic form of Muslim faith should be associated with greater self-knowledge, a possibility in fact confirmed in previous Iranian studies (Ghorbani et al., 2011; Ghorbani, Watson, Shamohammadi, & Cunningham, 2009).

Self-esteem can be associated with “egoistic illusions and self-regulation failure (e.g., adopting inappropriate goals that are beyond performance capabilities),” but self-compassion requires a “clarity and accuracy of self-appraisals” (Neff, 2003b, p. 93). Relative to these assumptions, the Muslim focus on self-knowledge suggests three possibilities. First, self-compassion should correlate positively with self-knowledge and with the intrinsic religious commitments that theoretically nurture it. Second, if a Muslim opportunity to culturally construct the adjustment of self-compassion occurs through sincere religious commitments to get closer to a merciful God through self-knowledge, then the intrinsic religious orientation and self-knowledge should mediate relationships of self-compassion with mental health. Finally, intrinsic commitments should encourage the self-knowledge that brings a Muslim closer to a merciful God, thereby strengthening intrinsic commitments in a dynamic that should even more strongly promote self-compassion. In other words, moderation effects should be apparent in how the intrinsic religious orientation and self-knowledge combine to influence self-compassion and the adjustment advantages associated with it.

HYPOTHESES

In summary, the present project extended the cross-cultural analysis of Buddhist self-compassion to the Muslim cultural context of Iran by testing five most important hypotheses:

- First, self-compassion should correlate positively with self-esteem and the supposedly “true” self-esteem of basic need satisfaction and negatively with depression and anxiety.
- Second, self-compassion should continue to correlate negatively with depression and anxiety even after controlling for self-esteem.
- Third, self-compassion should correlate positively with the intrinsic religious orientation and with self-knowledge.
- Fourth, the intrinsic religious orientation and self-knowledge should mediate linkages of self-compassion with adjustment.
- Finally, the intrinsic religious orientation and self-compassion should interact to predict higher levels of self-compassion and of the psychological advantages associated with it.

METHOD

Participants

Undergraduates enrolled at the University of Tehran served as the research participants. The average age of these 125 men and 113 women was 21.6 ($SD = 2.4$). All were Shiite Muslims. Participation in this project was voluntary, anonymous, and in full conformity with institutional ethical guidelines.

Measures

Previous Iranian studies confirmed the validity of the Persian translations of all measures except for the Self-Compassion Scale (e.g., Ghorbani & Watson, 2009; Ghorbani et al., 2009).

Careful preliminary analysis of self-compassion items preceded their translation into Persian. An individual not involved in these initial procedures then translated each Persian statement back into English. Substantive discrepancies between original and back-translated statements were rare and easily resolved through revisions in the Persian translation. Instruments appeared in a single questionnaire booklet that contained measures in the sequence presented next.

Integrative self-knowledge. Measurement of self-knowledge involved the use of the Integrative Self-Knowledge Scale (Ghorbani, Watson, & Hargis, 2008). This scale records efforts of the individual to integrate past, present, and desired future self-experience, and in Iranian Muslims it has displayed associations with both self- and peer-reported psychological adjustment (Ghorbani, Cunningham, & Watson, 2010; Ghorbani et al., 2008; Tahmasb, Ghorbani, & Watson, 2008). Responding on the 12 items of this instrument occurred along a 5-point Likert scale ranging from 0 (*largely untrue*) to 4 (*largely true*). Illustrating this construct was the claim that “by thinking deeply about myself, I can discover what I really want in life” and by the reverse scored assertion that “I get so involved in what is going on that I really can’t see how I am responding to a situation.” The mean response per item was 2.58 ($SD = 0.64$). Cronbach’s alpha was .79.

Self-compassion. Twenty-six items made up the Neff (2003a) Self-Compassion Scale ($\alpha = .84$, $M = 3.05$, $SD = 0.52$). Responses ranged from 1 (*almost never*) to 5 (*almost always*). Self-Compassion appeared in such self-reports as “I’m kind to myself when I’m experiencing suffering” and the reverse scored claim that “when I’m feeling down, I tend to feel like most other people are probably happier than I am.”

