# PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

# On the Nature of Self-Monitoring: Construct Explication With Q-Sort Ratings

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To explicate M. Snyder's (1987) construct of self-monitoring (SM), a new Q-sort prototype is introduced. Analyses of Q-sorts by both observers and self demonstrated cross-method convergent validity for the revised 18-item Self-Monitoring Scale (SMS-R) and its Public Performing subscale; however, neither scale showed discriminant validity against measures of extraversion. The Other-Directedness items remaining on the SMS-R correlated neither with the other measures of SM nor with extraversion. These findings suggest that the scale revision led to a conceptual shift toward extraverted (and away from other-directed) features of self-presentation. To adequately assess the conceptual domain of SM phenomena, researchers should administer the original 25-item SMS (not the abbreviated 18-item SMS-R) and score Public Performing and Other-Directedness separately to examine their individual and joint effects.

The self-monitoring (SM) construct (Snyder, 1979) offers a theoretical account of individual differences in self-presentation and expressive behavior. The original 25-item Self-Monitoring Scale (SMS; Snyder, 1974) has been used widely, and its conceptualization has had an important impact on personality and

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Correspondence concerning this article should be addressed to Oliver P. John, Department of Psychology #1650, University of California, Berkeley, California 94720-1650, or to Jonathan M. Cheek, Department of Psychology, Wellesley College, Wellesley, Massachusetts 02181-8288. social psychology (PerIman, 1984). For example, an extensive meta-analysis supported the validity and utility of the original SMS as a moderator of the relation between attitudes and behavior (Kraus, 1995). Nevertheless, a substantial number of studies have criticized this 25-item scale for containing several distinct factors, and some have even suggested it was "psychometrically unsound" (e.g., Briggs, Cheek, & Buss, 1980; Lennox & Wolfe, 1984; for a review, see Briggs & Cheek, 1986, Table 2). To increase the reliability of the original scale and make it more factorially pure, Gangestad and Snyder (1985) abbreviated it. For their revised scale (SMS-R), they retained only those 18 of the original 25 items that loaded above .15 on the first unrotated factor (see also Snyder & Gangestad, 1986, p. 137).

# The Evolution of the SM Construct

Snyder has also modified his interpretation of the construct measured by the scale: "The construct of self-monitoring has evolved from my initial concerns with the control of expressive behavior into a much broader theory of interpersonal orientations" (Snyder, 1987, p. 172). The current interpretation emphasizes the image of the prototypical high self-monitor as "someone who treats interactions with others as dramatic performances designed to gain attention, make impressions, and at times entertain" (Snyder, 1987, p. 178). In contrast, the prototypical low self-monitor is said to show the opposite social tendencies and to attempt to communicate his or her authentic feelings and dispositions.

Rather than resolving the controversy, the emphasis on the

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first unrotated factor, the publication of the revised scale, and the broader interpretation of the construct set off a new round of criticism and debate (Briggs & Cheek, 1988; Hoyle & Lennox, 1991; Lennox, 1988; Miller & Thayer, 1989; Nowack & Kammer, 1987; West & Finch, in press). Even when they restricted their attention to the unrotated factor structure, as Snyder and Gangestad (1986) had suggested, researchers continued to report at least two major factors in the pool of 25 SMS items. These two factors accounted for approximately the same percentage of the total variance, and subscales derived from them were found to be uncorrelated with each other (Briggs & Cheek, 1988; Gross & John, 1996; Nowack & Kammer, 1987). In the abbreviated 18-item SMS-R, these two factors have been named Public Performing (e.g., "I have considered being an entertainer") and Other-Directedness (e.g., "I may deceive people by being friendly when I really dislike them").<sup>1</sup>

From the perspective of some psychometricians, the presence of two uncorrelated factors would appear to be a major problem, given that the scale was designed to measure a single personality attribute. Snyder and Gangestad (1986, p. 132), however, proposed an alternative explanation: Even though these two factors are not related to each other, each could still relate significantly to a measure of the latent variable assumed to define the SM construct. For example, Gangestad and Snyder's (1985) procedures for estimating the relation between the factors of the SMS and the latent variable suggest that the set of items forming the Public Performing factor would have an estimated correlation of about .7 with the latent SM variable, whereas the Other-Directedness factor would correlate about .3 with the latent variable (see also Gangestad & Snyder, 1991, p. 143).

