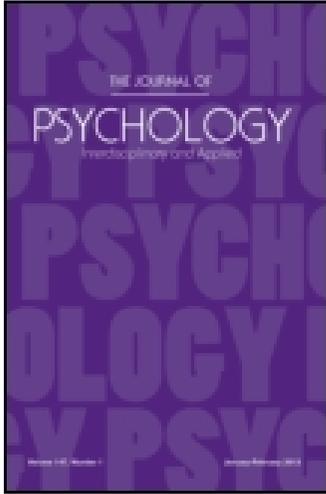


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Integrative Self-Knowledge and Marital Satisfaction

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ABSTRACT. Married Iranian couples ($N = 210$) responded to the Integrative Self-Knowledge Scale along with a measure of marital satisfaction, the International Personality Item Pool (IPIP) Big Five, and an index of interpersonal problems. Integrative self-knowledge correlated positively with marital satisfaction, positively with all but the extraversion Big Five traits, and negatively with three indices of interpersonal problems. Integrative self-knowledge also mediated a number of personality relationships with marital satisfaction. Spouse-ratings of personality confirmed the adaptive implications of integrative self-knowledge for marriage. Linkages with questionnaire response styles supported the description of integrative self-knowledge as a measure of both self-insight and self-development. Results confirmed the potential of integrative self-knowledge for studying self-regulatory processes and suggested that the enhancement of self-knowledge may be a useful goal in efforts to strengthen marriages.

Keywords: big five, integrative self-knowledge, interpersonal problems, marital satisfaction, spouse-rated personality

SELF-KNOWLEDGE IS OFTEN DESCRIBED as a centrally important psychological process within diverse psychotherapeutic as well as personality, philosophical, and religious perspectives (Ghorbani, Watson, Bing, Davison, & LeBreton, 2003). In these perspectives, self-knowledge involves an integration

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of life experiences into a meaningful whole that in some manner reflects the realities of the self. This integration is different from, but presumably critical to, the operation of other related psychological processes. The benefits of an introspective mindful awareness of the present (Brown & Ryan, 2003), for instance, must at some point involve an integrative process that effectively unites awareness of the present with understandings of the past and hopes for the future. Nor will self-knowledge be identical to how the self is evaluated, for example, in self-esteem (Rosenberg, 1965) or self-compassion (Neff, 2003). The adaptive potentials of such evaluations must presumably rest upon meaningful insights into a self that then serves as the object of esteem or compassion.

The Integrative Self-Knowledge Scale attempts to operationalize this potentially important construct by recording the efforts of an individual to integrate past, present, and desired future self-experience into a meaningful whole (Ghorbani, Watson, & Hargis, 2008). Illustrative items say, "By thinking deeply about myself, I can discover what I really want in life and how I might get it," and "In some situations, I almost never can understand why I have behaved in particular ways, so I usually don't even try" (reverse scored). The validity of this instrument has been demonstrated in studies examining personality (e.g., Ghorbani, Watson, Hamzavy, & Weathington, 2010), health psychology (e.g., Ghorbani, Mousavi, Watson, & Chen, 2011), the psychology of religion (e.g., Ghorbani, Watson, Rezazadeh, & Cunningham, 2011), and coping and self-regulation (e.g., Ghorbani, Cunningham, & Watson, 2010).

As Vogt and Colvin (2005) emphasize, valid assessment of self-knowledge presents a noteworthy challenge: "Self-reports of self-knowledge are unlikely to be very informative, as individuals who do not know themselves well probably lack the awareness to acknowledge their own ignorance" (p. 239). They recommend peer-ratings of self-knowledge as one procedure for establishing scale validity. Therefore, of interest was a recent finding that peer-reports of integrative self-knowledge by university dormitory roommates predicted self-reported integrative self-knowledge and other forms of personality adjustment as measured by the Big Five (Tahmasb, Ghorbani, & Watson, 2008). The present project built upon this earlier demonstration by examining integrative self-knowledge within the context of marriage.