Basic need satisfaction. The three Basic Need Satisfaction Scales of Ryan (2005) used 1 (*not at all true*) to 7 (*very true*) response options. The Autonomy Scale ($\alpha = .71$, $M = 4.73$, $SD = 1.01$) contained seven statements that said, for example, “I feel like I am free to decide for myself how to live my life.” The six items of the Competency Scale ($\alpha = .61$, $M = 4.73$, $SD = .97$) included such self-reports as “People I know tell me I am good at what I do.” Eight items made up the Relatedness Scale ($\alpha = .73$, $M = 4.93$, $SD = 1.02$) A representative item said, “I really like the people I interact with.”

Self-esteem. The 10-item Rosenberg (1965) Self-Esteem Scale included such statements as “I take a positive attitude toward myself.” Reactions ranged from 0 (*strongly disagree*) to 4 (*strongly agree*). Cronbach’s alpha was .80. M response per item was 2.71 ($SD = 0.70$).

Depression and anxiety. Costello and Comrey (1967) Depression ($\alpha = .91$, $M = 1.27$, $SD = 0.79$) and Anxiety ($\alpha = .73$, $M = 1.77$, $SD = 0.67$) Scales assessed dispositional emotional traits rather than states. The Depression Scale contained 14 items, with nine items included in the Anxiety Scale. Both measures used a 0 (*strongly disagree*) to 4 (*strongly agree*) Likert scale. Indicative of depression was the self-report, “I feel that life is drudgery and boredom.” Exemplifying anxiety was the claim, “I am a tense and ‘high strung’ person.”

Religious orientation. Gorsuch and McPherson (1989) Religious Orientation Scales included the eight-item Intrinsic ($\alpha = .73$, $M = 2.39$, $SD = 0.78$), the three-item Extrinsic Personal ($\alpha = .81$, $M = 2.53$, $SD = 1.11$), and the three-item Extrinsic Social ($\alpha = .79$, $M = 1.31$, $SD = 1.04$) measures. Responses varied from 0 (*strongly disagree*) to 4 (*strongly agree*). Where necessary, wording of items was adapted to the Iranian Muslim context. Instead of referring to “a church,” for example, one Extrinsic Social item said, “One reason for my being the member of a *Mosque or religious gathering* is that such membership helps to establish a person in the community.” Extrinsic personal reasons for being religious appeared in such statements as “What religion offers me most is comfort when sorrows and misfortune strike.” Representative of the Intrinsic Scale was the assertion, “I try hard to carry my religion over into all my other dealings in life.”

Procedure

Participants responded to the questionnaire booklet in small classroom settings. Data analysis began with a computation of correlations among all measures. Tests of mediation then followed and rested upon the conceptual framework of Baron and Kenny (1986). Examination of mediation and moderation effects involved use of the SPSS macro program supplied by Preacher and Hayes (2004). In moderation procedures, centering the predictor variables reduced the problem of multicollinearity, with cross-products calculated using these centered variables (Cohen, Cohen, West, & Aiken, 2003).

RESULTS

Table 1 presents the correlations among all measures. Self-compassion correlated positively with self-esteem and basic need satisfaction and negatively with depression and anxiety. Self-compassion, however, did not correlate with any religious orientation. Integrative self-knowledge exhibited the same pattern of linkages with mental health but also correlated positively with the intrinsic and negatively with the extrinsic social religious motivations. The Intrinsic Scale displayed relationships with reduced depression and with greater self-esteem and basic need satisfaction. The extrinsic personal orientation predicted greater self-esteem and basic need satisfaction along with lower depression. The extrinsic social orientation also correlated negatively with competency. The three religious orientations covaried directly. All measures of adjustment correlated positively with each other and negatively with depression and anxiety, which in turn correlated positively.

Noteworthy in these data was the failure the Intrinsic Scale to be associated with greater self-compassion. Again, the Intrinsic Scale also predicted higher levels of an extrinsic social orientation that correlated negatively with self-knowledge. Could covariance with the extrinsic social orientation obscure intrinsic linkages with self-compassion (and self-knowledge)? In partial correlations controlling for the Extrinsic Social Scale, the intrinsic religious orientation in fact displayed a slightly stronger tie with self-knowledge ($.25$, $p < .001$) and a marginally significant relationship with self-compassion using a one-tailed test justified by the hypothesis ($.12$, $p < .05$).

