The Self-Consciousness Scale: A Revised Version for Use with General Populations[1]

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Recent research suggests that some of the wording of the original Self-Consciousness Scale is too abstract for easy understanding by research participants who are not college students This article presents a revised version of that scale, along with information regarding its psychometric properties In general, the psychometric properties of the revised scale compare quite favorably to those of the original scale. It is suggested that the revised Self-Consciousness Scale be used whenever data are collected from populations other than college students.

The Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975) is a 23-item questionnaire, which measures individual differences in private and public self-consciousness. The term private self-consciousness refers to the tendency to think about and attend to the more covert, hidden aspects of the self, aspects that are personal in nature and not easily accessible to the scrutiny of other persons—for example, one's privately held beliefs, aspirations, values, and feelings. Public self-consciousness, on the other hand, refers to the tendency to think about those self-aspects that are matters of public display, qualities of the self from which impressions are formed in other people's eyes—for example, one's overt behavior, mannerisms, stylistic quirks, and expressive qualities.

In addition to assessing private and public self-consciousness, the Self-Consciousness Scale also incorporates a measure of social anxiety. This latter characteristic presumably involves a particular kind of reaction to focusing on the public self. That is, social anxiety would seem to derive (at least in part) from public self-consciousness, in that the subjective experience of social anxiety presupposes a focus on the public self. But an awareness of the public self by itself is not sufficient to produce social anxiety. There must also be a sense of apprehensiveness over being evaluated by the other persons in one's social context, or

doubt about being able to create adequate self-presentations (cf. Schlenker & Leary, 1982).

Since it was first devised in the middle 1970s, the Self-Consciousness Scale has been used in a rather large body of empirical research (for reviews see Buss, 1980; Carver & Scheier, 1981a; Scheier & Carver, 1983). Most of this research has focused on how private and public self-consciousness mediate the regulation of moment-to-moment behavior and cognition. The types of behavioral phenomena that have been found to be affected by dispositional self-consciousness vary widely, ranging from task persistance (Scheier & Carver, 1982) to resistance to persuasion (Carver & Scheier, 1981b), from the processing of self-relevant information (Hull & Levy, 1979) to dissonance reduction (Scheier & Carver, 1980). In addition to these influences found for private and public self-consciousness, the social anxiety subscale of the Self-Consciousness Scale has also been found to be useful in predicting behavior (see, e.g., Turner, 1977, 1978).

Perhaps not surprisingly, previous research utilizing the Self-Consciousness Scale has relied almost exclusively on college undergraduates as a source of data. Based on the number of positive findings that have accrued, it seems reasonable to conclude that the original scale provides a satisfactory assessment device for use with that particular population. More recently, however, we and other researchers have attempted to utilize the Self-Consciousness Scale in research using other populations. Our own initial attempts to use the scale in this manner have made one point exceedingly clear. The Self-Consciousness Scale as originally constructed is unsuitable for more general applications. This is a limitation on its use that is far from trivial, given the recent emphasis on moving research out of the laboratory and into the field. Nor are we the only researchers who have experienced difficulty in using the Self-Consciousness Scale with populations other than undergraduates (see, e.g., Duncan-Jones & Goodchild, 1983).

The problems with the original scale are twofold. First, some of the items are difficult for respondents to understand, because of the nature of the words involved. For example, our initial attempt to use the scale with a group of coronary artery bypass patients revealed that most of them had no idea what the word "scrutinize" meant. It is necessary to understand this word in order to answer one of the items on the original scale. A second problem is that non-college research participants seem to find the original response format confusing and difficult to work with, apparently because most persons are not used to thinking of attributes as being uncharacteristic of them, which the current scale requires them to do. Indeed, the original version of the scale not only requires respondents to think in terms of whether something is uncharacteristic of them or not, but to distinguish between degrees of uncharacteristicness—a task that most people seem to find exceedingly taxing.