Marital Satisfaction

The notion that self-knowledge should contribute to marital adjustment is an almost axiomatic presupposition that sometimes receives formal acknowledgement (e.g., Headman, 2002). Relative to the theoretical assumption that the self seeks its own meaningful integration across time, integrative self-knowledge should contribute to success in marriage at three moments in the narrative of a marriage. Before marriage, persons with greater self-insight should be more aware of what they are seeking in a spouse. Then once married, individuals with greater

self-knowledge should be more sensitive in the present to personal responsibilities and desires that make a marriage successful. Last, self-knowledge should help a spouse know how to move the self toward a happier marriage in the future. In short, the first hypothesis of this project was that integrative self-knowledge should correlate positively with marital satisfaction.

An additional assumption was that both integrative self-knowledge and marital satisfaction reflect more adaptive forms of psychological and interpersonal well-being. Therefore, both of these variables should display relationships with psychological adjustment as measured by the Big Five. As in the previous study of peer-rated integrative self-knowledge (Tahmasb et al., 2008), this investigation used the International Personality Item Pool (IPIP) version of the Big Five. This instrument reverses the scoring of neuroticism to create an index emotional stability (Goldberg et al., 2006); so, measures of adjustment included extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Negative linkages should also be obvious with evidence of interpersonal maladjustment. Analysis of this possibility involved an examination of the interpersonal sensitivity, interpersonal ambiguity, and aggression subscales from the Interpersonal Problems Scale (Kim, Pilkonis, & Barkham, 1997). Therefore, the second hypothesis of this investigation was that integrative self-knowledge and marital satisfaction would correlate positively with extraversion, agreeableness, emotional stability, conscientiousness, and openness to experience and negatively with interpersonal sensitivity, interpersonal ambiguity, and aggression.

A third hypothesis was that integrative self-knowledge would mediate at least some relationships of psychological functioning with marital satisfaction (Baron & Kenny, 1986). Again, the assumption was that integrative self-knowledge is critical to the operation of correlated psychological processes. Hence, this third hypothesis rested upon the belief that an adaptive form of self-knowledge should integrate psychological strengths and ameliorate interpersonal difficulties in efforts of a spouse to achieve a successful marriage. Evidence of such influences would appear if integrative self-knowledge at least partially mediated the positive linkages of extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience and the negative associations of interpersonal sensitivity, interpersonal ambiguity, and aggression with marital satisfaction.

Spouse-Reported Assessments

Procedures obtained spouse- as well as self-reported integrative self-knowledge. With regard to these data, the most important expectation and fourth hypothesis of this project was that spouse-reported integrative self-knowledge would correlate positively with self-reports of this measure. Such an outcome would suggest that self-ignorance offered no fundamental challenge to the validity of the Integrative Self-Knowledge Scale (Voigt & Colvin, 2005).

More generally, confirmation of this fourth hypothesis would identify both self-reported and spouse-reported integrative self-knowledge as valid measures of self-functioning. Therefore, an additional implication was that spouse-reported integrative self-knowledge would predict self-reported personality adjustment. Participants also assessed their spouses in terms of the Big Five and interpersonal problems measures. Further evidence of validity would consequently appear if self-reported integrative self-knowledge predicted spouse-reported personality adjustment. In short, the fifth hypothesis was that self-reported integrative self-knowledge should display at least some linkages with spouse-reported personality adjustment (and vice versa).

These procedures also made it possible to test the obvious expectation that self- and spouse-reports of the Big Five and of interpersonal problems would correlate positively. Such results would further document the validity of both the self- and spouse-report measures. In addition, it seemed possible that the relationship between self- and spouse-reported integrative self-knowledge might not be as strong as correlations between self- and spouse-reports of the other personality measures. Spousal evaluations of partner characteristics like agreeableness and aggression seem possible based upon relatively unambiguous behavioral indicators. The ability of a spouse to discern self-knowledge in a partner must instead rest upon more subtle and difficult discriminations about partners during complicated contexts across time. The sixth hypothesis, consequently, was that the correlation between self- and spouse-reported integrative self-knowledge would generally be less robust than such relationships for the Big Five and for interpersonal problems.

