Insight, Rumination, and Self-Reflection as Predictors of Well-Being

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ABSTRACT. Dispositional private self-focused attention variables such as insight, internal self-awareness (ISA), and self-reflectiveness (SR) have been found to relate to well-being. The present study sought to determine which dispositional private self-focused attention variables have the most predictive power for subjective well-being as measured by the Satisfaction With Life Scale (E. Diener, R. A. Emmons, R. J. Larsen, & S. Griffin, 1985) and for a *eudaemonic* form of well-being as measured by the Psychological Well-Being Scale (C. D. Ryff, 1989). A total of 121 college student participants completed an online version of the Self-Consciousness Scale–Revised, the Rumination–Reflection Questionnaire, the Self-Reflection and Insight Scale, the Satisfaction With Life Scale, and the Psychological Well-Being Scale. Results of a multivariate regression analysis using the Self-Consciousness Scale–Revised's (M. F. Scheier & C. S. Carver, 1985) subfactors of SR and ISA, the Rumination–Reflection Questionnaire's (P. D. Trapnell & J. D. Campbell, 1999) subscales of Rumination and Reflection, and the Self-Reflection and Insight Scale's (A. M. Grant, J. Franklin, & P. Langford, 2002) Self-Reflection and Insight subscales revealed that the Insight subscale was the only statistically significant predictor (a positive predictor) for all 6 dimensions of psychological well-being. Insight was also the only significant positive predictor for satisfaction with life. The Rumination subscale was a significant negative predictor for 3 dimensions of psychological well-being, and the Reflection subscale was a significant positive predictor for 1 dimension. Implications of dispositional self-awareness variables and their relation to dimensions of well-being are discussed.

Keywords: insight, private self-consciousness, rumination, self-reflection, well-being

FOR CENTURIES, PHILOSOPHERS HAVE PONDERED the nature of happiness and the good life, but only in recent decades have psychologists concentrated research efforts in the area. Several constructs have been proposed to capture the essence of happiness including, among others, subjective well-being (Diener, 1984) and *psychological well-being* (Ryff, 1989; Ryff & Keyes, 1995; Ryff &

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Singer, 1996). *Subjective well-being* refers to one's cognitive and affective evaluations of life satisfaction, whereas *psychological well-being* refers to the satisfaction of particular needs that lead to well-being such as autonomy, environmental mastery, and purpose in life. Psychological well-being as proposed by Ryff (1989) corresponds more closely to the *eudaemonist* theories of the ancient Greeks, who based an understanding of happiness on following prescriptive practices (e.g., Aristotle's teachings that happiness could be attained by following certain virtues) rather than on making subjective judgments about one's emotional states or overall life satisfaction (as defined by subjective well-being). Although many variables related to well-being have been examined, one area that has rarely been explored is self-consciousness, yet the ability to privately self-focus attention would appear to be a sine qua non for personal growth and psychological well-being. The present study was designed to determine the specific forms of dispositional private self-focus that best predict both subjective and psychological well-being.

Although private self-consciousness is associated with positive characteristics such as possessing a greater level of self-understanding (Darvill, Johnson, & Danko, 1992) and being more open to experiences (Scandell, 1998; Trapnell & Campbell, 1999), it is also linked to negative experiences and characteristics such as depression (Ingram & Smith, 1984), anxiety (Wells, 1985), and neuroticism (Trapnell & Campbell, 1999). Trapnell and Campbell (1999, p. 286) call this dual nature of private self-consciousness the "self-absorption paradox."

Private self-consciousness, at least as measured by Fenigstein, Scheier, and Buss's (1975) scale, refers to a dispositional tendency to focus on one's inner thoughts and feelings. It appears to be a two-subfactor construct with each subfactor representing opposing elements of the self-absorption paradox. Factor analytic studies of private self-consciousness as measured by Fenigstein and colleagues' scale have consistently revealed the presence of these two private self-consciousness subfactors, which are labeled internal self-awareness (ISA) and self- reflectiveness (e.g., Anderson, Bohon, & Berrigan, 1996; Burnkrant & Page, 1984; Creed & Funder, 1998; Kingree & Ruback, 1996; Piliavin & Charng, 1988).

Self-reflectiveness (SR) is a tendency to focus on oneself repeatedly, whereas ISA represents a tendency to maintain a general awareness of one's feelings and mental processes. Although researchers have found that high SR scores are associated with mild psychopathological traits and tendencies including neuroticism (Creed & Funder, 1998); lower self-esteem and higher trait anxiety and depression (Anderson et al., 1996); excessive rumination (Trapnell & Campbell, 1999); and more social anxiety, guilt, and shame (Watson, Morris, Ramsey, Hickman, & Waddell, 1996), these same investigators have generally found an inverse relationship of these variables with high ISA. Harrington and Loffredo (2007) also found a positive relationship between ISA and psychological well-being. Thus, in general, research findings have demonstrated that SR tendencies to self-focus are associated with less well-being, whereas ISA tendencies are associated with greater well-being.

