

## **WHAT PREDICTS WELL-BEING: A CONSISTENT SELF-CONCEPT OR A DESIRABLE SELF-CONCEPT?**

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College students described themselves in different situations and completed measures of psychological and physical well-being. Previous studies have reported that describing the self as having the same traits in different situations predicts greater well-being. The current study replicated their findings but questioned the validity of their consistency measure—the between-situation correlation coefficient (BSCC). The BSCC was positively related only to the consistency of endorsing desirable and denying undesirable traits (types of consistency positively related to well-being), and was negatively related to consistency of endorsing undesirable traits (a type of consistency negatively related to well-being). Thus, the BSCC, while theoretically a measure of the self's structure, was in reality influenced by its content. Furthermore, distinguishing "yes" versus "no" responses to desirable versus undesirable traits showed that consistency could not be summarized by a single variable. Whereas consistent responses to desirable traits predicted well-being, consistent responses to undesirable traits did not.

Models of the self-concept typically distinguish between its contents and its structure (Campbell, Assanand, & Di Paula, 2003). The contents of the self-concept are the specific beliefs and attitudes people have about themselves, and are typically measured by asking people to generate statements about themselves or respond to statements on self-report questionnaires. The structure of the self-concept refers to how diverse contents are interrelated. The current paper attempts to clarify the roles of self-concept desirability (a content variable) versus self-concept consistency (a structural variable) in predicting self-reported well-being.

Self-concept desirability is the tendency to use desirable versus unde-

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sirable terms to describe the self. Studies of the relationship between well-being and the content of the self-concept have repeatedly shown that desirable content—even unrealistically desirable content—is associated with greater mental and physical health (Taylor & Brown, 1988; Taylor, Lerner, Sherman, Sage, & McDowell, 2003). Self-concept consistency is the tendency to use similar traits to describe the self in different situations. For example, Jill might describe herself as warm with her female friends but aloof with her male friends. In contrast, Jack might describe himself as warm with both his male and his female friends. At least with respect to warmth, then, Jack is more consistent than Jill.

Some psychologists suggest that a consistent self can be maladaptive. One argument is that consistency constrains individuals' ability to respond flexibly and adaptively to the challenges of different situations (Gergen, 1971; Sande, Goethals, & Radloff, 1988). A second argument is that consistency allows negative experiences in one situation to have a negative "spillover effect" on experiences in other situations (Linville, 1985, 1987). Other psychologists suggest that a consistent self enhances well-being. They contend that consistency in how one describes and comports oneself yields a reassuring sense of personal continuity and integrity (e.g., Block, 1961; Lecky, 1945) and facilitates more predictable and thus comfortable interpersonal interactions (Swann, Stein-Seroussi, & Giesler, 1992). Let us call this hypothesis that well-being is positively associated with self-descriptive consistency across situations *the consistency hypothesis*.

### PRIOR RESEARCH ON THE CONSISTENCY HYPOTHESIS

A number of papers have studied the relationship between self-concept consistency and well-being, including Block (1961), Campbell et al. (2003), Cross, Gore, and Morris (2003), Diehl, Hastings, and Stanton (2001), Donahue, Robins, Roberts, and John (1993), Lutz and Ross (2003), Sheldon, Ryan, Rawsthorne, and Ilardi (1997), and Suh (2002). The following section summarizes the methods and results of these studies. All of the studies asked participants to describe themselves in different situations. The number of situations assessed ranged from three (for some participants in Donahue et al.'s Study 2) to eight (in Block's study), with five being the modal number of situations. Commonly used situations included: when with one's parents, when with a friend, and when with a romantic partner. The number of self-descriptive terms varied from 16 to 60, with most studies using between 20 and 32 traits. Except for the early study by Block, the studies deliberately sampled traits associated with each factor of the five-factor model of personality (FFM; Peabody & Goldberg, 1989).

The studies used one of four equivalent measures of self-concept consistency. Some researchers (e.g., Campbell et al., 2003) computed the Pearson correlation coefficient between each pair of situations (the between-situation correlation coefficient or BSCC), and then used the mean BSCC across all pairs of situations as the measure of consistency. Others (e.g., Suh, 2003) subjected the BSCCs to a factor analysis, and used the eigenvalue of the first principal component as the measure of consistency. Note that this eigenvalue (E) could also be computed directly from the mean BSCC as follows:  $E = 1 + \text{BSCC}(n-1)$ , where  $n$  = the number of situations. Finally, to create measures of self-concept inconsistency or differentiation, other researchers used  $1 - \text{BSCC}$  (e.g., Sheldon et al., 1997) or  $1 - E$  (e.g., Donahue et al., 1993). The important point to appreciate is that all of these superficially different indices are simply linear transformations of each other. Therefore, they will all yield the same results and which one is used will make no substantive difference. The current paper will use the mean BSCC because it is simple and familiar.