Questionnaire Response Styles

Last, a more unobtrusive assessment of scale validity seemed available in the analysis of questionnaire response styles. The Integrative Self-Knowledge Scale theoretically records not only greater self-insight, but also an active personality process that seeks to maximize psychological strengths while minimizing weaknesses across time. Therefore, with regard to the Likert scale of the IPIP Big Five measures of adjustment, integrative self-knowledge should predict increased selection of extreme positively scored “strongly agree” and reverse scored “strongly disagree” response options, reflecting these maximizing and minimizing effects, respectively. On the other hand, this same line reasoning further suggests that integrative self-knowledge should correlate negatively with tendencies to choose the neutral “neither agree nor disagree” response option.

Extreme and neutral response styles are sometimes identified as challenges to the construction of unambiguous (Raaijmakers, van Hoof, Hart, Verbogt, & Vollebergh, 2000) or methodologically adequate (Arce-Ferrer, 2006) psychological scales. This study tested the additional possibility that these two response styles might have substantive psychological implications that the Integrative Self-Knowledge Scale could help clarify. Therefore, the final and seventh hypothesis

argued that integrative self-knowledge should correlate positively with extreme and negatively with neutral response styles in the self-reported Big Five measures.

Method

Participants

Research participants included 105 married couples. These 210 individuals came from apartment complexes sampled from 5 economically and geographically diverse parts of Tehran, Iran, including Elahieh in the north, Baharestan in the center, Azadi in the west, OZgol in the east, and Afsarieh in the south. Average age of the sample was 35.6 years ($SD = 8.3$), average duration of marriage was 5.0 years ($SD = 1.8$), and the mean number of children was 1.5 ($SD = 1.1$).

Materials

All psychological scales appeared in a single questionnaire booklet that contained instruments for use in a number of different projects. Initial sections of this booklet presented, in sequence, the Integrative Self-Knowledge (Ghorbani et al. 2008), IPIP Big Five (Goldberg et al., 2006), Interpersonal Problems (Kim et al., 1997), and Marital Satisfaction (Hudson, 1992) measures. Creation of a Persian Integrative Self-Knowledge Scale occurred during scale-development procedures. Translation of all other instruments took place in preparation for the present or previous projects. In these preparations, one individual translated questionnaire items from English into Persian, and then another translated Persian statements back into English. Differences between initial and back-translated items were few and easily resolved through minor modifications in the Persian translations.

Later in the questionnaire booklet, statements from the integrative self-knowledge, Big Five, and interpersonal problems measures appeared once again, but this time with instructions asking each individual to rate how they thought their spouse would respond to each item. Response options paralleled the original scale. For example, the reaction to a statement from the original scale might be “strongly agree,” and the similar response of a husband rating a wife (or vice versa) might be “my spouse would strongly agree.”

Integrative Self-Knowledge.

Reactions to the 12-statement Integrative Self-Knowledge Scale ($\alpha = 0.90$, M response per item = 2.58, $SD = 0.76$) ranged across 1 (largely untrue) to 5 (largely true) response options. A representative item said, “If I need to, I can reflect about myself and clearly understand the feelings and attitudes behind my past behaviors.” For spouse-reported integrative self-knowledge ($M = 2.24$, $SD = 0.81$), Cronbach’s α was .88.

IPIP Big Five.

As noted by Goldberg et al. (2005), the IPIP had by that time been translated into over 25 languages and used in more than 80 studies including a number in Iran (e.g., Ghorbani & Watson, 2004). The mean correlation between the IPIP and NEO-PI-R Big Five facets is .73, and this value becomes .94 once statistical procedures control for the attenuation caused by measure unreliability (Goldberg, 1999). Such relationships document the substantial overlap between these two instruments; although minor subtle differences may of course still exist (Goldberg et al., 2005). Since 2005, international use of the IPIP Big Five has continued as illustrated by its administration to samples from China (Zheng et al., 2008), Slovenia (Ožura, Ihan, & Musek, 2012), Croatia (Mlačić & Goldberg, 2007), and Estonia (Möttus, Pullmann, & Allik, 2006), to mention only a few.