Although the use of the SR and ISA subfactors of the Private Self-Consciousness Scale has helped researchers to advance understanding of the different types of self-focus dispositions and their relationships with life satisfaction and mild psychopathological variables, use of these subfactors has been criticized, primarily on psychometric grounds (e.g., Bernstein, Teng, & Garbin, 1986). Issues include the small number of items used for each, resulting in inadequate reliabilities; the multiple scoring systems used; and the overlapping variance of the two factors.

In response to these and other criticisms, two new instruments have been developed to measure a dispositional tendency toward private self-focus that meet more rigorous psychometric standards. These are the Rumination–Reflection Questionnaire and the Self-Reflection and Insight Scale. Trapnell and Campbell (1999) developed the 24-item Rumination–Reflection Questionnaire and found an independent factor for both subscales (Rumination and Reflection) as well as a respectable coefficient alpha in the low .90s. The Rumination subscale measures a tendency to repeatedly self-focus on one's past actions, and the Reflection subscale measures a philosophical love of self-exploration. The authors constructed the Rumination subscale to capture the self-focused dimensions of Neuroticism (see Big-Five personality factors; Costa & McCrae, 1985) and constructed the Reflection subscale to capture the self-focused dimensions for Openness to Experience. Although the Rumination subscale has similarities to SR of the Private Self-Consciousness Scale, its authors noted that the Rumination–Reflection Questionnaire subscales are not intended to be and are not equivalents to the SR or ISA subfactors of the Private Self-Consciousness Scale.

Grant, Franklin, and Langford's (2002) Self-Reflection and Insight Scale was designed to be an improvement over the Private Self-Consciousness Scale and was written with the idea that private self-consciousness embodies two subfactors similar to those found for the Private Self-Consciousness Scale, a self-reflection scale and an insight scale. The authors reported that their Self-Reflection subscale has a relatively high coefficient alpha (the low .90s) and that their Insight subscale has a slightly lower alpha, though in the reasonably high range (the high .80s). Grant et al. found a positive correlation of $r = .59$ for the Self-Reflection and Insight Scale with the Private Self-Consciousness Scale but did not report any correlations between their subscales and the Private Self-Consciousness Scale subfactors of SR and ISA. Paralleling the findings for SR and ISA, those researchers discovered that their Self-Reflection subscale positively correlated with anxiety and stress variables, and that, as predicted, their Insight subscale negatively correlated with these same variables.

It appears that only one study to date, by Lyke (2009), has examined the relationship between Grant et al.'s (2002) Self-Reflection and Insight Scale and well-being. To our knowledge, no study has used Trapnell and Campbell's (1999) Rumination–Reflection Questionnaire to predict well-being. It should be noted that Elliott and Coker (2008) did use derived items from the Rumination–Reflection

Questionnaire and a measure of happiness, but unfortunately, because they modified items from Trapnell and Campbell's scale, their results do not speak directly to the scale's overlap with well-being.

Lyke (2009) found that subjects grouped into low, medium, and high categories of Insight as measured by the Self-Reflection and Insight Scale reported greater subjective well-being when their insight levels were high. She used the Subjective Happiness Scale (Lyubomyrsky & Lepper, 1999) and the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) to evaluate subjective well-being. There was a significant positive correlation of $r = .38$ between scores for Insight and the Subjective Happiness Scale as well as the same correlation ($r = .38$) between Insight and the Satisfaction With Life Scale. Although the Insight subscale correlated positively with her measure of happiness and well-being, the Self-Reflection subscale showed almost a zero correlation.

Most of the well-being research including Lyke's (2009) uses subjective well-being. However, Kesebir and Diener (2008) stress the importance of also exploring the eudaemonistic approaches to well-being such as psychological well-being. The present study sought to include the eudaemonistic concept of well-being by using Ryff's (1989) Psychological Well-Being Scale, which conceptualizes well-being as prescribed by the six dimensions of self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. In addition, a traditional measure of subjective well-being was employed, the Satisfaction With Life Scale, which (as previously described) measures one's subjective cognitive assessment of one's life based on one's personal criteria for life satisfaction.

Although Lyke's (2009) study employed the Self-Reflection and Insight Scale as the sole measure of two unique dimensions of disposition toward self-focused attention, we employed it, the Rumination–Reflection Questionnaire, and a revised version of the Private Self-Consciousness Scale (Private Self-Consciousness Scale–Revised). In total, we used six private self-focus variables including the two Self-Reflection and Insight Scale subscales, the two Rumination–Reflection Questionnaire subscales, and the two subfactors of the Private Self-Consciousness Scale–Revised to determine the best dispositional private self-focused attention predictor variables of both a eudaemonistic concept of well-being (as measured by the Psychological Well-Being Scale) and a subjective well-being concept of well-being (as measured by the Satisfaction With Life Scale).

Predictions

We predicted based on Lyke's (2009) findings that the Self-Reflection and Insight Scale's Insight subscale would be the most robust positive predictor of well-being. As discussed previously, Grant et al. (2001) patterned this scale after ISA, which captures many of the positive qualities of private self-consciousness. They found that their Insight subscale was negatively correlated with anxiety

and stress variables. This subscale appears to capture the positive side of the self-absorption paradox and could be similar to dimensions of positive insight sought by psychotherapists, though the degree of overlap of the insight construct as defined in a therapy context and the insight construct as determined by Grant et al.'s scale is currently unknown.