TABLE 1
Correlations Among Self-Compassion, Integrative Self-Knowledge, Mental Health, and Religious Orientation

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Self-compassion	—	.38***	.28***	-.36***	-.24***	.23***	.22**	.19***	.08	.04	-.08
2. Integrative self-knowledge		—	.45***	-.46***	-.42***	.34***	.39***	.26***	.16*	.05	-.26***
3. Self-esteem			—	-.71***	-.40***	.61***	.64***	.54***	.26***	.19**	-.10
4. Depression				—	.37***	-.51***	-.56***	-.54***	-.38***	-.29***	.10
5. Anxiety					—	-.30***	-.24***	-.26***	-.07	.06	.08
6. Autonomy						—	.58***	.55***	.28**	.13*	-.12
7. Competence							—	.56***	.34***	.24***	-.19**
8. Relatedness								—	.28***	.26***	-.09
9. Intrinsic									—	.65***	.28***
10. Extrinsic personal										—	.24***
11. Extrinsic social											—

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

After partial correlations removed variance associated with self-esteem, self-compassion continued to predict both lower depression ($-.24, p < .001$) and anxiety ($-.15, p < .05$). An association with integrative self-knowledge (.29, $p < .001$) also remained apparent, but connections with autonomy (.08), competency (.07), and relatedness (.04, $ps > .20$) were no longer significant.

For mediation to occur, self-compassion as the independent variable must predict the mediator (Baron & Kenny, 1986). Correlation results suggested and regression analyses confirmed that this condition was met for integrative self-knowledge ($\beta = .38, p < .001$) but not for the intrinsic orientation ($\beta = .08, p > .10$). Tests of mediation, therefore, examined integrative self-knowledge as the sole possible mediator.

Mediation also requires that the independent variable self-compassion predict the dependent variable on the first step of a two-step regression analysis. Significant results in fact appeared for each measure of psychological adjustment: self-esteem ($\beta = .377, p < .001$), depression ($\beta = -.555, p < .001$), anxiety ($\beta = -.316, p < .001$), autonomy ($\beta = .455, p < .001$), competence ($\beta = .415, p < .001$), and relatedness ($\beta = .369, p < .01$).

Full mediation then becomes obvious if addition of integrative self-knowledge on the second step eliminates the association of self-compassion with the dependent variable. Partial mediation appears if the mediator significantly reduces but does not eliminate the association. Assessment of these effects involved analysis of 1,000 bootstrap samples (Preacher & Hayes, 2004). Table 2 summarizes the results. Bootstrap estimate of indirect effects revealed that integrative self-knowledge significantly reduced the variance explained by self-compassion in each dependent variable. Regression coefficients further demonstrated that integrative self-knowledge fully mediated associations with autonomy, competency, relatedness, and anxiety and partially mediated connections with self-esteem and depression.

With regard to the issue of moderation, the intrinsic religious orientation interacted with integrative self-knowledge to increase variance explained in both self-compassion ($\beta = .16, p < .01$) and autonomy ($\beta = .25, p < .05$). As Figure 1 makes clear, the pattern of these two

TABLE 2
Mediation Effects of Integrative Self-Knowledge (ISK) on Relationships
of Self Compassion With Dependent Variables

Dependent Variable	β of IV on DV Controlling for ISK	Bootstrap Estimate of Indirect Effect	SE	Bias Corrected 95% Confidence Intervals	
				Lower Bound	Upper Bound
Self-esteem	.169*	.207	.049	.119	.313
Autonomy	.235	.220	.067	.102	.363
Competence	.164	.251	.060	.142	.375
Relatedness	.202	.167	.059	.063	.289
Depression	-.340*	-.215	.048	-.316	-.123
Anxiety	-.130	-.186	.043	-.278	-.107

Note. * $p < .05$.