Each Big Five personality scale included 10 items: Extraversion ($\alpha = 0.83$, $M = 2.05$, $SD = 0.65$, e.g., "I am the life of the party"), Agreeableness ($\alpha = 0.68$, $M = 2.95$, $SD = 0.56$: e.g., "I am interested in people"), Conscientiousness ($\alpha = .70$, $M = 2.88$, $SD = 0.68$: e.g., "I am always prepared"), Emotional Stability ($\alpha = 0.75$, $M = 2.07$, $SD = .72$: e.g., "I am relaxed most of the time"), and Openness to Experience ($\alpha = 0.75$, $M = 2.61$, $SD = 0.60$: e.g., "I have a rich vocabulary"). Responding to each statement involved use of a 1 (strongly disagree) to 5 (strongly agree) Likert scale. Each spouse-reported Big Five measure displayed an internal reliability that was comparable or superior to the corresponding self-report measure: Extraversion, $\alpha = .81$, $M = 2.11$, $SD = 0.75$; Agreeableness, $\alpha = .82$, $M = 2.63$, $SD = 0.69$; Conscientiousness, $\alpha = .81$, $M = 2.66$, $SD = 0.73$; Emotional Stability, $\alpha = .77$, $M = 2.00$, $SD = 0.72$; and Openness to Experience, $\alpha = .77$, $M = 2.35$, $SD = 0.65$.

Interpersonal Problems.

The Kim et al. (1997) scales used a 1 (strongly agree) to 5 (strongly disagree) Likert scale to assess three dimensions of interpersonal problems: Interpersonal Sensitivity (10 items, $\alpha = .061$, $M = 1.78$, $SD = 0.04$), Interpersonal Ambivalence (10 items, $\alpha = 0.61$, $M = 1.48$, $SD = 0.04$), and Aggression (7 items, $\alpha = 0.74$, $M = 1.31$, $SD = 0.06$). Interpersonal sensitivity appeared, for example, in the admission, "It is hard for me to trust other people." Illustrative of interpersonal ambivalence was the claim, "It is hard for me to do what another person wants me to do." Reflecting aggression was the statement, "I fight with other people too much." The spouse-reported interpersonal problems data displayed the following characteristics: Interpersonal Sensitivity, $\alpha = .77$, $M = 1.74$, $SD = 0.73$; Interpersonal Ambivalence, $\alpha = .84$, $M = 1.64$, $SD = 0.79$; and Aggression, $\alpha = .86$, $M = 1.44$, $SD = 0.91$.

Marital Satisfaction.

Research has established the Index of Marital Satisfaction (Hudson, 1992) as an internally reliable and valid measure (e.g., Cheung & Hudson, 1982; Markestad,

Montgomery, & Bartsch, 1998) that has had at least some use with non-Western samples (Ibora & Akpan, 2011). Representative of the 25 statements items from this scale ($\alpha = 0.79$, $M = 5.60$, $SD = 0.07$) were claims that “my partner is affectionate enough,” and that “my partner really cares for me.” Responses ranged from 1 (none of the time) to 7 (all of the time).

Procedure

Participation in this project was voluntary, anonymous, and in full compliance with institutional ethical guidelines. Once researchers secured the agreement of both husband and wife to take part in the study, they administered the questionnaire booklet separately to each partner, ensuring that the other member of the couple could never know the responses of his or her partner. Couples completed the questionnaire in less than an hour.

Scoring of all instruments focused on the average response per item. Computation of extreme and neutral response styles involved use of the Big Five self-report data. The percentage of these self-reports using the 1 (strongly disagree) and 5 (strongly agree) response options expressed the extreme response style. The percentage of responses using the 3 (neither agree nor disagree) option described the neutral response style.

Results

Preliminary analyses examined possible influences of background variables on observed outcomes. With regard to self-report data, age, sex, marriage duration, and number of children all failed to correlate with marital satisfaction, and only marriage duration displayed a linkage with integrative self-knowledge ($-.14$, $p < .05$). Marriage duration also predicted lower openness to experience ($-.19$, $p < .01$). Women self-reported greater agreeableness ($.23$, $p < .01$) and lower emotional stability ($-.20$, $p < .01$). The number of children in a family correlated negatively with self-reported interpersonal ambivalence ($-.14$, $p < .05$) and aggression ($-.28$, $p < .001$). With regard to spouse-reports, marriage duration once again correlated negatively with openness to experience ($-.21$, $p < .01$). Women displayed higher spouse-rated agreeableness ($.18$, $p < .05$) and conscientiousness ($.13$, $p < .05$). Number of children correlated negatively with spouse-reported interpersonal sensitivity ($-.16$, $p < .05$) and interpersonal ambivalence ($-.16$, $p < .05$). Based upon these results, all subsequent analyses controlled for sex, marriage duration, and number of children.