Due to the neuroticism tendencies reflected in the Rumination–Reflection Questionnaire's Rumination scale, this scale we expected to be the most powerful negative predictor of well-being. This prediction was further bolstered by the substantial body of research showing that rumination is associated with depressed mood (Nolen-Hoeksema, McBride, & Larson, 1997; Nolen-Hoeksema & Morrow, 1993; Nolen-Hoeksema, Parker, & Larson, 1994; Raes, 2010).

The Self-Reflection and Insight Scale's Self-Reflection subscale we predicted to contribute minimally to well-being variance based on Lyke's (2009) findings of a near-zero correlation. This prediction was based on the limited empirical findings available that appeared to supersede a theoretical prediction of a negative association (since it is patterned after SR, which captures the negative side of the self-absorption paradox) between this scale and measures of well-being. No predictions were made concerning the Rumination–Reflection Questionnaire's Reflection subscale due to its unique qualities.

We predicted the SR and ISA subfactors of the Private Self-Consciousness Scale–Revised to contribute less variance to the predictive model than the more psychometrically sound dual subscales of the Self-Reflection and Insight Scale and the Rumination–Reflection Questionnaire. As previously found, we expected SR to negatively correlate and ISA to positively correlate with well-being.

Method

Participants and Procedure

Participants were 121 (99 female and 22 male) university students who completed an online consent form, a demographic questionnaire, and an online version of the Self-Consciousness Scale–Revised, the Rumination–Reflection Questionnaire, the Self-Reflection and Insight Scale, the Satisfaction With Life Scale, and Ryff's (1989) Psychological Well-Being Scale (version with 14 items per dimension). The sample group's race/ethnicity breakdown consisted of the following: Non-Hispanic White = 53.7% ($n = 65$), Hispanic = 19.0% ($n = 23$), African American = 15.7% ($n = 19$), Asian American = 5.0% ($n = 6$), and Other = 6.6% ($n = 8$).

The mean age was 31.29 years with a standard deviation of 8.67 years. The mean age of the participants was higher than for a typical college sample because the university they attended is an upper division university that only serves college juniors, seniors, and master's level students, and the general profile of these students is nontraditional. In the year when the study was conducted, 1.5% of students attending were below age 21 years, 24.2% were between the ages of

21 and 25 years, 24.2% were between the ages of 26 and 30 years, 30.8% were between the ages of 31 and 40 years, and 19.3% were above age 40 years. The mean age of 31.29 years for students in the sample was comparable to the mean age of 32.3 years of all the students attending the university in the year when the study was conducted.

Students who participated in the study were enrolled in online courses in the Schools of Arts and Sciences, Education and Human Development, Business, and Nursing and were invited to participate by their online instructor or through an online announcement on the university Web site. Students who chose to participate in the study were given a link to a Web site that allowed them to complete the measures online after being presented with an informed consent form that had to be clicked to indicate consent before the measures were presented. Only participants, the researchers, and a research assistant had access to the survey site.

Measures

The Self-Consciousness Scale–Revised (Scheier & Carver, 1985) is a 22-item 4-point Likert-type scale that is a revised version of the original 23-item Self-Consciousness Scale (Fenigstein et al., 1975). The Self-Consciousness Scale–Revised is designed for use with a broad population, whereas the original Self-Consciousness Scale is better suited for a traditional college population. For some items, the wording was simplified in the Self-Consciousness Scale–Revised to address comprehension difficulties that some noncollege participants experienced with the original Self-Consciousness Scale. The scale also addressed perceived weaknesses in the original such as changing response formats of items that were reported by some participants as confusing. One item from the original was dropped because it no longer loaded on the expected factor after being modified to its less abstract version.

Both the Self-Consciousness Scale and the Self-Consciousness Scale–Revised contain the three subscales of Public Self-Consciousness, Private Self-Consciousness, and Social Anxiety. *Public Self-Consciousness* measures one's tendency to focus on how one may be perceived in a public setting and is illustrated by the item, "I care a lot about how I present myself to others." *Private Self-Consciousness* refers to one's tendency to focus on one's private thoughts and feelings and is represented by the following item: "I'm constantly thinking about my reasons for doing things." The *Social Anxiety* subscale measures a tendency to experience feelings of apprehensiveness in social contexts and is demonstrated by the item, "It takes me time to get over my shyness in new situations." Scheier and Carver found acceptable reliabilities for the three subscales of the Self-Consciousness Scale–Revised, including 4-week test–retest correlations ranging from .74 to .77 and Cronbach alphas ranging from .75 to .79. In addition, factor analysis with Varimax rotation supported the construct validity of the three subscales.