All of the studies included measures of well-being. The most common were measures of self-esteem and depression, but some studies also included measures of neuroticism, stress, anxiety, positive and negative affectivity, or emotional adjustment. A number of studies assessed satisfaction with specific situations or with life in general. In addition, Sheldon et al. (1997) and Cross et al. (2003) included measures of physical symptoms. Across all of the studies and all of the outcomes measures, BSCC was always positively related to mental and physical well-being. Indeed, after reviewing the evidence, McReynolds, Altrocchi, and House (2000) concluded: "the indicated relationship between self-perceived behavioral variability and psychological adjustment seems essentially established" (p. 372).

### **CAN SELF-CONCEPT DESIRABILITY INFLUENCE SELF-CONCEPT STRUCTURE?**

Despite the supportive evidence, it may be premature to consider the consistency-adjustment relationship "essentially established." Consider the problems that have beset other research programs involving measures of self-concept structure. Structural measures have intrigued researchers in part because they presumably are not vulnerable to self-report biases and do not share method variance with self-report outcome measures. Yet, while *in theory* content and structure are independent, *in reality* content often influences structure. In particular, individuals' tendencies to impute desirable versus undesirable contents to the self have been shown to influence their scores on what purport to be structural measures.

For example, consider a series of studies that have been used as evidence that conceptions of the self are more complex than conceptions of others (Sande et al., 1988). Participants were asked to describe the self and others using pairs of contrasting traits such as “serious” and “care-free.” The results showed that people ascribed contrasting traits in greater numbers and in greater amounts to the self than to others, suggesting that the self-concept was more “multifaceted.” However, these studies used predominantly desirable traits, thus confounding multifaceted self-descriptions with desirable self-descriptions. Replicating Sande et al.’s studies using both desirable and undesirable traits revealed that people ascribed contrasting traits in greater numbers and in greater amounts to the self than to others only if the traits were desirable (Locke, 2002, Study 1; Locke & Horowitz, 1997). Thus, a closer examination revealed that people tend to describe themselves in more desirable—but not necessarily more complex—terms.

A more sophisticated and popular measure of self-concept complexity or “self-complexity” (Rafaeli-Mor & Steinberg, 2002),  $H$ , is also sensitive to the frequencies with which self-descriptive traits are used. Specifically, given a set of traits that people generally endorse, if you endorse a relatively large number of traits your  $H$  will be relatively low; consequently, since people generally endorse desirable traits, if you endorse a relatively large number of traits from a set of desirable traits your self-complexity score will be relatively low. Likewise, given a set of traits that people generally deny, if you deny a relatively large number of traits your  $H$  will be relatively low; consequently, since people generally deny undesirable traits, if you deny a relatively large number of traits from a set of undesirable traits your self-complexity score will be relatively low. In short, how many desirable or undesirable traits people ascribe to self (which is a content variable) influences their self-complexity score (which purports to be a structural variable). (For more detailed explanations and empirical demonstrations of how desirability influences complexity, see Locke, 2003)

The conflating of self-concept content and self-concept structure is not inevitable. Compartmentalization is a structural variable that refers to segregating negative descriptors into certain self-aspects and not others (Showers, 1992, 2000). For example, a “compartmentalized” person may ascribe numerous negative traits to the “me as a supervisor” but ascribe no negative traits to the “me as a friend” or “me as a parent.” A less compartmentalized person would ascribe a similar proportion of negative traits to each self-aspect. The most common index of compartmentalization is the phi coefficient, which compares the numbers of positive and negative traits in each self-aspect with that expected given the proportion of negative traits across all self-aspects. The phi co-

efficient avoids the problems that beset other structural measures by (a) measuring the structure of just one content variable (i.e., negative versus positive traits) and (b) controlling for the degree of structure expected by chance (i.e., by comparing the numbers of positive and negative traits in each self–aspect with the numbers expected by chance for that person).

### PROBLEMS WITH THE BSCC AS A MEASURE OF CONSISTENCY

The current paper argues that the measure of self–consistency, the BSCC, has the same problem that plagued the measures of self–complexity and the multifaceted self—that is, while in theory the BSCC is a structural variable, in practice it is confounded with the content variable of self–concept desirability. Furthermore, the BSCC has two additional problems: (1) the BSCC is a function of between–situation *covariance*, which differs from *consistency* as defined by the consistency hypothesis, and (2) the BSCC is also a function of within–situation variance and so is undefined whenever there is no variance in how traits are rated in a given situation.

To understand these problems, let us first review how the BSCC is computed. For the sake of simplicity, imagine that whenever respondents are asked “Does this trait describe you in this situation?” they have only two response options: “yes” or “no.” For each pair of situations, let  $YY$  be the number of traits to which the respondent responds “yes” in both situation 1 and situation 2. Let  $NN$  be the number of traits to which the respondent responds “no” in both situation 1 and situation 2. Let  $YN$  be the number of traits to which the respondent says “yes” in situation 1 and “no” in situation 2. And let  $NY$  be the number of traits to which the respondent says “no” in situation 1 and “yes” in situation 2. For those two situations, then, the covariance is  $(YY)(NN) - (YN)(NY)$ ; the variance is the square root of  $(YY + YN)(YY + NY)(NN + YN)(NN + NY)$ ; and the BSCC is the covariance divided by the variance.