Sometimes the problems surrounding item difficulty simply cause respondents to leave the relevant items blank. Other consequences are more severe,

however. For example, in several instances respondents who were completing a telephone interview expressed extreme embarrassment over their ignorance. In two cases (both involving stroke victims and their spouses), the respondents became so emotionally distraught that they were unable to complete the interview. While we do not have any concrete information about the exact extent of the problem (e.g., percentages of respondents experiencing difficulties), we do know of at least two instances in which difficulties were encountered so often that the researchers had to drop the Self-Consciousness Scale from the protocol. Thus, the problem with item difficulty is not only one of knowing how to interpret the responses one obtains, but also one of knowing how to obtain responses to interpret. The difficulties with the original Self-Consciousness Scale seem that extreme, at least among certain populations.

The primary purpose of the present research was to revise the original Self-Consciousness Scale, so that a more suitable version of it might be available for use with noncollege populations. This revision was intended to circumvent the two problems outlined above. In the remainder of this article, we present the revised version that we are proposing, along with information that we have collected concerning its basic psychometric properties.

Method

The first step in revising the Self-Consciousness Scale was to identify the subset of items that respondents who were not college students were finding difficult to understand. To accomplish this, the experiences of three sets of researchers were taken into account, each of whom happened to be using the Self-Consciousness Scale to collect information from noncollege research participants.[3] The projects in question were being conducted at geographically separate locations, and made use of several very different types of subject populations (coronary artery bypass patients, victims of stroke and their spouses, and middle-aged healthy women) Given the diversity of the groups sampled and the consistency that was found among them, we feel relatively confident that we were able to identify most of the problematic items on the original scale.

Based on the combined experience with these various subject groups, 15 items were identified as being in need of revision. In modifying these items, we focused on making two kinds of changes. First, we attempted to use language that was simpler than in the original item. Second, we attempted, where possible, to increase the fit between the item's wording and the underlying construct that the item was originally intended to measure.

Although the initial version of the revised scale proved largely satisfactory in

terms of its psychometric properties, further revision of particular items was needed for several reasons. Some of the items were endorsed either too frequently or too infrequently to be acceptable. In addition, some of the factor loadings associated with the revised items were judged to be too different from those of the original scale to be acceptable. As a result, the revised scale went through several editions, as individual items were refined further. With each iteration, the revised scale became more and more similar (psychometrically) to the original scale from which it was derived, as was intended. One item from the original scale proved to be relatively impervious to our efforts to make it concrete enough for subjects to understand easily, while still loading solidly on the appropriate factor. This item was eventually deleted.

The final version of the revised Self-Consciousness Scale consists of 22 items, one fewer than the original scale. Respondents are asked to indicate the extent to which each of the 22 statements is like them, using the following response format: 3 = a lot like me, 2 = somewhat like me, 1 = a little like me, and 0 = not at all like me. Additional instructions caution respondents to be as honest and as accurate as they can throughout, and to try not to let their answers to one question influence their answers to other questions. They are explicitly told that there are no correct or incorrect answers.

After the items had been revised completely, several hundred undergraduates ($N = 298$) completed both the original Self-Consciousness Scale and the final version of the revised scale, in order to be able to compare the psychometric properties of each to the other and to determine how well the old and the new scales correlated. Analyses were initially performed separately for men and women, but in all cases the gender differences that occurred were minimal, as has typically been the case in the past (see, e.g., Fenigstein et al., 1975). Therefore, the data from men and women are combined in the analyses that follow.

Results

Factor Analyses and Interscale Correlations

Table 1 presents the results of a principal-factors (as opposed to a principal-components) factor analysis for the original version of the scale. For this analysis, the communalities for the diagonal of the intercorrelation matrix were estimated and iterated, and a varimax rotational technique was used to achieve a final solution. Table 2 presents the corresponding analysis for the revised version. In each case, three factors were retained for final rotation, as was done when the Self-Consciousness Scale was originally factor analyzed by Fenigstein et al. (1975). An inspection of Tables 1 and 2 provides the basis for two conclusions. First, the present factor analysis of the original scale bears a strong resemblance, in terms of the overall pattern of loadings, to the analysis of the same