As discussed previously, however, two subfactors labeled SR and ISA consistently emerge in factor analytic studies of the Private Self-Consciousness Scale. An example of the two Private Self-Consciousness Scale subfactors for the Self-Consciousness Scale can be found in Burnkrant and Page's (1984) confirmatory analysis studies. These authors reported that the SR subfactor comprised five items and that the ISA subfactor comprised three items. Martin and Debus (1999) noted that equivalent items for these subfactors found in the Self-Consciousness Scale can be demonstrated by summing Self-Consciousness Scale–Revised's scores for items 1, 4, 6, 14, and 17 to determine SR and summing scores for items 12, 19, and 21 to determine ISA. This was the scoring system used to determine SR and ISA in the present study. A sample SR item from the Self-Consciousness Scale–Revised is "I'm always trying to figure myself out," and a sample ISA item is "I generally pay attention to my inner feelings."

Trapnell and Campbell's (1999) 24-item 5-point Likert-type scale called the Rumination–Reflection Questionnaire measures the extent to which participants are disposed to engage in repetitive thinking about their past (rumination) and to reflect on themselves out of epistemic curiosity, that is, out of a philosophical love of self-exploration (reflection). A representative example of the Rumination subscale is "Often I'm playing back over in my mind how I acted in a past situation," and an example of the Reflection subscale is "I love analyzing why I do things." The authors reported on conducting a principal-components oblique rotation factor analysis that the factor structure supported the construct of two unique factors. In addition, they found a relatively high coefficient alpha for both subscales (Rumination = .90, and Reflection = .91). The subscales showed good convergent validity in that each correlated highly with its respective factor predicted from the Big Five factor model of personality (Rumination with Neuroticism, and Reflection with Openness to Experience). They also showed good discriminant validity in that they showed a minimal correlation with each other ($r = .22$).

The 20-item 6-point Likert-type scale called the Self-Reflection and Insight Scale (Grant et al., 2002) consists of two subscales with one labeled Self-Reflection and the other labeled Insight. The Self-Reflection subscale measures the respondent's need for and engagement in self-reflection and is characterized by the item "I am very interested in examining what I think about," whereas the Insight subscale measures the characteristic of generally having internal self-awareness of one's feelings, thoughts, and motivations represented by the item "I usually know why I feel the way I do."

In constructing the instrument, Grant and his colleagues used a principal-components analysis with varimax rotation to eliminate items that did not load on the expected two factors. They used the same factor analytic procedure a second time to confirm the expected two orthogonal factors. The coefficient alpha was .91 for the Self-Reflection subscale and was .87 for Insight. The 7-week test–retest reliabilities were in the high .70s for both subscales. Convergent validity was demonstrated by the Self-Reflection subscale positively correlating with the Self-Consciousness Scale's Private Self-Consciousness subscale and with measures of

anxiety and stress. The Insight subscale showed the predicted negative correlation with the Self-Consciousness Scale's Private Self-Consciousness subscale as well as with measures of anxiety, stress, and depression. Excellent discriminant validity was demonstrated in that the subscales showed a near-zero correlation with each other ($r = -.03$).

The Psychological Well-Being Scales were designed to measure well-being by assessing its six hypothesized dimensions embodied in subscales referred to as Self-Acceptance, Positive Relations With Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth (Ryff, 1989). The original inventory includes 20 items per subscale each using a 6-point Likert-type format, and a shorter version used in this study contains 14 items per subscale. Correlations reported by Ryff between the original and the shorter version range from .97 to .98.

The first subscale, Self-Acceptance, taps into one's level of self-approval and is represented by the item "I like most aspects of my personality." Positive Relations With Others measures how satisfied the respondents are with their interpersonal relationships and is characterized by the item "My friends and I sympathize with each other's problems." The Autonomy subscale measures self-determination and self-directedness and is illustrated by the item "People rarely talk me into things I do not want to do." Environmental Mastery includes the perception of control over one's outer life and is characterized by the item "In general, I feel I am in charge of the situation in which I live." The subscale, Purpose in Life, demonstrated by the item "I feel good when I think of what I've done in the past and what I hope to do in the future," captures the concept of living one's life with meaning and direction. Last, the subscale measuring the dimension of Personal Growth, indicated in the item "For me, life has been a continuous process of learning, changing, and growth," reflects the idea of positive expansion of one's potential.

Ryff (1989) reported favorable reliability estimates for the Psychological Well-Being's scales ranging from .87 to .93 for coefficient alphas and from .81 to .88 for 6-week test–retest reliability. Ryff and Keyes (1995) also demonstrated good construct validity for the Psychological Well-Being subscales using a confirmatory factor analysis that supported the hypothesis that all six predicted dimensions formed one global factor.

The 5-item Satisfaction With Life Scale (Diener et al., 1985) uses a 7-point Likert-type scale to measure a person's subjective judgment of his or her life satisfaction as a whole. A representative sample item is "In most ways my life is close to ideal." Diener et al. reported that a single factor emerged from their principal-axis factor analysis of the Satisfaction With Life Scale, suggesting that the instrument measures the proposed single dimension of life satisfaction. They also found a good 2-month test-retest reliability of .82 and a good coefficient alpha of .87. Many supportive construct validity studies have been done indicating positive convergence findings with other methods for assessing life satisfaction and negative correlations with measures of distress. See Pavot and Diener (1993) for a review of Satisfaction With Life Scale validity studies.