The first problem is that the BSCC may reflect some types of consistency and not others. Consider the examples in Table 1, which are hypothetical examples of how four different men might describe their behavior when with women versus when with other men. Consider first Abe and Ben. In each case, how they are with men is perfectly predictive of how they are with women—that is,  $BSCC = 1$ . Yet, they are very different self–concepts. Abe consistently says “yes” to desirable traits and “no” to undesirable traits, whereas Ben consistently says “no” to desirable traits and “yes” to undesirable traits. Because in ordinary samples people generally endorse about twice as many desirable descriptors as undesirable descriptors (e.g., Locke & Horowitz, 1997), we would expect to have

TABLE 1. Examples of Descriptions of the Self in Two Different Situations

When with . . .	Desirable Traits				Undesirable Traits			
	T1	T2	T3	T4	T5	T6	T7	T8
<b>“Abe”</b>								
. . . men	Y	Y	Y	Y	N	N	N	N
. . . women	Y	Y	Y	Y	N	N	N	N
<b>“Ben”</b>								
. . . men	N	N	N	N	Y	Y	Y	Y
. . . women	N	N	N	N	Y	Y	Y	Y
<b>“Cal”</b>								
. . . men	Y	Y	N	N	N	N	N	N
. . . women	Y	Y	N	N	Y	Y	Y	Y
<b>“Don”</b>								
. . . men	Y	Y	N	N	Y	Y	N	N
. . . women	Y	Y	N	N	N	N	Y	Y

many more participants like Abe than participants like Ben. Typically, then, consistent people are consistently saying “yes” to desirable traits and “no” to undesirable traits, thus confounding consistent descriptions with desirable descriptions. So, perhaps previous research found that greater BSCCs predicted more desirable outcomes because greater BSCCs were confounded with consistently endorsing desirable traits and consistently denying undesirable ones.

The second problem with the BSCC is that how it operationalizes consistency differs from how the consistency hypothesis conceptualizes consistency. The BSCC does not measure consistency *per se*, but rather the residual consistency after controlling for the expected consistency (given the proportion of Y and N responses in each situation). For example, consider how Cal and Don describe themselves with males and females in Table 1. The consistencies between the two situations are the same for both of them—specifically, they respond YY to T1 and T2 and NN to T3 and T4 (and make inconsistent responses to the other traits). Yet, the BSCC for Cal is 0.33 whereas the BSCC for Don is zero. The reason is that Don says Y to 50% of the traits with both men and women, so having two YYs and two NNs is exactly the consistency expected by chance. However, Cal says yes to 25% of the traits with men and 75% of the traits with women, so having two YYs and two NNs is more consistency than expected by chance. But the consistency

hypothesis is not concerned with either variation within or covariation between situations; it is only concerned with whether people use the same exact terms across situations. So, unlike the BSCC, the consistency hypothesis does not distinguish between Cal and Don. Thus, the BSCC does not measure consistency as it is conceptualized by the consistency hypothesis, whereas simply counting the number of YYs and NNs does.

A third problem with the correlation coefficient is that it requires there to be variance within situations. When there is no variance within one or both of the situations, then the covariance between the situations must be zero, and the correlation coefficient (which divides the covariance by the variance) is undefined. For example, consider the responses Abe, Ben, and Cal made to the undesirable traits in Table 1. The lack of within-situation variance means the covariance is zero and the BSCC for undesirable traits is undefined. Yet, the consistency hypothesis refers only to consistency across situations, not to the variance within or the covariance between situations. Therefore, the consistency hypothesis would not consider the consistency of Abe, Ben, or Cal's responses to undesirable traits to be undefined. Instead, it would define Abe and Ben's responses to undesirable traits as perfectly consistent (because their responses are always YY or NN) and Cal's responses as perfectly inconsistent (because his  $YY = NN = 0$ ). Once again, counting YYs and NNs is a more valid operationalization of consistency as defined by the consistency hypothesis.

## OVERVIEW OF THE CURRENT STUDY

The current study compares two hypotheses. The consistency hypothesis states that describing the self consistently across situations predicts well-being. The desirability hypothesis states that any relationships between self-descriptions and well-being are due to the desirability (i.e., content)—not the consistency (i.e., structure)—of the self. To test these hypotheses, the study replicated the basic design of previous studies of the relationship between BSCC and well-being. Specifically, participants described how they tended to act in four different situations and also completed measures of well-being. In order to increase the generalizability of the findings, participants completed measures of both psychological and physical well-being.