Critics have not accepted the results of these latent-variable analyses. Specifically, Miller and Thayer (1989) have pointed out that Gangestad and Snyder's (1985) index of the latent SM variable contains several of the same items that are scored on the factors. This item overlap inevitably causes a spurious inflation of the correlations between the factors and the index for the latent variable (cf. Cohen & Cohen, 1975). Moreover, it has been noted that the sole reliance on self-report measures in these studies introduces shared method variance that makes it even more difficult to definitively interpret the findings (e.g., Gangestad & Snyder, 1991; Krosnick & Sedikides, 1990; Nowack & Kammer, 1987). We are persuaded that further internal analyses of the SM item pool, including factor analysis, will never be sufficiently unambiguous to resolve the debate about whether SM is a unitary concept. In our view, the recurrent controversy needs new light that can be provided only by a second, independent operational definition of the SM construct, one that shares neither specific item variance nor method variance with the SMS-R and its two major factors.

One widely accepted method for validating self-report scales is the use of ratings by knowledgeable informants (e.g., Funder & Harris, 1986). In one of the studies validating the original scale, Snyder (1974) obtained peer ratings on a number of attributes that he judged to be conceptually related to SM (e.g., "Has good self-control of his behavior; can play many roles"; "Is good at learning what is socially appropriate in new situations") and found that the composite of these peer ratings was related to self-reports on the SMS. The present study followed a similar design. To explicate the SM construct, we used an independent operational definition of the construct that allowed us to examine the convergent and discriminant validity of the 18-item SMS-R and its two major factors. We derived validity criteria from both observer and self Q-sorts of personality by using an expert prototype sort of the SM construct.

#### SM Prototype for the California Adult Q-Set (CAQ)

The SM prototype we used had been devised for the CAQ (J. Block, 1961/1978), which consists of 100 widely ranging statements about personality, cognitive, and interpersonal characteristics. J. Block (1961/1978) constructed the CAQ to provide a comprehensive, generally applicable, and standardized language for describing the full range of individual differences in personality functioning (e.g., J. Block, 1971). The CAQ is a general-purpose assessment instrument; it thus avoids the limitations of other instruments that are specifically focused on one or a few predetermined dimensions of personality. Because of its comprehensiveness and conceptual openness, the CAQ has been widely used to create expert-defined operationalizations of a broad array of personality constructs (see J. Block, 1991), such as ego resiliency and ego control (J. H. Block & J. Block, 1980; Klohnen, 1996), the Big Five (John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994; York & John, 1992), optimal adjustment (J. Block, 1961/1978), narcissism (Wink, 1991), externalization-internalization (Gjerde, Block, & Block, 1988), and generativity (Peterson & Klohnen, 1995). Once a prototype definition has been obtained, the construct can be measured with the CAQ by calculating the degree of resemblance between the CAQ description of the individual and the CAQ prototype defining the construct (J. Block, 1957).<sup>2</sup>

The usefulness of expert-defined prototypes stems from their potential to aid the process of construct explication. Across the diverse content domains represented by the 100 CAQ statements, a theorist can describe, in explicit and numerical terms, the attributes hypothesized to define a particular personality type (J. Block, 1957, 1961/1978). Such a theoretical and con-

<sup>&</sup>lt;sup>1</sup> The Public Performing factor is essentially the sum of Acting and Extraversion, two smaller and intercorrelated factors in the 25-item version of the SMS (Briggs, Cheek, & Buss, 1980; Gabrenya & Arkin, 1980; Gangestad & Snyder, 1985; Leary, Silver, Darby, & Schlenker, 1982); Nowack and Kammer (1987) have interpreted this combination as a Social Skills factor. Moreover, they suggested that the second factor, here labeled Other-Directedness, measures Inconsistency, whereas Schwalbe (1991) called it Inauthenticity. Most of the factor analytic studies concur that "sources of influence underlying both the 25- and the 18-item SMS cannot be captured in a single total scale score" (Hoyle & Lennox, 1991, p. 532).