Results

Cronbach alphas were determined for the Self-Consciousness Scale–Revised's SR and ISA subfactors as well as for the two subscales of the Self-Reflection and Insight Scale and of the Rumination–Reflection Questionnaire. The alphas were as follows: SR = .71, ISA = .66, Self-Reflection and Insight Scale–Self-Reflection = .92, Self-Reflection and Insight Scale–Insight = .83, Rumination–Reflection Questionnaire–Rumination = .91, and Rumination–Reflection Questionnaire–Reflection = .90, generally replicating previous findings and reinforcing the argument that SR and ISA have weaker psychometric properties.

Table 1 reports bivariate correlations for the six predictor variables of Self-Reflection and Insight–Self-Reflection, Self-Reflection and Insight–Insight, Rumination– Reflection Questionnaire–Rumination, Rumination–Reflection Questionnaire– Reflection, Self-Consciousness Scale Revised–SR, and Self-Consciousness Scale Revised–ISA with the three subscales of the Self-Consciousness Scale Revised of Private Self-Consciousness, Public Self-Consciousness, and Social Anxiety. It is noteworthy that all the dispositional self-attention predictor variables were significantly positively correlated with Private Self-Consciousness except the Self-Consciousness Scale's Insight, which had zero correlation.

Table 2 reports the descriptive statistics and the bivariate correlations for the six predictor variables and the seven criterion variables. Two predictor variables showed robust correlations with nearly all the Psychological Well-Being

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TABLE 1. Bivariate Correlations Between Study Subscale/Subfactor Self-Attention Variables and the Self-Consciousness Scale Revised Scales

Variable	SRIS-SR	SRIS-IN	RRQ-RM	RRQ-RF	SR	ISA
Private SC	**.50**	.00	**.24**	**.47**	**.89**	**.63**
Public SC	.17	−.17	**.39**	.04	**.45**	.05
Social anxiety	.07	−**.31**	**.45**	.02	**.25**	−.11

Notes. **Bold** type indicates correlation significant at the .01 level (two-tailed). ISA = the Internal Self-Awareness subfactor of the Self-Consciousness Scale–Revised; Private SC = Private Self-Consciousness of the Self-Consciousness Scale–Revised; Public SC = Public Self-Consciousness of the Self-Consciousness Scale–Revised; RRQ-RF = Rumination–Reflection Questionnaire–Reflection; RRQ-RM = Rumination-Reflection Questionnaire–Rumination; SR = the Self-Reflectiveness subfactor of the Self-Consciousness Scale–Revised; Social Anxiety = Social Anxiety of the Self-Consciousness Scale–Revised; SRIS-IN = Self-Reflection and Insight Scale–Insight; and SRIS-SR = Self-Reflection and Insight Scale–Self-Reflection.

TABLE 2. Descriptive Statistics and Simple Correlations Among Predictor and Criterion Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. SRIS-SR													
2. SRIS-IN	−.13												
3. RRQ-RM	**.27**	**−.57**											
4. RRQ-RF	**.78**	.04	.06										
5. SR	**.44**	−.13	**.34**	**.35**									
6. ISA	**.26**	.18	−.03	**.38**	**.25**								
7. SWLS	−.18	**.34**	**−.29**	.06	.08	.05							
8. Autonomy	−.02	**.48**	**−.50**	.08	−.13	.20*	**.41**						
9. Env Mastery	−.11	**.46**	**−.47**	.02	−.18	.07	**.67**	**.56**					
10. Pers Growth	**.27**	**.29**	−.11	**.41**	.02	**.25**	**.40**	**.45**	**.56**				
11. Pos Rel Others	.04	**.44**	**−.33**	.10	−.11	.20*	**.53**	**.45**	**.68**	**.60**			
12. Purpose in Life	−.03	**.43**	**−.25**	.06	−.13	.09	**.57**	**.47**	**.75**	**.70**	**.71**		
13. Self-Acceptance	−.06	**.46**	**−.45**	.06	−.20*	.13	**.77**	**.58**	**.79**	**.63**	**.68**	**.77**	
M	48.65	35.16	38.07	39.47	7.00	6.28	25.46	64.02	63.41	71.41	67.07	70.69	65.37
SD	10.92	6.69	9.75	9.26	3.40	1.88	6.93	10.68	11.73	8.28	10.31	10.45	12.99

Notes. **Bold** type indicates correlation significant at the .01 level (two-tailed). Env Mastery = Environmental Mastery; ISA = the Internal Self-Awareness subfactor of the Self-Consciousness Scale Revised; Pos Rel Others = Positive Relations with Others; Pers Growth = Personal Growth; RRQ-RF = Rumination–Reflection Questionnaire–Reflection; RRQ-RM = Rumination–Reflection Questionnaire–Rumination; SR = the Self-Reflectiveness subfactor of the Self-Consciousness Scale Revised; SRIS-IN = Self-Reflection and Insight Scale–Insight; and SRIS-SR = Self-Reflection and Insight Scale–Self-Reflection.