Table 1

Items and Factor Loadings of the Original Self-Consciousness Scale

A priori scale assignment	Factor loading		
	Private self-consciousness	Public self-consciousness	Social anxiety
Private self-consciousness			
I'm always trying to figure myself out. (1)	.64		
I reflect about myself a lot. (5)	.59		
I'm often the subject of my own fantasies. (7)		.20	
I never scrutinize myself. (9)	.28		
I'm generally attentive to my inner feelings. (13)	.45		
I'm constantly examining my motives. (15)	.67		
I sometimes have the feeling that I'm off somewhere watching myself. (18)	.42		
I'm alert to changes in my mood. (20)	.35	.22	
I'm aware of the way my mind works when I work through a problem. (22)	.20		
Generally, I'm not very aware of myself. (3)	.38		-.21
Public self-consciousness			
I'm concerned about my style of doing things. (2)	.29	.38	
I'm concerned about the way I present myself. (6)		.71	.20

Continued

(Table 1. *continued*)

A priori scale assignment	Factor loading		
	Private self-consciousness	Public self-consciousness	Social anxiety
Public self-consciousness —continued			
I'm self-conscious about the way I look. (11)		.67	
I usually worry about making a good impression. (14)		.58	.31
One of the last things I do before I leave my house is look in the mirror. (17)		.49	
I'm concerned about what other people think of me. (19)		.67	.26
I'm usually aware of my appearance. (21)		.54	
Social anxiety			
It takes me time to overcome my shyness in new situations. (4)			.75
I have trouble working when someone is watching me. (8)			.27
I get embarrassed very easily. (10)		.29	.65
I don't find it hard to talk to strangers. (12)			.57
I feel anxious when I speak in front of a group. (16)			.46
Large groups make me nervous. (23)			.53

Note. The numbers in parentheses indicate the sequence of items on the scale. Only factor loadings equal to .20 and above are listed (N = 298). Items numbered 3, 9, and 12 are to be reversed prior to scoring, which accounts for the lack of negative loadings in the analysis.

Table 2

Items and Factor Loadings of the Revised Self-Consciousness Scale

A priori scale assignment	Factor loading		
	Private self-consciousness	Public self-consciousness	Social anxiety

Private self-consciousness

A priori scale assignment	Private self-consciousness	Public self-consciousness	Social anxiety
I'm always trying to figure myself out. (1)	.79		
I think about myself a lot. (4)	.53	.26	
I often daydream about myself. (6)	.37		.23
I never take a hard look at myself. (8)	.34		
I generally pay attention to my inner feelings. (12)	.48		-.27
I'm constantly thinking about my reasons for doing things. (14)	.63		
I sometimes step back (in my mind) in order to examine myself from a distance. (17)	.59		
I'm quick to notice changes in my mood (19)	.43	.25	
I know the way my mind works when I work through a problem. (21)	.25		

Public self-consciousness

A priori scale assignment	Private self-consciousness	Public self-consciousness	Social anxiety
I'm concerned about my style of doing things. (2)	.34	.38	
I care a lot about how I present myself to others. (5)		.71	

(Table 2, *continued*)

A priori scale assignment	Factor loading		
	Private self-consciousness	Public self-consciousness	Social anxiety
Public self-consciousness—Continued			
I'm self-conscious about the way I look. (10)		.69	.23
I usually worry about making a good impression. (13)	.20	.61	.29
Before I leave my house, I check how I look. (16)		.62	
I'm concerned about what other people think of me. (18)		.63	.29
I'm usually aware of my appearance. (20)	.20	.70	
Social anxiety			
It takes me time to get over my shyness in new situations. (3)			.78
It's hard for me to work when someone is watching me. (7)			.40
I get embarrassed very easily. (9)		.23	.64
It's easy for me to talk to strangers. (11)			.62
I feel nervous when I speak in front of a group. (15)			.65
Large groups make me nervous. (22)			.60

Note. The numbers in parentheses indicate the sequence of items on the scale. Only factor loadings equal to .20 and above are listed (*N* = 298). Items numbered 8 and 11 are to be reversed prior to scoring, which accounts for the lack of negative loadings in the analysis.

scale reported much earlier by Fenigstein et al. (1975). Thus, it would seem that the factor structure of the original Self-Consciousness Scale has remained remarkably stable during the intervening 10-year period.