<sup>&</sup>lt;sup>2</sup> Such a prototype *score* measures an individual's similarity to a characteristic pattern of attributes without making any assumptions about the interrelations among these attributes in the general population. The computation of a prototype score does not require that the underlying construct is unidimensional, nor that the most and least characteristic CAQ statements form an internally consistent scale. Thus, the definition of prototype scores is quite compatible with the measurement model for latent class variables, such as the one Gangestad and Snyder (1985, 1991) proposed for SM.

ceptual clarification of SM would seem particularly timely now that the initial definition of the construct is being reexamined and its scope extended:

Much has been said about self-monitoring since the construct was first introduced. What precisely, out of all that has been said, constitutes the self-monitoring construct? Just the initial characterization? It hardly seems right that the construct should be identified solely with the initial statements, given that the theory concerning the individual differences tapped by the Self-Monitoring Scale has evolved through extension, elaboration, and reemphasis. But this being so, how much extension, elaboration, and reemphasis can occur before the construct is, in fact, no longer the same construct? Perhaps, we might answer, there is a set of core propositions that are fundamental to the construct. . . If so, what are the core propositions? and how does one decide what are the core propositions? (Snyder & Gangestad, 1986, p. 134)

What was needed, then, was a formulation of the theory that would be faithful to the construct as theoretically conceived and extended over the years (e.g., Snyder, 1974, 1979, 1987) and sufficiently explicit to offer an alternative way of indexing the construct. The SM prototype (see J. Block, 1991) was designed for this purpose.

Soon after completing his revisions of the SM construct and scale, Snyder (personal communication, September 25, 1986) devised a CAQ-sort of the prototypical high self-monitor, in response to a request from J. Block. This expert sort of the high SM individual was based both on theoretical considerations and on past research findings. Thus, this expert sort can define the personality of the high self-monitor in terms of central and salient attributes, so that hypotheses about the relations between the SMS-R and independently assessed personality attributes can be tested.

Snyder's description of the prototypical high self-monitor was based on the 100 CAQ statements, sorted into nine categories (from extremely uncharacteristic to extremely characteristic) according to the standard CAQ response distribution (J. Block, 1991). The placement of the CAQ statements in the expert sort amounts to 100 separate hypotheses; although guided by theory and prior research, the expert sort requires a considerable amount of inference and interpretation on the part of the theorist. Thus, before the CAQ prototype of SM was analyzed, J. Block sought Snyder's opinion of the adequacy of the sort he had provided. Of central concern was the question of whether the content of the 100 CAQ items would permit a comprehensive and sufficient characterization of the SM personality. Might some aspects of the construct have been overrepresented, whereas others were omitted from the expert definition simply because they were not included among the items in the Q-set? In response, Snyder offered the following observations:

As for how comprehensive and sufficient I feel my Q-sort characterization of self-monitoring is, I suspect that all criterion definers walk away from the task with some uneasiness about what they have just done. I know that I had some difficulty with the more psychodynamically oriented items. I know too that it was somewhat easier to see items as descriptive of the high self-monitor (the "top" of the distribution) than of the low self-monitor (the "bottom" of the distribution). And, finally, there were times when I thought that an item would be sorted quite differently by the actual subject, by a friend, and by an expert judge. But, I suppose these are reactions that are hardly unique to me as a criterion definer. All in all, though, I was quite satisfied with my sort. (Snyder, personal communication, October 13, 1986)

It is reassuring that Snyder was satisfied with his SM sort, as required by J. Block's (1957) procedures for obtaining expert criterion sorts. Nonetheless, it would be useful to know whether this expert sort defines SM in a way similar to how other judges would define it. Larkin (1991) had 12 undergraduates read the items on the SMS-R and then use the CAQ to describe the attributes of the prototypical self-monitor by using the standard CAQ distribution; the reliability of the composite judgments exceeded .85. These composite judgments reflect the layperson's consensual view of the attributes conceptually related to the SM construct (as represented by the 18-item SMS-R) and thus provide an opportunity to assess the convergence of Snyder's expert sort with Q-sorts obtained from judges who were less familiar with the construct. We computed the correlation between Snyder's expert sort and the composite layperson sort (Larkin, 1991) across the 100 CAQ items and found it to be .75.3 This substantial correlation provides important evidence for the convergent validity of Snyder's expert sort.

What can we say about the content of the CAQ description of the prototypical self-monitor? The complete prototype sort, including the assignments of all 100 items (J. Block, 1991), is reprinted in the Appendix; however, some general impressions are conveyed by the 13 CAQ statements most characteristic of the high self-monitor's personality (presented in the top half of Table 1) and the 13 statements most uncharacteristic of the high self-monitor (the bottom half of Table 1).