Relationships Among Self-Report Measures

Table 1 presents partial correlations among the self-report measures controlling for sex, marriage duration, and number of children. In support of the

TABLE 1. Partial Correlations Among Self-Reported Integrative Self-Knowledge, Marital Satisfaction, and Personality Measures

Measures	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Integrative Self-Knowledge	.25***	.05	.32***	.38***	.57***	.40***	-.50***	-.48***	-.49***
2. Marital Satisfaction	—	.00	.33***	.27***	.29***	.18*	-.26***	-.18*	-.33***
3. Extraversion		—	.18*	.14*	.05	.18*	-.04	-.17*	-.02
4. Agreeableness			—	.48***	.10	.46***	-.21***	-.36***	-.36***
5. Conscientiousness				—	.16*	.45***	-.23***	-.29***	-.31***
6. Emotional Stability					—	.10	-.52***	-.39***	-.52***
7. Openness to Experience						—	-.15*	-.14*	-.22***
8. Interpersonal Sensitivity							—	.55***	.56***
9. Interpersonal Ambivalence								—	.55***
10. Aggression									—

Note. Partial correlations controlled for sex, marriage duration, and number of children.

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

first hypothesis of this investigation, integrative self-knowledge predicted greater marital satisfaction. Integrative self-knowledge and marital satisfaction also correlated positively with all Big Five traits except for extraversion and negatively with all three interpersonal problems. Positive linkages with each other and negative associations with the Big Five traits confirmed that interpersonal sensitivity, interpersonal ambivalence, and aggression operationalized maladjustment. Therefore, as predicted by the second hypothesis, integrative self-knowledge and marital satisfaction both displayed associations with indices of greater psychological adjustment and interpersonal well-being.

Mediation Analyses

The third hypothesis was that integrative self-knowledge would mediate relationships of personality functioning with marital satisfaction. Tests of mediation required that a hypothesized independent variable display a significant association with the presumed mediator of integrative self-knowledge and also with the proposed dependent variable of marital satisfaction (Baron & Kenny, 1986). After entering sex, marital duration, and number of children in the first step of multiple regression procedures, extraversion failed to predict integrative self-knowledge ($\beta = .04, p = .63$). Table 2 demonstrates that all of the remaining potential independent variables did exhibit significant associations with integrative self-knowledge and with marital satisfaction. The addition of integrative self-knowledge to the prediction of marital satisfaction by the independent variable revealed its full mediation of the openness to experience and interpersonal ambivalence relationships; its partial mediation of the agreeableness, conscientiousness, and interpersonal sensitivity linkages; and no mediation of the emotional stability and aggression connections. In short, the third hypothesis rested upon the assumption that integrative self-knowledge would help a spouse integrate psychological strengths and ameliorate interpersonal difficulties in efforts to achieve a successful marriage, and these full and partial mediations effects supported that suggestion.

Spouse- and Self-Report Personality Relationships

Partial correlations between spouse- and self-reported personality measures appear in Table 3. Most important in these data was confirmation of the fourth hypothesis that spouse- and self-reported integrative self-knowledge would correlate positively. Numerous other significant relationships were in line with the predictions of the fifth hypothesis that self-reported integrative self-knowledge would display at least some linkages with spouse-reported personality adjustment (and vice versa). Specifically, self-reported integrative self-knowledge correlated positively with spouse-reported conscientiousness and emotional stability and negatively with spouse-reported aggression. In addition, spouse-reported integrative self-knowledge correlated negatively with self-reported interpersonal sensitivity and aggression. The finding that spouse-reported integrative self-knowledge

TABLE 2. Analyses of Integrative Self-Knowledge (ISK) as Mediating Relationships of Personality Independent Variables (IV) With Marital Satisfaction Dependent Variable (DV)