The study specifically asked four questions of the data. The first question was: Does the BSCC predict well-being? I hypothesized that the current study would replicate the findings of previous studies and find a positive relationship between BSCC and well-being. However, the desirability hypothesis claims the BSCC predicts well-being because it only measures "desirable" types of consistency.

Therefore, the second question was: Does the BSCC reflect all types of consistency? Let us distinguish four types of consistency: consistently endorsing the same desirable trait across different situations ( $YY_{\text{desirable}}$ ), consistently endorsing the same undesirable trait across different situations ( $YY_{\text{undesirable}}$ ), consistently denying the same desirable trait across different situations ( $NN_{\text{desirable}}$ ), and consistently denying the same undesirable trait across different situations ( $NN_{\text{undesirable}}$ ). To the extent that “consistent people” are consistently endorsing desirable traits and consistently rejecting undesirable ones, I predicted that BSCC would be positively correlated with  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$  (i.e., desirable types of consistency) but not  $NN_{\text{desirable}}$  and  $YY_{\text{undesirable}}$  (i.e., undesirable types of consistency).

If the BSCC reflects some types of consistency and not others, it raises a third question: Do these different types of consistency have different relationships with well-being? The consistency hypothesis predicts that greater cross-situational consistency yields greater well-being, regardless of trait desirability. In contrast, the desirability hypothesis predicts that well-being will be positively associated with  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$  (the types of consistency associated with higher BSCCs) but negatively associated with  $NN_{\text{desirable}}$  and  $YY_{\text{undesirable}}$ .

Whereas a BSCC computed on both desirable and undesirable traits may primarily reflect  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , a BSCC computed on just desirable traits should reflect both  $YY_{\text{desirable}}$  and  $NN_{\text{desirable}}$ , and a BSCC computed on just undesirable traits should reflect both  $YY_{\text{undesirable}}$  and  $NN_{\text{undesirable}}$ . Consequently, the desirability hypothesis would predict that well-being will be unrelated to BSCCs that are computed on just desirable or just undesirable traits. Therefore, the fourth and final question was: When computed separately on desirable or undesirable traits, does the BSCC still predict well-being?

## METHOD

### PARTICIPANTS

College students (92 females, 39 males; age range = 18 to 50 years,  $M = 21.8$ ,  $SD = 4.0$ ) participated for extra credit in undergraduate psychology courses.

### MATERIALS

*Self-Worth Measures.* The Rosenberg Self-Esteem Inventory (RSEI; Rosenberg, 1965) is a widely used 10-item self-report measure of overall self-esteem. The Center for Epidemiological Studies-Depression



(CES-D; Radloff, 1977) is a widely used 20-item self-report measure of symptoms associated with depression. The RSEI and the CES-D have been used in many previous studies of the relationship between self-concept organization and well-being (e.g., Campbell et al., 2003; Cross et al., 2003; Diehl et al., 2001; Donahue et al., 1993; Lutz & Ross, 2003; Sheldon et al., 1997). Because the RSEI and CES-D were strongly associated,  $r(129) = -.62, p < .01$ , the RSEI and the (reversed scored) CES-D were converted to z-scores and summed to yield an overall measure of self-worth.

*Physical Symptoms Measure.* Physical symptoms were assessed by means of a self-report checklist that has been used in several previous studies (e.g., Elliot & Sheldon, 1998; Emmons & McCullough, 2003). Participants checked off whether they had experienced any of the following 13 symptoms: headaches, faintness/dizziness, stomachache/pain, shortness of breath, chest pain, acne/skin irritation, runny/congested nose, stiff or sore muscles, stomach upset/nausea, irritable bowels, hot or cold spells, poor appetite, coughing/sore throat, or other. The number of items each participant checked constituted his or her physical symptom score. In the current sample, the symptom scores ranged from 0 to 11,  $M = 3.44, SD = 2.22$ .

*Situation-Specific Self-Description Task.* The participants were asked to describe how they tend to be "with a male I know well," "with a female I know well," "with a male I do not know well," and "with a female I do not know well." They described themselves in one situation before describing themselves in the next situation. The participants were randomly assigned to receive the four situations in one of eight different orders. For example, some subjects described themselves "with a male I know well" first, whereas other subjects described themselves "with a female I do not know well" first.

Participants described themselves in each situation by indicating whether or not each trait on a list of 20 traits "describes how you are with that type of person by marking a Y or an N" next to the trait. The 20 traits consisted of five sets of four traits each. The trait sets were developed by Hampson (1998), who details how they were derived and their properties. Most relevant for the current study is that each set consists of four traits that load highly on one of the five factors of the FFM, as shown in Table 2. Moreover, two of the traits are desirable (with one from each pole of the factor) and two are undesirable (again with one from each pole of the factor). The traits were presented to the participants in alphabetical order.