The CAQ statements defining the SM prototype cover a broad range of diverse aspects of the construct; rather than simply listing them by item numbers, we have organized them in Table 1 under headings that roughly parallel recent statements about central propositions of the construct (Snyder, 1987; Snyder & Gangestad, 1986). As one would expect, a good number of the prototypical CAQ statements reflect the well-known description of the high self-monitor as possessing superior expressive skills and as being particularly aware and perceptive of interpersonal cues and impressions made on others (e.g., Snyder, 1974, 1979). Equally familiar is the characterization of low SM individuals as people who attend to and value their private self-views, and whose behavior and personality are genuine and consistent with their personal values and beliefs (Snyder, 1987; Snyder & Campbell, 1982). Finally, the most recent theoretical and empirical applications of SM are also included, namely the domains of interpersonal and relational orientations. These newer aspects of the construct are reflected in statements concerning the high self-monitor's interest in sexual contacts and concern with appearance, as contrasted with the close and committed relationships typical of low self-monitors (Snyder, Berscheid, & Matwychuk, 1988; Snyder, Simpson, & Gangestad, 1986). Thus, although by no means exhaustive as a description of the construct, the most char-

<sup>&</sup>lt;sup>3</sup> To compute this correlation, we needed information beyond that presented in Larkin's (1991) article, and we are grateful to her for providing us with the full set of 100 CAQ item placements.

Table 1
Self-Monitoring Prototype for the California Adult Q-Set
(CAQ): Summary of the 13 Items Most Characteristic and
Most Uncharacteristic of the Prototypical High Self-Monitor

Observer CAQ item (abbreviated)	Characterísticness
Characteristic of high self-monitor	ors
Expressive skills	
15. Is skilled in social techniques	Extremely
43. Is facially and/or gesturally expressive	Quite
98. Is verbally fluent; can express ideas well	Quite
92. Has social poise and presence	Extremely
88. Is personally charming	Quite
18. Initiates humor	Extremely
Attention and sensitivity to interpersonal cues	•
64. Is socially perceptive of a wide range of	
interpersonal cues	Extremely
32. Is aware of impression made on others	Extremely
3. Has a wide range of interests	Quite
Relationships and self-presentation	
80. Is interested in the opposite sex	Quite
31. Regards self as physically attractive	Quite
33. Is calm, relaxed in manner	Quite
54. Emphasizes being with others; gregarious	Quite

#### Uncharacteristic of high self-monitors

appropriateness) 96. Values own independence and autonomy Quite 16. Is introspective Extremely 24. Prides self on being objective, rational 41. Is moralistic Quite Behavioral consistency (vs. variability) 100. Does not vary roles: relates to everyone
96. Values own independence and autonomy   Quite     16. Is introspective   Extremely     24. Prides self on being objective, rational 41. Is moralistic   Quite     Behavioral consistency (vs. variability)   Quite
autonomyQuite16. Is introspectiveExtremely24. Prides self on being objective, rationalQuite41. Is moralisticQuiteBehavioral consistency (vs. variability)100100Does not vary roles: relates to everyone
16. Is introspectiveExtremely24. Prides self on being objective, rationalQuite41. Is moralisticQuiteBehavioral consistency (vs. variability)Quite100 Does not vary roles: relates to everyone
24. Prides self on being objective, rational Quite   41. Is moralistic Quite   Behavioral consistency (vs. variability) 100   100 Does not vary roles: relates to everyone
41. Is moralistic Quite Behavioral consistency (vs. variability) 100 Does not vary roles: relates to everyone
Behavioral consistency (vs. variability) 100 Does not vary roles: relates to everyone
100 Does not vary roles: relates to everyone
in the same way Extremely
75. Has a clear-cut, internally consistent
personality Extremely
70. Behaves in ethically consistent manner Extremely
2. Is a genuinely dependable person Quite
77. Appears straightforward, forthright,
candid Quite
Relationships and self-presentation
35. Has warmth; has the capacity for close
relationships Extremely
11. Is protective of those close to him/her Quite
12. Tends to be self-defensive Quite
55. Is self-defeating Quite