*Correlation significant at the .05 level (two-tailed).

dimensions. They were the Self-Reflection and Insight Scale's Insight subscale and the Rumination–Reflection Questionnaire's Rumination subscale. Self-Reflection and Insight Scale's Insight was significantly ($p < .01$) positively correlated with all of the Psychological Well-Being dimensions and the Satisfaction With Life Scale. Rumination–Reflection Questionnaire's Rumination was negatively correlated with all the Psychological Well-Being dimensions and the Satisfaction With Life Scale. However, its correlation with the Psychological Well-Being dimension of Personal Growth failed to reach statistical significance.

The Self-Reflection and Insight Scale's Self-Reflection subscale generally showed near-zero insignificant negative correlations with the Psychological Well-Being dimensions. One exception that bucked the trend was a positive significant correlation with Personal Growth ($r = .27, p < .01$). The Rumination–Reflection Questionnaire's Reflection subscale showed a similar pattern of near-zero insignificant correlations with the Psychological Well-Being dimensions, though in the positive direction. Once again, Personal Growth was the exception with a strong positive correlation ($r = .41, p < .01$).

The SR subfactor showed small negative correlations with each of the Psychological Well-Being dimensions except Personal Growth with only Self-Acceptance reaching statistical significance ($r = -.20, p < .05$). All of the Psychological Well-Being dimensions positively correlated with ISA, with Autonomy ($r = .20, p < .05$), Personal Growth ($r = .25, p < .01$), and Positive Relations With Others ($r = .20, p < .05$) reaching statistical significance.

A step-wise multiple regression analysis was conducted testing the Self-Consciousness Scale-Revised's SR and ISA, the Rumination–Reflection Questionnaire's Rumination and Reflection, and the Self-Reflection and Insight Scale's Self-Reflection and Insight as predictors of satisfaction with life (as measured by the Satisfaction With Life Scale). The predictor model of best fit for satisfaction with life was Insight ($F(1, 119) = 15.412, p < .001$; 12% of variance and 11% adjusted).

A multivariate regression analysis using the six self-awareness variables (predictor variables) and the six psychological well-being variables (criterion variables) was run to determine the significant predictor-criterion relationships. Multivariate regression analyses are used when there are multiple predictor variables and multiple criterion variables (see Stevens, 2009, pp. 128–131, for a discussion). Use of this analysis minimizes chance findings in ways similar to other multivariate procedures (e.g., multivariate analyses of variance). The multivariate regression analysis first determines the significance of the overall multivariate F. If that score is significant, F scores for each individual predictor variable can be examined for significance with the cluster of criterion variables. Significant F scores then protect against inflated alphas when the researcher next examines individual t scores for each predictor variable with each criterion variable for a finer grained interpretation of results.

The Wilks' Lambda overall multivariate F test was highly significant ($F(6, 110) = 9.99$, $p < .001$) indicating that the self-awareness predictor variables significantly predicted the psychological well-being criterion variables. Examination of the individual F scores revealed that only three of the six predictor variables were significant in predicting psychological well-being (as measured by the six criterion variables). They were the Rumination–Reflection Questionnaire's Rumination ($F(6, 110) = 5.91$, $p < .001$); the Self-Reflection and Insight Scale's Insight ($F(6, 110) = 3.29$, $p < .01$); and the Rumination–Reflection Questionnaire's Reflection ($F(6, 110) = 3.09$, $p < .01$).

Looking at the individual t scores revealed that only the Self-Reflection and Insight Scale's Insight was significant ($p < .01$) for all six psychological well-being variables. All the corresponding beta weights were positive, indicating that it is a positive predictor of psychological well-being. The Rumination–Reflection Questionnaire's Rumination was significant (with corresponding negative beta weights) for the psychological well-being dimensions of Autonomy ($p < .001$), Environmental Mastery ($p < .01$), and Self-Acceptance ($p < .05$). Finally, the Rumination–Reflection Questionnaire's Reflection was significant (with a corresponding positive beta weight) for the psychological well-being dimension of Personal Growth ($p < .05$).

Discussion

The present study's objective was to examine six dispositional private self-focused attention variables related to well-being and to determine which ones are the most powerful positive and negative predictors of both subjective and psychological well-being. Although previous research demonstrated that the Self-Consciousness Scale–Revised's SR and ISA factors can predict psychological well-being (Harrington & Loffredo, 2007), results of the regression analyses in the present study demonstrate that the subscales of the more psychometrically sound instruments of the Rumination–Reflection Questionnaire and Self-Reflection and Insight Scale are better at predicting psychological well-being than the Self-Consciousness Scale–Revised's subfactors, as expected. In particular, the Self-Reflection and Insight Scale's Insight subscale was the only one to make statistically significant contributions to the predictive models for both (a) all six dimensions of Ryff's (1989) eudemonic construct for psychological well-being and (b) the subjective well-being construct of satisfaction with life. The second most comprehensive predictor variable was the Rumination–Reflection Questionnaire's Rumination scale, which was found to predict three dimensions of psychological well-being, followed by the Rumination–Reflection Questionnaire's Reflection subscale, which only made a significant contribution to the prediction of one psychological well-being dimension, Personal Growth. Thus, as predicted, Insight was the most robust positive predictor, and Rumination was the most powerful negative predictor of well-being.