$YY_{\text{desirable}}$  was computed as the number of times a participant said "yes" to the same desirable trait in two different situations, summed across the 10 desirable traits and six two-situation combinations; thus,

TABLE 2. Trait Pairs Used in the Study

FFM Dimension	Desirable Trait Pairs	Undesirable Trait Pairs
Openness	Cultured – Down to earth	Snobbish–Coarse
Conscientiousness	Self-disciplined–Uninhibited	Rigid–Unstable
Extraversion	Outspoken–Modest	Boastful–Withdrawn
Agreeableness	Tactful–Straightforward	Vague–Abrupt
Neuroticism	Spirited–Stable	Temperamental–Unemotional

$YY_{\text{desirable}}$  could range from 0 to 60.  $YY_{\text{undesirable}}$ ,  $NN_{\text{desirable}}$ , and  $NN_{\text{undesirable}}$  were computed in an analogous manner and likewise could range from 0 to 60.

## PROCEDURE

The participants were asked to complete a questionnaire containing the following measures in the following order: the physical symptoms checklist, the self-description task, the CES-D, and the RSEI. The participants were run individually. All participants provided informed consent prior to completing the questionnaire, and upon completing the questionnaire received a detailed debriefing form.

## RESULTS

### DOES THE BSCC PREDICT WELL-BEING?

On the basis of prior research, it was hypothesized that the mean BSCC would be positively related to self-worth and negatively related to physical symptoms. The results supported this hypothesis. The correlations between the mean BSCC and self-worth and physical symptoms were, respectively,  $r(129) = 0.46$  and  $r(129) = -0.23$ ,  $ps < .01$ . The findings of the current study were therefore in accord with the findings of previous studies.

However, the findings of the current study also question those previous studies' conclusions. To begin, consider that self-concept desirability (the number of desirable traits endorsements minus the number of negative endorsements) also predicted self-worth ( $r(129) = 0.50$ ) and physical symptoms ( $r(129) = -0.25$ ) as well as the mean BSCC, ( $r(129) = 0.77$ ), all  $ps < .005$ . After controlling for the effect of self-concept desirability, the BSCC was no longer a significant predictor of either

self-worth (partial  $r[128] = 0.13$ ) or physical symptoms (partial  $r[129] = -0.05$ ). Thus, self-concept desirability fully accounted for the relationship between BSCC and well-being.<sup>1</sup>

#### DOES THE BSCC REFLECT ALL TYPES OF CONSISTENCY?

I hypothesized that most people with high BSCCs were consistently endorsing desirable traits and consistently rejecting undesirable ones. To test this hypothesis, I computed Pearson correlations between participants' mean BSCC and the number of times they consistently endorsed or rejected desirable or undesirable traits across pairs of situations. The mean BSCC showed strong positive relationships with  $YY_{\text{desirable}}$ ,  $r(129) = 0.64$ , and  $NN_{\text{undesirable}}$ ,  $r(129) = 0.82$ ,  $ps < .001$ . In contrast, the mean BSCC was unrelated to  $NN_{\text{desirable}}$ ,  $r(129) = 0.10$ ,  $ns$ , and negatively related to  $YY_{\text{undesirable}}$ ,  $r(129) = -0.37$ ,  $p < .001$ . Thus, as hypothesized, the mean BSCC reflected, not consistency in general, but consistency with respect to endorsing desirable traits and denying undesirable ones. Indeed, consistency with respect to endorsing undesirable traits actually predicted a lower BSCC.

#### DO DIFFERENT TYPES OF CONSISTENCY HAVE DIFFERENT RELATIONSHIPS WITH WELL-BEING?

The consistency hypothesis predicts that greater well-being will be associated with greater cross-situational consistency, independent of trait

1. An alternative measure of cross-situational consistency is the conditional probability,  $p(Y|Y)$ , that if a trait is endorsed in one situation it is also endorsed in another situation; mathematically,  $p(Y|Y) = (YY/(YY + NY) + YY/(YY + YN))/2$ . Averaged across multiple pairs of situations,  $p(Y|Y)$  has been used as a measure of "role overlap" and called *OL* (Rafaeli-Mor, Gotlib, & Ravelle, 1999). Because  $p(Y|Y)$  or *OL* defines consistency only in terms of *YY*s and not *NN*s, it should be used only when *NN*s do not contribute to cross-situational consistency. In the current paper participants actively responded "Y" or "N" to each descriptor, so *YY*s and *NN*s should have approximately equal weight in computing consistency and *OL* will be an invalid index of consistency.

Furthermore, *OL* has similar problems as BSCC: *OL* is undefined if no traits are ascribed to at least one situation and (all else equal) *OL* increases with increases in the number of desirable traits endorsed. For example, in the current study the correlation between *OL* and self-concept desirability was  $r(129) = 0.71$ ,  $p < .001$ . The zero-order correlation between *OL* and self-worth was  $r(129) = 0.40$ ,  $p < .001$ , but the partial correlation between *OL* and self-worth, controlling for self-concept desirability, was only  $r(128) = 0.08$ ,  $ns$ . Thus, self-concept desirability fully accounted for the relationship between *OL* and self-worth. For further explanation of the properties of *OL* and the conditions under which it should and should not be used, see Locke (2003, pp. 277–278).

desirability. The desirability hypothesis predicts that the relationship between well-being and consistency will depend on the desirability of the trait in question. To test these competing hypotheses, I computed Pearson  $r$ s between the measures of mental and physical well-being and measures of cross-situational consistency. Table 3 shows the results.