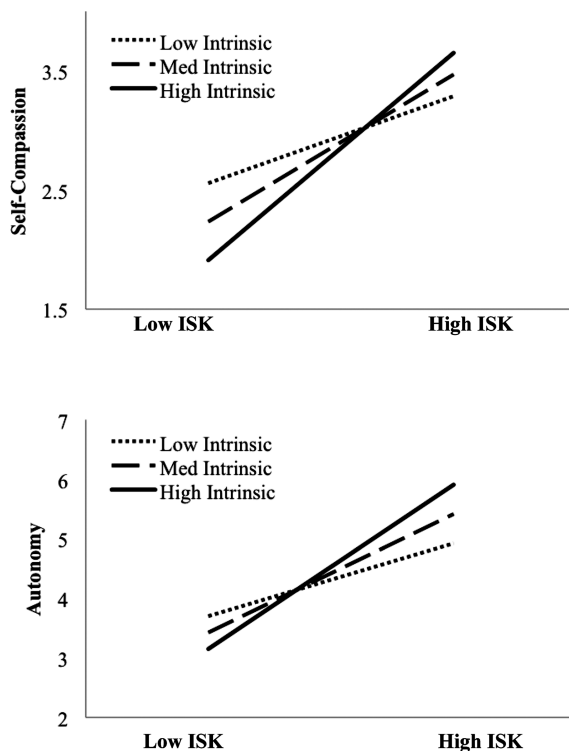


FIGURE 1 Interaction of intrinsic religious orientation with integrative self-knowledge (ISK) in predicting self-compassion and autonomy.

interactions was basically the same. Integrative self-knowledge became a more robust predictor of mental health as the intrinsic religious orientation became stronger.

DISCUSSION

Although a Buddhist construct in its origins, self-compassion may offer insight into human psychological flourishing generally and may have advantages over self-esteem as a mental health ideal (Neff, 2003b; Neff et al., 2008; Neff & Vonk, 2009). The present project offered support for these claims within the Muslim cultural context of Iran.

In Iran, self-compassion predicted greater self-esteem and satisfaction of basic needs and lower levels of depression and anxiety. Relationships with autonomy, competence, and relatedness (Deci & Ryan, 2000) mirrored previous American findings in pointing toward associations with a supposedly “true” form of self-esteem that emerges from fulfillment of intrinsic motivations (Neff, 2003a). Also as in the United States, negative linkages with depression and anxiety remained significant even in partial correlations controlling for self-esteem. In

Iran as elsewhere, therefore, self-compassion predicted a form of mental health that went beyond the presumed strengths of self-esteem. At the same time, however, self-compassion no longer predicted autonomy, competence, and relatedness after controlling for self-esteem. This outcome questioned the claim that satisfaction of basic needs reflects a more “true” form of self-adjustment than self-esteem, at least in Iran.

This investigation assumed that a Muslim foundation for self-compassion rests in sincere religious commitments to get closer to a merciful God through self-knowledge. The Intrinsic Religious Orientation Scale served as a rough index of sincere Muslim faith, and in the present sample, it did indeed predict relative adjustment by correlating negatively with depression and positively with integrative self-knowledge, self-esteem, and all three basic need satisfactions. Most important, however, the Intrinsic Scale displayed no linkage with self-compassion. Why did this hypothesized relationship fail to appear? One factor may have been covariance with the extrinsic social orientation. As in previous Muslim studies (Ghorbani et al., 2007), the extrinsic social orientation tended to predict maladjustment, including most importantly a connection with lower levels of self-knowledge. Partial correlations controlling for this motivation in fact uncovered a weak positive association of the Intrinsic Scale with self-compassion. Still, the weakness of this relationship perhaps revealed that the Intrinsic Scale, as an instrument developed in the West, is not ideal as an index of specifically Muslim commitments. That possibility clearly deserves additional research attention.

As expected, based on Muslim thought (Haque, 2004; Motahharī, 2000), self-knowledge was noteworthy in clarifying self-compassion in Iran. Connections of the Integrative Self-Knowledge Scale with the other psychological measures occurred in a pattern that was identical to that observed for the Self-Compassion Scale, with which it also correlated positively. The association of self-knowledge with self-compassion also remained significant in partial correlations controlling for self-esteem. Hence, self-knowledge, like self-compassion, had mental health advantages beyond those associated with self-esteem. In addition, the Integrative Self-Knowledge Scale fully mediated the relationships of self-compassion with autonomy, competence, relatedness, and anxiety and partially mediated other associations with self-esteem and depression. As hypothesized, therefore, self-knowledge did indeed prove useful in efforts to understand how self-compassion might influence psychological functioning within a Muslim cultural context.