Private Self-Consciousness and Its Relation to the Other Predictor Variables

Bivariate correlations reported in Table 1 for Self-Reflection and Insight–Self-Reflection, Self-Reflection and Insight–Insight, Rumination–Reflection Questionnaire–Rumination, Rumination–Reflection Questionnaire–Reflection, Self-Consciousness Scale Revised–SR, and Self-Consciousness Scale Revised–ISA, with the three subscales of the Self-Consciousness Scale–Revised are discussed next. Unsurprisingly, the Self-Reflection and Insight–Self-Reflection, and the Rumination–Reflection Questionnaire's Rumination and Reflection subscales were all significantly positively correlated with Private Self-Consciousness. It should be noted that Trapnell and Campbell (1999) also found significant positive correlations between Private Self-Consciousness and each of their subscales of the Rumination–Reflection Questionnaire.

A surprising finding, however, was that the Self-Reflection and Insight's Insight subscale had a zero correlation with Private Self-Consciousness, suggesting it is measuring an entirely different self-attention construct than private self-consciousness. Its strongest correlation, a negative one, was with Social Anxiety ($r = -.31$), suggesting that it may positively relate to social confidence. The Rumination–Reflection Questionnaire–Rumination subscale was, out of the four subscales, the one most strongly related to Social Anxiety ($r = .45$). Thus, it appears that of the scales examined in the present study, the Self-Reflection and Insight's Self-Reflection and Rumination–Reflection Questionnaire's Reflection subscales best measure the construct of private self-consciousness and that the Rumination–Reflection Questionnaire's Rumination subscale only does so weakly. The Self-Reflection and Insight Scale's Insight subscale does not appear to be measuring private self-consciousness at all but rather appears to measure another dimension of dispositional self-focus.

The Importance of Insight to Positive Well-Being

The finding that the Self-Reflection and Insight Scale's Insight subscale, originally patterned after ISA, was found to be the most robust dispositional self-focus predictor variable of subjective and psychological well-being confirms that the disposition to have a conscious awareness of one's thoughts, feelings, and motivations is important to overall well-being. The correlation found in the present study of $r = .34$ between Insight and the Satisfaction With Life Scale essentially replicates Lyke's (2009) finding of a correlation of $r = .38$, suggesting that this is a consistent finding. In addition, however, the present study extends the findings by determining that Insight is also strongly correlated with the eudaemonist concept of psychological well-being on all six dimensions. Therefore, Insight was the only variable studied that powerfully predicted both the subjective and eudaemonist constructs of well-being.

Schools of psychotherapy beginning with Freud have proposed that raising one's consciousness to facilitate insight is the key to good psychological health. In fact, today therapists of virtually all schools of psychotherapy use some form of consciousness raising within their armamentarium of change agents (see

Prochaska & Norcross, 2010). However, this longstanding practice seems paradoxical in light of recent research findings such as (a) a meta-analytic study done by Mor and Winquist (2002) that found that self-focused attention has a moderate effect size for negative affect and (b) that of Ingram (1990), which reported that increased self-focused attention is an attribute associated with a number of different psychological disorders. This seeming paradox, first discussed by Trapnell and Campbell (1999) as the *self-absorption paradox*, can be resolved by unraveling the types of self-focused attention and studying the potential effects of each. For example, mindfulness meditation and practice that involves a type of self-focused attention derived from Buddhist teachings is associated with a number of salutary benefits including increased well-being (see Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007). Mindfulness practice is designed to focus attention in a way that fosters acceptance and a nonjudging perspective regarding one's inner experiences. Practitioners take "a nonevaluative stance toward thoughts and feelings" (Baer, 2007, p. 239).

Brown and Ryan (2003) contend that ISA is a construct that overlaps with mindfulness, and those researchers reported positive correlations between their Mindful Attention Awareness Scale, designed to measure dispositional tendencies toward engaging in mindfulness, and measures of emotional subjective well-being, eudaemonic well-being, and physical well-being. Although the present study found only a modest insignificant correlation between Insight (patterned after ISA) and ISA ($r = .18$), suggesting minimal overlap of these constructs, the most robust positive correlation for ISA was between the Reflection subscale from the Rumination–Reflection Questionnaire and ISA ($r = .38$). This finding essentially replicates Trapnell and Campbell's (1999) correlation of $r = .39$ between these same variables.