With respect to the relationships between well-being and  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , the consistency hypothesis and the desirability hypotheses both predict positive relationships. Table 3 shows that the correlations were in the predicted direction and generally supported the hypotheses. However, whereas there were strong relationships between  $YY_{\text{desirable}}$  and self-worth and between  $NN_{\text{undesirable}}$  and self-worth and physical symptoms, the relationship between  $YY_{\text{desirable}}$  and physical symptoms was not statistically significant.

With respect to the relationships between well-being and  $NN_{\text{desirable}}$  and  $YY_{\text{undesirable}}$ , the consistency hypothesis predicts positive relationships and the desirability hypothesis predicts negative relationships. The correlations between well-being and  $NN_{\text{desirable}}$  were not significant, and thus did not favor one hypothesis over the other. However, the correlations between well-being and  $YY_{\text{undesirable}}$  were significant and negative, and thus clearly supported the desirability hypothesis over the consistency hypothesis.

Recall that the BSCC was positively associated with  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , and negatively associated with  $YY_{\text{undesirable}}$ . Therefore, we would expect the correlates of BSCC to be in the same direction as the correlates of  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , but in the opposite direction as the correlates of  $YY_{\text{undesirable}}$ . Table 3 shows that is exactly what was found.

#### WHEN COMPUTED SEPARATELY ON DESIRABLE AND UNDESIRABLE TRAITS, DOES BSCC PREDICT WELL-BEING?

If the mean BSCC is computed separately for desirable traits and undesirable traits, the consistency hypothesis predicts that both of the BSCCs will predict well-being, whereas the desirability hypothesis predicts that neither of them will predict well-being. The results provided partial support for both hypotheses. Specifically, the mean BSCC for desirable traits was positively related to self-worth,  $r(107) = .40, p < .001$ , and negatively related to physical symptoms,  $r(107) = -.19, p < .05$ . However, the mean BSCC for undesirable traits was *not* related to either self-worth or physical symptoms,  $r(77)$ s = 0.16 and  $-0.06, ps > .15$ . Thus, the results for desirable traits supported the consistency hypothesis, but the results for undesirable traits did not.

TABLE 3. Correlations Between Measures of Well-Being and Measures of Self-Consistency

Type of Consistency	Physical Symptoms	Self-Worth
<b>Desirable Traits</b>		
YY	-0.04	0.37**
NN	-0.08	-0.05
<b>Undesirable Traits</b>		
YY	0.33**	-0.37**
NN	-0.31**	0.45**

Note.  $N = 131$ . \* $p < .05$ , \*\* $p < .005$ .

Notice that the sample sizes for correlations with the BSCC for desirable traits and the BSCC for undesirable traits were lower than the sample size for correlations with the BSCC for all traits. As explained in the introduction, the reason is that the BSCC cannot be computed if there is no variance within at least one situation. In the current sample, the BSCC for positive traits was undefined for 22 subjects who claimed that, in at least one role, *all* of the positive traits applied. Likewise, the BSCC for negative traits was undefined for fifty-two subjects who claimed that, in at least one role, *none* of the negative traits applied.

## DISCUSSION

The current study was designed to address four questions concerning the relationship between well-being and self-descriptive consistency across situations. To do so, the study asked participants to describe themselves in four different situations and to complete measures of psychological and physical well-being. The following section summarizes the results.

### HOW THE CURRENT STUDY ANSWERED THE FOUR QUESTIONS ABOUT CONSISTENCY AND WELL-BEING

The first question was: Does the mean BSCC predict well-being? The answer was yes. Using different samples of students, different situations, and different descriptors, previous studies reliably found a positive relationship between the mean BSCC and well-being. Therefore, I hypothesized that the current study would also find a positive relationship between the BSCC and well-being—and it did. However, the current

study also found that the variance BSCC shared with self-concept desirability fully explained the relationship between BSCC and well-being, thus raising questions about the validity of the BSCC as a measure of self-consistency and the conclusions of previous research on the consistency hypothesis.

In order to clarify the link between BSCC and desirability, the second question was: Does the BSCC reflect all types of consistency? The answer was no. The mean BSCC reflected consistency only with respect to endorsing desirable traits and denying undesirable traits. At least among North American students, it appears those who consistently say “no” to desirable traits and “yes” to undesirable traits are rare, whereas those who consistently say “yes” to desirable traits and “no” to undesirable traits are common. Moreover, because this large group of people that says “no” to undesirable traits consistently tends not to say “yes” to undesirable traits consistently, the mean BSCC was negatively related to  $YY_{\text{undesirable}}$ . In short, the current results suggest that the BSCC is not a valid measure of consistency in general.