Note. The characteristicness rating scale ranged from 1 to 9; following the standard CAQ distribution, five items are *extremely* characteristic (a rating of 9) and another five are extremely uncharacteristic (rating of 1), and eight items each are *quite* characteristic (8) or quite uncharacteristic (2). From "Prototypes for the Adult California Q-Set" (unpublished manuscript, Department of Psychology, University of California, Berkeley), by J. Block, 1991. Copyright 1991 by J. Block. Adapted with permission. CAQ items from *The O-Sort Method in Personality Assessment and Psychiatric Research*, by J. Block, 1961/1978, Palo Alto, CA: Consulting Psychologists Press. Copyright 1978 by Consulting Psychologists Press. Reprinted with permission of J. Block. Reproduced by special permission of the Distributor, Mind Garden, Inc., P.O. Box 60669, Palo Alto, CA 94306. All rights reserved. Further reproduction is prohibited without the Distributor's written consent.

acteristic and uncharacteristic items include many important propositions about SM as the construct has evolved through both theory and empiricism into the formulation presented in Snyder's (1987) book.<sup>4</sup>

#### The Present Study

The CAQ prototype of SM provided a way to test the convergent validity of the SMS-R relative to an alternative operational definition of the construct. We also investigated the relative contributions of the two subscales, Public Performing and Other-Directedness. Would these two components converge in predicting the SM prototype, as suggested by the view of SM as unitary construct?

In addition, we included measures of Extraversion to address the controversy about the discriminant validity of the SMS-R. When Snyder (1987) considered the question of whether SM truly is "a unique psychological construct," he argued that the construct is not Extraversion or Need for Approval "in disguise" and that the "list of other measures with which SM is *not* meaningfully correlated is a long one" (p. 27). However, this conclusion was based on research from the 1970s that used the earlier 25-item SMS.

Commenting on more recent findings, Snyder (1987) also noted that a number of well-known personality scales do correlate with the SMS-R and that the scales "that best discriminate between people high and low in self-monitoring are exhibitionism, play, and dominance" (Snyder, 1987, p. 178). Note that Costa and McCrae (1988) have shown these three scales to measure facets of the broad personality dimension often called extraversion or surgency, which represents the first of the five factors typically found in personality ratings (Norman, 1963; see John, 1990). Consequently, it is not surprising that Snyder's (1987) most recent interpretation of the SM construct highlights these extraverted aspects of the construct. On the basis of his analyses of the items most closely related to the general factor measured by the SMS-R, Snyder (1987) concluded:

Thus, the portrait of the prototypical high self-monitor that emerges from these items is of someone who treats interactions with others as dramatic performances designed to gain attention, make impressions, and at times entertain. The portrait of the prototypical low self-monitor is of someone who is unable or unwilling to engage in histrionics in social situations and who typically does not use dramatic performances to impress others or gain their attention. (Snyder, 1987, p. 178)

Note that this characterization of the construct no longer emphasizes the other-directed concerns about social appropriateness that were so central in the initial description of the high self-monitor and in the original 25-item SMS, thus raising questions about the uniqueness of the SM construct.

Consider, for example, Briggs and Cheek's (1988) findings for the Social Potency scale, a measure of extraversion that emphasizes enjoying leadership roles, being the center of attention at social occasions, and liking to influence others (Tellegen, 1982;

<sup>&</sup>lt;sup>4</sup> The number of CAQ statements conceptually relevant to SM far exceeds the 26 most central ones given in Table 1. For example, attributes such as 28, "Tends to arouse liking and acceptance from others"; 44, "Evaluates the motivation of others"; 50, "Is unpredictable and changeable in behavior and attitudes"; 93, "Behaves in sex-typed ways"; and 99, "Is self-dramatizing; histrionic" were all judged as "fairly characteristic" of the prototypical high self-monitor (i.e., 7 on the 9-point scale).

Tellegen et al., 1988). Whereas the 25-item SMS correlated .41 with Social Potency, the 18-item SMS-R correlated .54, and the Public Performing subscale correlated .61. Indeed, Public Performing was correlated so strongly with self-report measures of social potency, exhibitionism, and sociability that Briggs and Cheek (1988) questioned its ability to withstand tests of discriminant validity in relation to markers of the Extraversion domain. In contrast, the Other-Directedness subscale of the 25-item SMS tends to be uncorrelated, or slightly negatively correlated, with self-report measures of the extraversion domain (Briggs et al., 1980; McCrae, 1993).