Integrative Self-Knowledge and Intrinsic Religious Orientation Scales also interacted to increase the variance explained in self-compassion. As expected, self-knowledge became more predictive of self-compassion as sincere religious commitments increased. Again, the Intrinsic Scale failed to correlate with self-compassion, perhaps suggesting among the other previously noted possibilities that Muslim faith alone is not sufficient to promote self-compassion. This interaction, nevertheless, documented the importance of intrinsic Muslim commitments and presented preliminary support for the model that Muslim self-compassion occurs through sincere religious efforts to get closer to a merciful God through self-knowledge. Integrative Self-Knowledge and Intrinsic Scales similarly interacted to predict autonomy, a psychological strength associated with self-compassion. These two instruments, however, did not interact to explain variance in any other mental health variable. Additional research will need to clarify when and why the interaction model might apply within a Muslim psychology of religion. Development of specifically Muslim measures of religious motivation might also uncover more consistent interactions of religious commitments with self-knowledge in predicting psychological adjustment.

As in previous Muslim investigations (Ghorbani et al., 2007), the Extrinsic Personal Scale had generally adaptive religious and psychological implications. This instrument correlated positively with the intrinsic orientation while also predicting greater self-esteem and basic needs satisfaction along with lower depression. Again, the Extrinsic Social Scale demonstrated a tendency to measure maladjustment. Connections with the more adjusted intrinsic and extrinsic personal religious motivations did appear, but the extrinsic social orientation also exhibited linkages with lower self-knowledge and competency. Associations with psychological maladjustment may be noteworthy at a theoretical level because the Muslim ideal is to have no separation between the religious and nonreligious, the spiritual and secular dimensions of life (e.g., Moughrabi, 1995; Murken & Shah, 2002). The implication, in other words, is that social manifestations of Muslim commitments should be adaptive. A recently developed Extrinsic Cultural Scale displays such relationships in Iran (Ghorbani, Watson, Zarehi, & Shamohammadi, 2010), and the present data pointed toward the importance of reexamining this measure along with the Extrinsic Social Scale in future Muslim investigations.

Numerous limitations characterized this project. First, university students served as the research participants and could not have been representative of Iranian society as a whole. Moreover, Shiite Iranians are not necessarily representative of all Muslims. Additional studies of Muslim self-compassion clearly need to examine a wider range of Iranian and Islamic cultural contexts. Second, social desirability response sets are a noteworthy concern in the psychology of religion (e.g., Batson, Schoenrade, & Ventis, 1993) and may be important in further attempts to understand Muslim self-compassion. Third, deeper insight into the psychological dynamics of any religion must surely include efforts to “operationalize the tradition” in instruments that are uniquely meaningful within the tradition itself (e.g., Khan & Watson, 2010; Roberts & Watson, 2010). As noted previously, opportunities may exist for operationalizing sincere Muslim commitments in ways that are superior to the Intrinsic Religious Orientation Scale. Relative to the present project, it would also seem essential to develop scales that assess Muslim beliefs in the mercifulness of God. More explicitly religious articulations of the Muslim attempt to achieve self-knowledge may deserve consideration as well. Finally, this project implied that sincere religious commitments and self-knowledge, alone and in interaction, cause greater Muslim self-compassion. The correlational nature of these results, nevertheless, means that no causal inferences can be made. Use of other research methodologies will need to establish causality.

In summary, self-compassion is a Buddhist construct that may have implications for understanding psychological adjustment cross-culturally. This study further confirmed that possibility by extending the analysis to Iran. These data also suggested that self-knowledge may be especially important in understanding self-compassion within the dynamics of a Muslim psychology of religion.

REFERENCES

- Ali, A. (1993). *Al-Qur'ān: A contemporary translation*. Princeton, NJ: Princeton University Press.
- Allport, G. W., & Ross, M. J., Jr. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432–443.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.

- Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual*. New York, NY: Oxford University Press.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Costello, C. G., & Comrey, A. L. (1967). Scales for measuring depression and anxiety. *The Journal of Psychology*, *66*, 303–313.
- Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: The role of compassionate and self-image goals. *Journal of Personality and Social Psychology*, *95*, 555–575.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York, NY: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268.
- Ghorbani, N., Cunningham, C. J. L., & Watson, P. J. (2010). Comparative analysis of integrative self-knowledge, mindfulness, and private self-consciousness in predicting responses to stress in Iran. *International Journal of Psychology*, *45*, 147–154.
- Ghorbani, N., & Watson, P. J. (2009). Mysticism and self-determination in Iran: Multidimensional complexity of relationships with basic need satisfaction and mindfulness. *Archive for the Psychology of Religion*, *31*, 75–90.
- Ghorbani, N., Watson, P. J., & Hargis, M. B. (2008). Integrative Self-Knowledge Scale: Correlations and incremental validity of a cross-cultural measure developed in Iran and the United States. *Journal of Psychology*, *142*, 395–412.
- Ghorbani, N., Watson, P. J., & Khan, Z. (2007). Theoretical, empirical, and potential ideological dimensions of using Western conceptualizations to measure Muslim religious commitments. *Journal of Muslim Mental Health*, *2*, 113–131.
- Ghorbani, N., Watson, P. J., Rezaadeh, Z., & Cunningham, C. J. L. (2011). Dialogical validity of religious measures in Iran: Relationships with integrative self-knowledge and self-control of the “Perfect Man” (*ensān-e kāmel*). *Archive for the Psychology of Religion*, *33*, 93–113.
- Ghorbani, N., Watson, P. J., Shamohammadi, K., & Cunningham, C. J. L. (2009). Post-critical beliefs in Iran: Predicting religious and psychological functioning. *Research in the Social Scientific Study of Religion*, *20*, 217–237.
- Ghorbani, N., Watson, P. J., Zarehi, J., & Shamohammadi, K. (2010). Muslim extrinsic cultural religious orientation and identity: Relationships with social and personal adjustment in Iran. *Journal of Beliefs and Values*, *31*, 15–28.
- Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/Extrinsic measurement: I/E-revised and single-item scales. *Journal for the Scientific Study of Religion*, *28*, 348–354.
- Haque, A. (2004). Psychology from Islamic perspective: Contributions from early Muslim scholars and challenges to Contemporary Muslim psychologists. *Journal of Religion and Health*, *43*, 357–377.
- Hood, R. W. Jr., Hill, P. C., & Spilka, B. (2009). *The psychology of religion: An empirical approach* (4th ed.). New York, NY: Guilford.
- Khan, Z. H., & Watson, P. J. (2010). Ramadan experience and behavior: Relationships with religious orientation among Pakistani Muslims. *Archive for the Psychology of Religion*, *32*, 149–167.
- Motahharī, M. (2000). Ensan dar Goran [Human being in the Qur’an]. In *Majmoe asar Ostad Motahari (Chap 9), Geld 2* [Persian] (pp. 267–327). Tehran, Iran: Sadra.
- Moughrabi, F. (1995). Islam and religious experience. In R. W. Hood (Ed.), *Handbook of religious experience* (pp. 72–86). Birmingham, AL: Religious Education Press.
- Murken, S., & Shah, A. A. (2002). Naturalistic and Islamic approaches to psychology, psychotherapy, and religion: Metaphysical assumptions and methodology—A discussion. *The International Journal for the Psychology of Religion*, *12*, 239–254.
- Neff, K. D. (2003a). Development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223–250.
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–102.
- Neff, K. D. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences*, *9*(2), 27–37.
- Neff, K. D., Hsieh, Y., & DeJitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*, 263–287.
- Neff, K. D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, *41*, 139–154.
- Neff, K., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, *39*, 267–285.

- Neff, K. D., Rude, S. S., & Kirkpatrick, K. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41*, 908–916.
- Neff, K., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality, 77*(1), 23–50.
- Nikazmerad, N. M. (1980). A chronological survey of the Iranian Revolution. *Iranian Studies, 13*, 327–368.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers, 36*, 717–731.
- Roberts, R., & Watson, P. J. (2010). A Christian psychology view. In E. L. Johnson (Ed.), *Psychology & Christianity: Five views* (pp. 149–178). Downers Grove, IL: InterVarsity Press.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ryan, M. (2005). *Basic psychological need scales*. Retrieved from <http://www.psych.rochester.edu/SDT/measures/needs.html>
- Shimamoto, T. (2008). The question of “self-knowledge” (*ma’rifat an-nafs*) in Islam: Mortazā Motahharī’s theory of the “Perfect Man” (*ensān-e kāmel*). *Journal of the Interdisciplinary Study of Monotheistic Religions, 4*, 25–45.
- Tahmasb, A. R., Ghorbani, N., & Watson, P. J. (2008). Relationships between self- and seer-reported integrative self-knowledge and the big five factors in Iran. *Current Psychology, 27*, 169–176.