The third question was: Do all types of consistency predict well-being? The answer was no. The results for undesirable traits were clear.  $NN_{\text{undesirable}}$  and well-being were positively associated, which is what both the consistency hypothesis and the desirability hypothesis would predict. However,  $YY_{\text{undesirable}}$  and well-being were negatively associated, which is exactly what the desirability hypothesis would predict but exactly the opposite of what the consistency hypothesis would predict. Therefore, the results for undesirable traits clearly favored the desirability hypothesis over the consistency hypothesis.

The results for desirable traits were less conclusive. There was a positive relationship between  $YY_{\text{desirable}}$  and self-worth, which can be used to support both the consistency and the desirability hypothesis. The other relationships between consistency and well-being were not significant, and so cannot be used to support either hypothesis. Therefore, the results for desirable traits do not favor one hypothesis over the other. One possible explanation of the lack of relationship between  $NN_{\text{desirable}}$  and well-being is that there was both a positive effect of consistency and a negative effect of (lack of) desirability, and these opposing effects produced no net effect.

The fourth question was: When computed separately on desirable and undesirable traits, does BSCC still predict well-being? The desirability hypothesis predicted that the answer would be no (because each correlation would reflect both a “desirable” and an “undesirable” type of consistency). The consistency hypothesis predicted that the answer would be yes (because the benefits of consistency should not vary with trait desirability). And the actual answer was: It depends. The BSCC for desir-

able traits predicted well-being but the BSCC for undesirable traits did not. In other words, the results for desirable traits supported the consistency hypothesis, but the results for undesirable traits did not.

Future researchers should remember that computing one BSCC on desirable traits and another BSCC on undesirable traits does not solve all of the problems with the BSCC. On the one hand, computing the BSCC separately on desirable and undesirable traits does eliminate the confound between BSCC and self-concept desirability. On the other hand, it does not eliminate the problem of BSCC being undefined when there is no variance in trait ratings within at least one situation, and in fact makes this problem more likely (since less variance in trait desirability means less variance trait ratings).

#### LIMITATIONS AND OBJECTIONS

One limitation of the current study is that, by relying solely on self-report measures, it cannot determine the veracity of the self-reports. Consequently, there are multiple ways to explain the results. For example, consider the relationship between  $NN_{\text{undesirable}}$  and physical symptoms. If the consistency measure does not reflect actual consistency and the symptom measure does not reflect actual symptoms, then the relationship between them may simply reflect individual differences in the tendency to deny problems. On the other hand, if the consistency measure reflects actual behavioral consistency and the symptom measure reflects actual physical symptoms, then the relationship between them may be due to the effects of those behaviors and symptoms. In short, the current study cannot elucidate the causes of some of the observed relationships. However, this limitation does not undermine the key conclusions.

One objection to the conclusion that the BSCC is not a valid measure of consistency is that the BSCC predicts self-report measures of self-perceived consistency. Specifically, the BSCC has been shown to correlate positively with Campbell et al.'s (1996) self-concept clarity scale (a measure of the degree which one's self-concept is clearly and confidently defined, internally consistent, and temporally stable) and to correlate negatively with McReynolds et al.'s (2000) self-pluralism scale (a measure of the degree to which one perceives oneself as typically feeling, behaving, and being different in different situations and at different times). However, since social desirability scales also correlate positively with the self-concept clarity scale and negatively with the self-pluralism scale (Campbell, Trapnell, Heine, Katz, Lavalley, & Lehman, 1996; McReynolds, et al., 2000), the variance the BSCC shares with the self-re-

port scales may—once again—reflect variance in the desirability, rather than consistency, of the self.<sup>2</sup>

#### CROSS-CULTURAL DIFFERENCES

Suh (2002) conducted a self-consistency study on samples of college students in Korea and the United States. The results showed that the mean BSCC was greater and was more predictive of well-being in the American sample than in the Korean sample. In addition, people who knew the students evaluated how socially skilled and likeable they were. The results showed that the students with more positive BSCCs received more positive evaluations in the U.S. but not in Korea.

Suh (2002) suggested that these cultural differences in the levels and correlates of the BSCC are due in part to cultural differences in attitudes toward self-consistency. Whereas people in Western cultures tend to construe the self as an independent entity defined by stable internal traits and attitudes, people in East Asian cultures tend to construe the self as an interdependent entity defined by important relationships, group memberships, and social roles (Markus & Kitayama, 1991). Therefore, people in Western societies are more likely to be evaluated positively by themselves and others if they demonstrate an independent self—that is, a self that remains consistent across situations. In contrast, people in East Asian societies are more likely to be evaluated positively by themselves and others if they demonstrate an interdependent self—that is, a self that conforms to situation-specific norms, rules, and expectations.