Briggs and Cheek's (1988) claim that the two SM subscales do not converge to form a unitary construct has been criticized for being based solely on self-report data (Krosnick & Sedikides, 1990, p. 725). To permit a more stringent test of the validity of both the self-report SMS-R and the observer-based Qsort measure of SM, we used both a self-report measure of extraversion (the Social Potency scale) and an observer-based Qsort measure of extraversion as discriminant-validity criteria. Moreover, because we share Snyder's concern about potential differences between personality descriptions made by observers rather than by the self (John & Robins, 1993), we also examined the participants' own self-descriptions on the Q-sort. In all, then, we considered four self-report scales (the 18-item SMS-R, its Public Performing and Other-Directedness subscales, and the Social Potency scale) as well as Q-sort observer ratings and self-descriptions of SM and extraversion.

### Method

#### **Participants**

The participants were from a longitudinal study of personality development, initiated in 1968 by J. Block and J. H. Block at the University of California, Berkeley. Participants were initially recruited into the study at age 3, while attending either a university-run nursery school or a parent-run cooperative nursery school. A comprehensive description of this project and its aims can be found in J. H. Block and J. Block (1980). These participants live primarily in urban settings and are heterogeneous with respect to race, social class, and parental level of education. They have been assessed with a wide range of psychological measures. The present sample consisted of 86 participants (46 women and 40 men) who completed the SMS-R and the Social Potency scale when they were 18 years old; 84 of them also participated in the next wave of personality assessments at age 23.

# Self-Report Scales: SM, Its Two Subscales, and Social Potency

The abbreviated 18-item SMS-R, recommended by Snyder and Gangestad (1986) as the best measure of SM, was administered when the participants were 18 years old. The items were given in true-false format (Snyder, 1974), interspersed among items from other personality scales. In addition to the total SMS-R score, we also scored two subscales, Public Performing and Other-Directedness. Whereas three obliquely rotated factors have been found in the original 25-item SMS (e.g., Briggs et al., 1980), in the shortened 18-item SMS-R two of these factors (Acting and Extraversion) combine into one broader factor, similar to the first unrotated factor identified as SM by Snyder and Gangestad (1986) and labeled Public Performing by Briggs and Cheek (1988; see also Gross & John, 1996). Our Public Performing scale was scored from the nine items loading above .30 on Briggs and Cheek's (1988) factor (i.e., Items 1, 5, 8, 12, 14, 18, 20, 22, and 23, as numbered on the 25-item SMS). However, Public Performing represents only one of two sources of variance remaining in the shortened SMS-R, the second being Other-Directedness. Because Snyder and Gangestad (1986) omitted 4 of the 10 initial Other-Directedness items from the 18-item scale, only 6 items remain as a measure of Other-Directedness (i.e., Items 3, 6, 13, 16, 17, and 25).

To assess discriminant validity, we used the Social Potency scale, a self-report scale that assesses three components of extraversion: social attention sceking, persuasiveness and the ability to influence others, and leadership. The scale consists of 25 true-false items, such as "I enjoy being in the spotlight" and "I am quite effective at talking people into things" (Tellegen, 1982; Tellegen et al., 1988). All items were administered on a personal computer.

### Personality Descriptions

Three independent sets of personality descriptions that used the CAQ were available: observer descriptions at age 18, observer descriptions at age 23, and self-descriptions at age 23.

Observer CAQ descriptions at ages 18 and 23. The personality characteristics of each participant were described by four assessors at age 18, and by six assessors at age 23, with the standard vocabulary of the CAQ (J. Block, 1961/1978). The CAQ consists of 100 statements, each printed on a separate card, that describe a wide range of personality, cognitive, and social attributes. The task of the assessors was to sort the 100 personality-descriptive statements from the CAQ into nine categories, ranging from *least characteristic of the subject* (1) to *most characteristic of the subject* (9). The assessor was required to place a predetermined number of statements into each category (i.e., 5 in Categories 1 and 9, 8 in Categories 2 and 8, 12 in Categories 3 and 7, 16 in Categories 4 and 6, and 18 in Category 5). The personality descriptions provided independently by each assessor were averaged to obtain a composite personality description of each participant at age 18 and again at age 23.

The assessors providing the personality descriptions had doctorates in personality or clinical psychology, or were advanced graduate students in a doctoral program in personality or clinical psychology. Each assessor had supervised the participant in one or more research procedures and had additional formal and informal contacts with the participant over the course of the assessment, which was conducted across several days. For example, the age 18 assessment battery included a detailed clinical interview, a standardized emotion-expression behavioral task, as well as numerous behavioral and experimental procedures that measured a range of psychological characteristics, such as conformity, field independence, rigidity, creativity, political beliefs, and word associations. The age 23 assessment battery included interviews focused on adult attachment patterns, relationship histories, and early memories: a procedure to measure individual differences in moral judgment, cognitive complexity, and emotion expression; as well as several additional experimental procedures that measured physiological reactivity and psychological processes. It is important to note that none of the assessors knew the participants beforehand and that two entirely independent teams of assessors provided personality descriptions for the age 18 and age 23 assessments.