Independent Variable	IV with ISK		IV with DV		Addition of Mediator				Sobel Z
	β with ISK	ΔR^2	β with DV	ΔR^2	ISK β with DV	IV β with DV	IV β with DV	IV β with DV	
Agreeableness	.31***	.09***	.31***	.03**	.19**	.25**	.18*	.21*	2.33*
Conscientiousness	.37***	.06**	.25**	.03**	.20**	.18*	.15	.21*	2.43*
Emotional Stability	.58***	.08***	.30***	.02	.15	.24**	.07	.07	—
Openness to Experience	.39***	.03*	.16*	.05**	.24**	.16*	.16*	.18*	2.82**
Interpersonal Sensitivity	-.50***	.07***	-.26***	.02	.16*	-.18*	-.18*	-.08	-1.97*
Interpersonal Ambivalence	-.48***	.03*	-.19*	.03**	.21**	-.08	-.08	-.29***	-2.54**
Aggression	-.51***	.11***	-.35***	.01	.12	-.29***	—	—	—

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

TABLE 3. Partial Correlations of Spouse-Reported With Self-Reported Personality Measures

Self-Reported Measures	Spouse-Reported Measure								
	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Integrative Self-Knowledge	.23**	-.01	.05	.16*	.17*	.04	-.13	-.11	-.26**
2. Extraversion	-.16*	.30***	-.01	.04	-.18*	.12	.07	.05	.10
3. Agreeableness	.10	.09	.37***	.21**	.08	.18*	-.07	-.19**	-.11
4. Conscientiousness	.03	-.02	.11	.43***	.02	.11	-.03	-.09	-.11
5. Emotional Stability	.07	-.04	-.03	.01	.16*	-.09	-.11	-.14	-.20**
6. Openness to Experience	.09	.07	.22**	.14	.17*	.33***	-.09	-.08	-.13
7. Interpersonal Sensitivity	-.23**	.04	-.13	-.12	-.17*	.03	.34***	.29***	.29***
8. Interpersonal Ambivalence	-.06	.03	-.12	-.06	-.04	.02	.19**	.32***	.23**
9. Aggression	-.23**	.00	-.15*	-.17*	-.13	-.10	.22**	.21**	.33***

Note. Partial correlations controlled for sex, marriage duration, and number of children.

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

correlated negatively with self-reported extraversion was the lone outcome that was not in obvious conformity with the fifth hypothesis. Also as expected, self- and spouse-reports of each personality scale displayed direct relationships with each other, and all other significant linkages between self- and spouse-reported measures supported the validity of these various constructs. However, especially noteworthy were results supporting the sixth hypothesis that the correlation of self- and spouse-reported integrative self-knowledge would be lower than similar self- and spouse-reported relationships for all other measures. Only the comparison between integrative self-knowledge and emotional stability failed to display this pattern.

Questionnaire Response Styles

Extreme responding to the Big Five measures averaged 37.7% of the total ($SD = 17.8\%$), and for responding to the neutral center option, the average was 18.6% ($SD = 12.3\%$). Partial correlations controlling for sex, marriage duration, and number of children examined the linkages of integrative self-knowledge with these percentages. In these analyses, integrative self-knowledge displayed associations of .21 ($p < .01$) with the extreme and $-.26$ ($p < .01$) with the neutral response style percentages. In short, these data confirmed the seventh and final hypothesis that integrative self-knowledge would correlate positively with extreme and negatively with neutral response styles in the self-reported Big Five measures.

Further reflection, nevertheless, suggested that individual differences in response styles could be a consistent trait of research participants, could affect scores similarly across all instruments, and could consequently produce the same pattern of correlations regardless of the psychological scale examined. If so, then the Interpersonal Problems Scales should yield the same pattern of results as the Integrative Self-Knowledge Scale. This did not happen. Interpersonal sensitivity displayed no significant relationship with either the extreme ($-.03$, $p = .72$) or neutral ($.03$, $p = .64$) response styles. For interpersonal ambivalence, the correlation with the extreme style was negative rather than positive ($-.22$, $p < .01$), and a positive rather than a negative linkage with the neutral style reached borderline significance ($.13$, $p = .07$). Last, aggression correlated negatively with the extreme ($-.15$, $p < .05$) and positively ($.19$, $p < .01$) with the neutral styles, results that were opposite to those observed with integrative self-knowledge.