The results of the current study suggest an alternative explanation. To the extent that the BSCC confounds self-consistency and self-enhancement, the cultural differences in the levels and correlates of the BSCC may be due to cultural differences in self-enhancement rather than cultural differences in self-consistency. Indeed, there exists substantial evidence that relative to people in East Asia, people in North America are more likely to describe themselves as having desirable attributes and re-

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2. The literature on self-concept clarity should not be confused with the literature on self-concept consistency. The construct of self-concept clarity (i.e., a clearly and confidently defined, internally consistent, temporally stable self-concept) appears to subsume self-concept consistency, but has been operationalized in different and varied ways, including both self-report measures and unobtrusive measures such as test-retest reliability and response extremity on bipolar scales (Campbell, 1990; Campbell et al., 1996). The arguments and conclusions of the current paper only apply to self-descriptive consistency across situations, and may not generalize to the broader construct being assessed in research on self-concept clarity.



ceive social and psychological benefits from describing themselves as having desirable attributes (Heine, Lehman, Markus, & Kitayama, 1999). Comparing these alternative explanations is straightforward, and could be done simply by reanalyzing Suh's (2002) data using  $YY_{\text{desirable}}$ ,  $NN_{\text{undesirable}}$ ,  $NN_{\text{desirable}}$ , and  $YY_{\text{undesirable}}$  as the measures of consistency. If the cross-cultural differences concern attitudes toward self-consistency, then they should be robust across all measures of consistency. However, if the cross-cultural differences concern attitudes toward self-enhancement or self-deprecation, then the type of consistency should matter. For example, Americans may show greater consistency (and stronger links between consistency and well-being) than Koreans for  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , whereas the reverse may be true for  $NN_{\text{desirable}}$  and  $YY_{\text{undesirable}}$ .

## CONCLUSIONS AND RECOMMENDATIONS

For undesirable traits, well-being was positively related to consistently saying "no," negatively related to consistently saying "yes," and unrelated to the mean BSCC. Thus, desirability—not consistency—predicted well-being. These findings should not be surprising given that the consistency hypothesis makes such a counterintuitive claim concerning undesirable qualities—namely, that it is healthier to view the self as manifesting undesirable qualities consistently rather than inconsistently across situations. Imagine you are a therapist and your depression-prone client confesses that he behaved rudely on a blind date the previous night. Would you encourage your client to think: "While I behaved poorly last night, I am not rude in many situations, indicating that I can behave better in the future." Or, inspired by the consistency hypothesis, would you say: "Thinking you are only rude in some situations is so confusing. Be consistent! Recognize how you are rude, not only to your dates, but also to your friends and family and even little children." I suspect most people would choose the former over the latter intervention, and the current results offer empirical support for those clinical intuitions.

For desirable traits, on the other hand, the mean BSCC was positively related to psychological and physical well-being, indicating that there is a relationship between well-being and consistency after all. These results suggest that desirable qualities may be the most fertile focus for future research on the consistency hypothesis. One important question for such research is: When do the benefits of consistency exceed the benefits of desirability, or, more specifically, when does greater  $NN_{\text{desirable}}$  predict greater well-being? It may depend on which desirable traits are being denied the self as well as in which situations they are being denied.

Moreover, the implications of  $NN_{\text{desirable}}$  and  $YY_{\text{desirable}}$  may be interdependent. For example, people may benefit from knowing that there are some desirable qualities that they lack (and should not rely on in any situation) only if they also believe that there are many desirable qualities that they do have (and can rely on across situations).

The current results again show how structural measures can in theory be independent of content, yet in practice not be independent. Specifically, the BSCC in theory should measure “cross-situational self-descriptive consistency,” but in practice it does not. The BSCC was positively associated only with  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , and was negatively associated with  $YY_{\text{undesirable}}$ . The relationships between well-being and BSCC were, consequently, in the same direction as the relationships between well-being and  $YY_{\text{desirable}}$  and  $NN_{\text{undesirable}}$ , but in the opposite direction as the relationships between well-being and  $YY_{\text{undesirable}}$ .

Yet, the essential problem is not the BSCC, but that people are not consistently consistent. There exist different types of consistency that can have opposing relationships with each other as well as distinct causes and consequences. To the extent that “cross-situational self-descriptive consistency” is not a unitary construct, no single variable will be a valid measure of that construct. So, the broader problem is this. A clever researcher can combine responses that differ in content into a structural variable (such as  $H$  or  $BSCC$ ), claim the variable measures some emergent property (such as “complexity” or “consistency”), when in reality the variable measures nothing—that is, no unitary, causally efficacious, psychological property. Nonetheless, to the extent that the structural variable is affected by content variables (which do measure meaningful psychological properties that are associated with important outcomes), the structural variable may show relationships with important outcomes. To avoid promulgating such spurious findings in the future, data showing effects of structural variables should always be accompanied by data showing that the effects cannot be explained by simpler, content-based variables.

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