CAQ self-descriptions. At age 23, participants described their own personalities by sorting the 100 CAQ statements (now phrased in firstperson form) into nine categories, ranging from *least characteristic of* myself (1) to most characteristic of myself (9). They used the same predetermined rating distribution that the observers used.

### Prototype Scores for SM and Extraversion on the CAQ

SM. The personality characteristics posited to be associated with the SM construct (as specified by the originator of the construct, Mark

#### Table 2

Internal Consistency (Alpha) Coefficients, Mean Interitem Correlations, and Correlations With Gender for the 18-Item Revised Self-Monitoring Scale (SMS-R), Its Subscales, and the Social Potency Scale

Scale	Alpha	Mean interitem correlation	No. of items	Correlation with gender*
SMS-R	.60	.07	18	.34**
Public Performing	.73	.23	9	.28**
Other-Directedness	.40	.09	6	.10
Social Potency	.86	.19	25	.16

*Note.* N = 86.

<sup>a</sup> Positive correlations indicate that men scored higher than women. \*\* p < .01.

Snyder) were available from J. Block (1991). (The complete expert Qsort is reprinted in the Appendix.) We used this expert Q-sort to compute three independent SM prototype scores for each participant: one for the age 18 observer CAQ descriptions, one for the age 23 observer descriptions, and one for the age 23 self-descriptions. Prototype scores were calculated by correlating, across the 100 CAQ items, the participant's individual CAQ personality description (i.e., values between 1 and 9 for each of the 100 CAQ items) with the SM prototype sort (also defined by values between 1 and 9 for the 100 CAQ items). The prototype score is thus defined by the correlation between individual and prototype; a high correlation implies the individual shows a pattern of personality characteristics very similar to the prototype, whereas a low score means the individual's personality is dissimilar to the prototype.

*Extraversion.* Prior to and independent of the construction of the SM prototype, J. Block (1991) developed a CAQ prototype definition for Extraversion based on expert judgments. Following the same procedures used to compute the SM prototype scores, three Extraversion prototype scores were computed for each participant.

#### Results

# Cross-Method Validity and Stability of the Prototype Scores

On the basis of the age 18 and age 23 observer descriptions and the age 23 self-descriptions, we computed three SM prototype scores and three Extraversion prototype scores for each participant. We first examined the cross-method validity and temporal stability of the prototype scores. The convergent validity of the SM prototype score, assessed across the observer and self descriptions at age 23, was substantial; the SM prototype score obtained from observer CAQ descriptions correlated .53 with the participants' own CAQ self-descriptions. Moreover, the SM observer prototype was quite stable over the 5-year interval; although the observational procedures differed at the two occasions and nonoverlapping sets of observers were used, the stability correlation was .63. The results for the Extraversion prototype score were similar; convergent validity between self and observers was .68 at age 23, and 5-year stability for the observer prototype score was .74.

# The Self-Report Scales and Their Intercorrelations

The internal-consistency coefficients of the four self-report scales and their correlations with gender are given in Table 2. The coefficient alpha of the 18-item SMS-R was .60, somewhat lower than the alphas of .70 in Snyder and Gangestad's (1986) and Briggs and Cheek's (1988) samples, but similar to the .62 figure reported by Miller and Thayer (1989). Although only half as long as the total scale, the 9-item Public Performing subscale had considerably better alpha reliability, .73. The alpha for the Other-Directedness scale, represented by only 6 items, was rather low, .40. The 25-item Social Potency scale had an excellent alpha, .86.

The overall mean of the SMS-R was 10.8 (SD = 3.0); Miller and Thayer (1989) reported similar figures for their sample of college students (M = 11.3, SD = 2.3). As in several previous studies (e.g., Stewart & Carley, 1984; see also Snyder, 1987, p. 19), men scored significantly higher (M = 11.9, SD = 2.8) than women did (M = 9.9, SD = 2.9). The point-biserial correlations between gender and all four self-report scales, given in the fourth column of Table 2, indicate that the gender difference in the total SMS-R score was due primarily to its Public Performing component.