Why, then, is the Insight subscale that overlaps substantially less with ISA so much more of a robust and comprehensive positive predictor of well-being than the Reflection subscale that overlaps significantly more with ISA? The answer seems to be found in the psychological well-being concept of *self-acceptance*, which also happens to be one of the primary components of mindfulness. Whereas the Insight subscale shows a highly significant correlation with the psychological well-being dimension of Self-Acceptance ($r = .46$), the Reflection subscale does not ($r = .06$). The Reflection subscale, designed by Trapnell and Campbell (1999) to tap into the private self-focus components of Openness to Experience, only predicted one psychological well-being variable, Personal Growth (note that Schmutte & Ryff, 1997, also found that Openness to Experience was linked to Personal Growth). Thus, it appears that within the parameters of the variables examined in the present study, the combination of (a) the disposition to self-focus attention and (b) self-acceptance is the optimal formula for high well-being. It is essentially an "I like my personality" dispositional self-focused attention pattern. However, a disposition to self-focus attention where self-acceptance is neutral (a philosophical love of self-exploration) is essentially an "I'm open to change" pattern that is naturally

associated with personal growth. As we will subsequently suggest, a disposition to self-focus attention where self-acceptance is negative is essentially an "I do not like my personality" pattern and predicts well-being negatively.

The Importance of Rumination to Negative Well-Being

Rumination was negatively related to psychological well-being as predicted. As Baer (2007, p. 240) explains, "rumination is a style of recurrent negative thinking in which the causes, consequences, and implications of negative events and feelings are repetitively analyzed. It includes persistently dwelling on personal problems and inadequacies and reviewing what has gone wrong and why." This process appears to perpetuate depressed mood (Nolen-Hoeksema, 1991) and likely plays a role in sustaining disorders such as unipolar depression and a number of anxiety disorders (Baer, 2007).

This is not surprising since rumination relates to neuroticism. As Trapnell and Campbell (1999, p. 291) noted, they constructed the Rumination–Reflection Questionnaire–Rumination subscale to focus on "the private self-attentive aspects of Neuroticism (rumination)." In fact, in their study, the Rumination subscale positively correlated with a host of different measures of neuroticism, anxiety, depression, and negative affect. Neuroticism has been found to relate to many mental and physical disorders as well as to negatively predict overall quality and longevity of life (Lahey, 2009; Steel, Schmidt, & Schultz, 2008). Therefore, it is not surprising that Rumination was a strong negative predictor for psychological well-being.

In the present study, Rumination was found to have a highly significant negative correlation with the psychological well-being dimension scale of Self-Acceptance. This result is in accord with Lyubomirsky, Tucker, Caldwell, and Berg's (1999) finding that self-focused rumination was associated with negative self-evaluations. Therefore, as discussed previously, this would represent an "I do not like my personality" pattern of high levels of rumination combined with low levels of self-acceptance. Not liking one's personality makes sense for these individuals given that they also perceive they have little personal autonomy and environmental mastery and likely use repetitive negative self-critical thinking patterns in a dysfunctional attempt to resolve their perceived personal inadequacies.

Limitations of the Study

One of the limitations of the present study is the correlational nature of the design. Such designs do not lead to causal inferences. For example, from the present study, one cannot discern if a disposition to experience high levels of insight causes higher well-being, high levels of well-being cause a greater disposition toward self-focused insight, or perhaps an unknown third variable has a positive simultaneous impact on both dispositional self-focused insight and well-being. At this time, we can only speculate about causal variables and their directions of influence. However, studies discussed earlier regarding mindfulness

practice and the influence of rumination on psychological disorders suggest a causal role for different self-attention forms' positively or negatively influencing well-being.

Another limitation of the present study is the sample's composition of college students who are primarily female. In terms of a college sample's limiting external validity, it is important to note that Lyke (2009) found similar results for the Satisfaction With Life Scale in a community sample of 208 respondents. Therefore, the results do not appear to be limited to a college population. Further, although her sample was primarily female (70%), she did not find any gender differences in the Satisfaction With Life Scale or her other measure of subjective well-being for Insight. The sample size of males in the present study was too small to use as a comparison to females; however, given Lyke's findings, gender does not appear to play a role in this phenomenon.

Conclusion

The present study found that among the six dispositional self-focused attention variables examined, only the Self-Reflection and Insight Scale's Insight subscale successfully predicted both subjective well-being (as measured by Satisfaction With Life Scale) and eudaemonic well-being (as measured by Psychological Well-Being Scale). The Rumination–Reflection Questionnaire's Rumination subscale was the next most comprehensive predictor of psychological well-being, playing a negative predictive role for three of the six psychological well-being dimensions. Finally, the Rumination–Reflection Questionnaire's Reflection subscale played a predictive role, a positive one, only in the psychological well-being dimension of Personal Growth. The Private Self-Consciousness Scale subfactors of SR and ISA were not predictors of well-being as powerful as the more psychometrically sound subscales of the Self-Reflection and Insight Scale and Rumination–Reflection Questionnaire previously mentioned. These findings reinforce and extend those of Lyke (2009) that insight is a very important dispositional self-focused attention variable related to positive well-being. They also emphasize the negative relationship that some forms of dispositional self-focus, such as rumination, can have in the experience of well-being. Further, as in mindfulness practices, an important key is self-acceptance. Different levels of self-acceptance combined with different types of dispositional tendencies to engage in self-focused attention seem to account for much of the differences in subjective and psychological well-being found in the present study.

AUTHOR NOTES

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