Second, and perhaps more importantly, the factor structure of the revised scale is highly similar to that of the original. All of the revised items loaded on the appropriate factors, in a fashion that was generally quite comparable to their original counterparts. Even the relative magnitude of the loadings compares favorably with those for the original scale. Thus, at least in terms of its factor structure, the revised scale would seem to represent an appropriate substitute for the original scale for use with more general populations.[4]

Table 3 presents the subscale intercorrelations among and between the original and revised scales. (Subscale scores were derived in each case by adding together the raw scores for each of the items comprising the subscale.) In general, the same two conclusions that applied to the factor structure of the original and revised scales also characterize the pattern of subscale intercorrelations. That is, in terms of the original scale, public self-consciousness tended to correlate to a moderate extent with both private self-consciousness and social anxiety. The correlation between private self-consciousness and social anxiety was much weaker. A very similar pattern of correlations obtains when one examines the subscale intercorrelations for the revised scale. Moreover, these various relationships hold even when one uses the subscales from the two instruments interchangeably (e.g., uses the original scale to derive scores on private self-consciousness and the revised scale to derive scores on public self-consciousness and social anxiety).

The final set of intercorrelations that needs to be discussed concerns the relationship between each of the three subscales on the original scale and its counterpart on the revised scale. As can be seen in Table 3, all of the correlations are quite high, all being in the low to mid .80s. Thus, it appears that the three revised subscales are providing data that are quite similar to the data provided by the original subscales, thereby adding further credence to the assertion that the scales can be used interchangeably.

Reliability

In order to determine the internal consistency of the revised Self-Consciousness Scale, three separate Cronbach alphas were computed, one for each subscale. The following Cronbach alphas were obtained (uncorrected for subscale length): private self-consciousness .75, public self-consciousness .84, and social anxiety .79. These various alphas compared favorably to those obtained for the

[4] In addition to the orthogonal rotations reported above, oblique rotations were also performed on the data, yielding highly similar results. For this reason, only the results of the orthogonal rotations have been described.

Table 3

Subscale Intercorrelations Among and Between Original and Revised Scales

	Original private	Original public	Original social anxiety	Revised private	Revised public	Revised social anxiety
Original private	—	.39	.12	.82	.33	.07
Original public		—	.33	.30	.84	.31
Original social anxiety			—	.03	.31	.86
Revised private				—	.38	.03
Revised public					—	.35
Revised social anxiety						—

Note. The *N*s for the above correlations varied between 283 and 298 due to missing data. Correlations above .12 are signifi-
cant at $p < .05$; correlations greater than .15 are significant at $p < .01$ (two-tailed).

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original scale. Indeed, in every case they were slightly higher than those associated with the original subscales (the alphas for the original scale were .69 for private self-consciousness, .79 for public self-consciousness, and .71 for social anxiety).

One remaining reliability issue concerns the stability of individual scores over time. In order to assess the test-retest reliability of the revised scale, a separate sample of 135 respondents completed the scale twice, with a 4-week interval between administrations. The test-retest correlation for the private subscale was .76, for the public subscale .74, and for the social anxiety subscale .77. These values suggest that the revised Self-Consciousness Scale possesses reasonable stability across time.

Norms

Table 4 presents normative data for the revised scale for a sample of 213 undergraduate men and 85 undergraduate women. These norms for college undergraduates are currently the only *complete* norms available. We do, however, have partial norms for two noncollege samples. The first is comprised of a group of 42 middle-aged men (average age 47.7), who had recently undergone coronary artery bypass surgery. The mean and standard deviation for this group on private self-consciousness (the only subscale administered) were 13.5 and 4.9, respectively. The second sample is comprised of a group of 396 middle-aged women (all between 45 and 50 years of age), enrolled in a longitudinal study of

Table 4

Normative Data for Revised Self-Consciousness Scale

Subscale	Men		Women	
	M	SD	M	SD
Private	15.5	4.8	17.3	4.7
Public	13.5	4.2	14.2	4.7
Social anxiety	8.8	4.3	8.6	4.7

Note. The difference between the means for men and women on private self-consciousness is significant, $t(296) = 2.93, p < .01$. The differences between the means for men and women on public self-consciousness and social anxiety are not, both $ts < 1.25$.

menopause. For this sample, only scores on public self-consciousness and social anxiety were available. The mean and standard deviation on public self-consciousness for this group were 11.8 and 4.5, respectively. The corresponding numbers for the social anxiety subscale were 7.3 and 3.9. Hopefully, norms for other age, class, and occupational groupings will become available as the revised scale begins to be used on a wider basis.