Discussion

Self-knowledge should promote adjusted personality functioning (e.g., Ghorbani et al., 2008) and marital satisfaction as a consequence. Empirical efforts to confirm such claims may confront a basic conceptual problem (Vogt &

Colvin, 2005). Research participants without self-knowledge may lack the self-insight necessary to offer accurate self-reports. The present investigation used the Integrative Self-Knowledge Scale to examine the hypothesized linkage of self-knowledge with marital adjustment and adopted several analytical strategies that addressed possible concerns about the valid measurement of self-reported self-insight. Findings clearly identified the Integrative Self-Knowledge Scale as a valid instrument that predicted marital adjustment.

Marital Satisfaction and Personality Adjustment

As hypothesized, integrative self-knowledge correlated positively with marital satisfaction. Positive adjustment implications also appeared in direct relationships with agreeableness, conscientiousness, emotional stability, and openness and in negative linkages with interpersonal sensitivity, interpersonal ambivalence, and aggression. Also as expected, marital satisfaction predicted personality adjustment by correlating positively with the same Big Five traits and negatively with the three interpersonal problems.

Theoretically, integrative self-knowledge is not only about self-insight, but also about active efforts of the self to seek its own meaningful development. Further support for that suggestion seemed clear when integrative self-knowledge fully mediated the openness and interpersonal ambivalence and partially mediated the agreeableness, conscientiousness, and interpersonal sensitivity associations with marital satisfaction. Therefore, integrative self-knowledge seemed to encourage the positive influences of openness, agreeableness, and conscientiousness on marriage while ameliorating the potential disturbances of interpersonal ambivalence and sensitivity. Such findings, in other words, suggested that integrative self-knowledge may help bring the psychological dynamics of an individual into line with the achievement of a personally important goal such as a happy marriage. Such mediation effects also seemed useful in arguing against the idea that the low self-insight of some participants somehow fundamentally challenged the validity of the Integrative Self-Knowledge Scale. This was so because mediation documented the ability of the scale to assess the "integration" of personality into a desired outcome like marital satisfaction. Such mediation effects supplemented previous demonstrations that the Integrative Self-Knowledge Scale may record an empirically noteworthy self-regulatory process (Ghorbani, Cunningham, et al., 2010; Ghorbani, Watson, et al., 2011).

The failure of mediation effects to appear with emotional stability and aggression perhaps pointed toward the limitations of integrative self-knowledge in the self-regulation of emotional life. Those limitations, nevertheless, do not appear to be absolute because a previous investigation found that integrative self-knowledge partially mediated the effects of perceived stress on anger in samples that included

coronary heart disease and cancer patients (Ghorbani, Tahbaz, Watson, & Chen, 2012). Therefore, self-regulation of emotions may be apparent in at least some circumstances.

Spouse-Reported Assessments

Relationships between self- and spouse-reported personality characteristics further supported the hypothesis that integrative self-knowledge promotes marital adjustment. Specifically, self-reported integrative self-knowledge correlated positively with spouse-reported conscientiousness and emotional stability and negatively with spouse-reported aggression. Spouse-reported integrative self-knowledge also correlated negatively with self-reported interpersonal sensitivity and aggression. Again, integrative self-knowledge failed to mediate the relationship of aggression with marital satisfaction, but the consistent negative relationship observed in these self- and spouse-reported data nevertheless suggested that integrative self-knowledge may be a noteworthy factor in inhibiting aggression. Spouse-reported integrative self-knowledge also correlated negatively with self-reported extraversion. The perhaps unsurprising suggestion was that integrative self-knowledge may appear to others as a more introverted form of personality functioning. However, the more broad principal implication of these data was that self- and spouse-perceptions of integrative self-knowledge defined an interpersonal nexus of marital adjustment.

Spouse-reported integrative self-knowledge should not be vulnerable to the potential influence of self-ignorance on self-reports (Vogt & Colvin, 2005). Therefore, discovery that self- and spouse-reported integrative self-knowledge correlated positively further confirmed scale validity and paralleled a previous finding involving the peer-reports of dormitory roommates (Tahmasb et al., 2008).