Discussion

The primary purpose of this article was to present a version of the Self-Consciousness Scale that would be suitable for use with research participants other than college students. In general, the psychometric properties associated with the revised scale compared quite favorably to the psychometric properties of the original. For example, the factor structures of the two scales were highly similar, as were the patterns of subscale intercorrelations. Moreover, the correlations between the original subscales and their revised counterparts were all in the low to mid .80s. Finally, the internal consistency and test-retest reliability of the revised scale appeared more than satisfactory. Taken together, these various findings suggest that the revised Self-Consciousness Scale represents a subitable substitute for the original scale. Indeed, for noncollege populations the revised version of the scale would seem to be the preferred version because of the difficulty that such respondents have been found to have with the original.

One final point concerning the revised scale deserves comment. In particular, even though the revised Self-Consciousness Scale is intended primarily for use with general populations, a college population was used to establish its psychometric properties. Why?

There were two reasons that prompted us to use the sample that we did. First, the original Self-Consciousness Scale was validated on a college population; for comparison purposes, it seemed desirable to examine the properties of the revised scale on a similar group. Second, and perhaps more important, in order to determine how well the new and the old scales correlated, it was necessary to use a sample that was capable of completing both the original version of the scale *and* its revised counterpart. Recall that the primary reason for undertaking a revision of the scale in the first place was the fact that respondents other than undergraduates often found it impossible to complete some of the items making up the original scale. Thus it was (and remains) impossible to obtain data on the original scale from the kind of populations for which the revised scale was intended. This in turn made it mandatory, by default, to rely on a sample of college students for our present purposes.

Several large-scale projects are now under way in which noncollege populations are being administered the revised Self-Consciousness Scale. Though data from these projects are somewhat sketchy and preliminary, participants appear

to be having little difficulty in responding to the items as they are now consti-
tuted. Thus, we believe we have been successful in our attempt to construct a
scale that such populations are capable of grasping and completing. The question
for the future, of course, is whether or not this revised scale will prove to be use-
ful in predicting important processes and outcomes among these more general
populations. Although a complete answer to this question will only become evi-
dent after several years of research, the psychometric similarities outlined above
between the revised scale and the original represent a reason for optimism.

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Please answer the following questions about yourself by darkening in an appropriate circle on your IBM answer sheet. For each of the statements, indicate how much each statement is like you by using the following scale:

3 = a lot like me
2 = somewhat like me
1 = a little like me
0 = not like me at all

Please be as honest as you can throughout, and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

1. I'm always trying to figure myself out.

2. I'm concerned about my style of doing things.

3. It takes me time to get over my shyness in new situations.

4. I think about myself a lot.

5. I care a lot about how I present myself to others.

6. I often daydream about myself.

7. It's hard for me to work when someone is watching me.

8. I never take a hard look at myself.

9. I get embarrassed very easily.

10. I'm self-conscious about the way I look.

11. It's easy for me to talk to strangers.

12. I generally pay attention to my inner feelings.

13. I usually worry about making a good impression.

14. I'm constantly thinking about my reasons for doing things.

15. I feel nervous when I speak in front of a group.

16. Before I leave my house, I check how I look.

17. I sometimes step back (in my mind) in order to examine myself from a distance.

18. I'm concerned about what other people think of me.

19. I'm quick to notice changes in my mood.

20. I'm usually aware of my appearance.

21. I know the way my mind works when I work through a problem.

22. Large groups make me nervous.

Scoring Procedures:

1. Reverse code items 8 and 11.

2. Computing subscales:

   a. For Private Self-consciousness subscale:
      Sum items 1, 4, 6, 8, 12, 14, 17, 19, and 21.

   b. For Public Self-Consciousness subscale:
      Sum items 2, 5, 10, 13, 16, 18, and 20.

   c. For Social Anxiety subscale:
      Sum items 3, 7, 9, 11, 15, and 22.