An additional expectation was that the significant relationship between self- and spouse-reported integrative self-knowledge would not be as robust as for the other personality characteristics. This seemed possible because integrative self-knowledge represents a more (though not wholly) "private" psychological experience, as seems evident in the self-report, "By thinking deeply about myself, I can discover what I really want in life and how I might get it." The other personality measures instead appeared to assess traits that were more (though not wholly) "public." One conscientiousness item says, for example, "I am always prepared." A representative extraversion item asserts, "I am the life of the party." Illustrative of aggression was the self-report, "I fight with other people too much." Such self-reports point toward behavioral indicators that seem more publically available for view by a spouse. Therefore, as expected, the significant correlation between self- and spouse-reported integrative self-knowledge was lower than for all other measures except for emotional stability. Why this relationship for emotional stability was not stronger may deserve additional research attention.

Questionnaire Response Styles

A final, more unobtrusive line of evidence supporting scale validity appeared in the analysis of questionnaire response styles. Again, integrative self-knowledge theoretically is not only associated with greater self-insight, but also with adaptive personality development. Both possibilities suggest that those high in integrative self-knowledge should be less likely to respond with the “neither agree nor disagree” Likert option of scales designed to operationalize adaptive personality functioning. In addition, such individuals should also be more likely to display extreme response options as they “strongly agree” with personality strengths and “strongly disagree” with reverse scored personality weaknesses. Correlations with response styles to the Big Five traits confirmed both predictions.

Such results were specifically germane to integrative self-knowledge. Interpersonal ambivalence and aggression displayed the opposite pattern, that is, positive correlations with neutral and negative linkages with extreme response styles. In other words, a negative correlation with neutral and a positive correlation with extreme responses apparently did not reflect a general response style regardless of what a scale operationalized. That two scales correlating negatively with integrative self-knowledge should also display opposite relationships with these response styles offered further support for the logic underlying these analyses. More generally, these data supplemented previous findings that response styles may at least sometimes have substantive psychological implications (McCrae & Costa, 1983).

Limitations and Conclusions

Perhaps the most obvious limitation of this investigation was its use of an Iranian sample. Iran is a Muslim society, and self-knowledge is an important Islamic ideal (e.g., Ghorbani, Watson, et al., 2011). Research in other societies is obviously necessary before the conclusions of this project can be generalized more widely.

In addition, the present data supported the claim that integrative self-knowledge operationalizes a noteworthy self-regulatory process, but such a conclusion does not necessarily mean that integrative self-knowledge operates alone in exerting such influences. Preliminary evidence already suggests that mindfulness (Baer, Hopkins, Krietemeyer, Smith, & Toney, 2006) and self-control (Tangney, Baumeister, & Boone, 2004) may have important roles to play as well (Ghorbani, Watson, Farhadi, & Chen, 2014).

In short, this study most importantly confirmed that integrative self-knowledge correlates positively with marital adjustment. Numerous findings made it clear that any potential influences of self-ignorance on self-reported self-knowledge had no substantive impact on this conclusion. Demonstrations implicating integrative self-knowledge in self-regulation, nevertheless, pointed toward the need for additional

research. Especially important will be attempts to understand when and why integrative self-knowledge mediates the influences of some but not all psychological processes. To mention only one possibility, the moral emotions of shame and guilt have opposite mental health implications (Tangney & Dearing, 2002). Shame predicts maladjustment whereas guilt displays linkages with adjustment. Integrative self-knowledge would presumably have a role in the psychological dynamics of morality, and further efforts to clarify its self-regulatory influences might examine the possibility that integrative self-knowledge mediates the apparent effects of shame and guilt.

The correlational nature of these findings, of course, precludes any definitive inferences about causality. The idea that integrative self-knowledge should promote marital adjustment, nevertheless, remains a plausible causal assumption that deserves additional analysis in applied research. In premarital counseling and in the counseling of already married couples experiencing difficulties, for example, assessments of integrative self-knowledge might be essential in efforts to understand how an optimally effective counseling experience should proceed. When one or both partners display low levels of integrative self-knowledge, counseling may need to include interventions that explicitly encourage the development of integrative self-knowledge in order to achieve stronger and larger lasting counseling benefits for the relationship. Such studies, in other words, could have fruitful implications in applied efforts to promote happier marriages, as well as supply evidence that integrative self-knowledge does indeed exert a causal influence on marital satisfaction.

AUTHOR NOTES

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