Table 3 shows the intercorrelations among the four self-report scales. The correlations among the SMS-R and its subscales closely replicated previous findings; note that the Public Performing and Other-Directedness subscales did not correlate significantly with each other. The Social Potency scale correlated .56 with the SMS-R and .70 with the Public Performing subscale, but -.14 with the Other-Directedness subscale. Apparently, the Public Performing component of the SMS-R measures something very similar to Social Potency, and both measures are unrelated to the second SMS-R component, Other-Directedness.

# Correlations Between the Self-Report Scales and the CAQ Observer Prototype Scores

Table 4 presents the validity correlations of these four scales in predicting the SM prototype score and the Extraversion prototype score for the observer descriptions at ages 18 and 23. The convergent validity of the SMS-R across methods is indicated by its correlations with the observer-based SM prototype scores; the correlations of the two SMS-R subscales with the prototype

# Table 3

Correlations Among the Self-Monitoring Scales and Social Potency

Scale	Total SMS-R	Public Performing	Other- Directedness	Social Potency
Self-Monitoring subscales				
Public				
Performing	.82ª			
Other-				
Directedness	.36ª	17		
Social Potency	.56*	.70*	14	-

*Note.* N = 86.

\* These are uncorrected part-whole correlations; Public Performing and Other-Directedness are subscales of the revised 18-item Self-Monitoring Scale (SMS-R). \* p < .05.

Predicting the CAQ Self-Monitoring and Extraversion Prototype Scores From the SMS-R, Its Subscales, and Social Potency

CAQ prototype score	Total SMS-R	Social Potency	Public Performing	Other- Directedness
Observer descriptions at age 18				
Self-Monitoring	.33*	.48*	.40*	04
Extraversion	.29*	.41*	.32*	01
Observer descriptions at age 23				
Self-Monitoring	.30*	.44*	.38*	06
Extraversion	.23*	.34*	.29*	07
Self-descriptions at age 23				
Self-Monitoring	.32*	.43*	.39*	06
Extraversion	.22*	.46*	.28*	08

Note. Ns range from 82 to 86. CAQ = California Adult Q-Set; SMS-R = revised Self-Monitoring Scale.

\* *p* < .05.

Table 4

score indicate the degree to which the two components are related to an independent assessment of the construct. The correlation between the 18-item SMS-R and the SM observer prototype score was .33 at age 18 and .30 five years later. However, Table 4 also shows that the Public Performing subscale predicted the SM observer score at least as well as the full scale did and that it did so at both occasions (.40 and .38, respectively), as did the Social Potency scale (.48 and .44). In contrast, the Other-Directedness component of the SMS-R was not at all related to the SM observer score at either occasion (-.04 and -.06). Indeed, the two subscales of the SMS-R differed significantly in their correlations with the SM observer score both at age 18, t(83) = 2.9, p < .01, and at age 23, t(81) = 2.8, p < .01.

A very similar pattern of correlations emerged for the Extraversion observer prototype score. The total SMS-R correlated moderately with the Extraversion observer score at both occasions (.29 and .23), as did the Public Performing subscale (.32 and .29) and the Social Potency scale (.41 and .34). However, the Other-Directedness subscale of the SMS-R was not related to the Extraversion observer score at either occasion (-.01 and -.07).

In summary, the SMS-R showed respectable levels of convergent validity with the SM observer score, even across a 5year interval. However, the SMS-R was about equally strongly related to the Extraversion observer score at both occasions. Of the two SMS-R components, the Public Performing subscale (which was closely related to the Social Potency scale) consistently predicted both the SM and Extraversion observer scores. In contrast, Other-Directedness (which was not related to the Social Potency scale), showed zero convergent validity with the SM observer score and was also not related to the Extraversion observer score.

### Generalizability to CAQ Self-Descriptions

The preceding analyses of the SM prototype score relied on observer assessments. Would our findings be different if we used the participants' own CAQ self-descriptions rather than the observers' descriptions? At the bottom of Table 4, we present the findings for the SM and Extraversion prototype scores based on the self-descriptions obtained at age 23. The pattern of correlations provides a close replication of the observer-based findings. Again, the SMS-R, its Public Performing subscale, and the Social Potency scale all predicted the SM and Extraversion prototype scores, and they all did so about equally well. In contrast, the Other-Directedness subscale remained unrelated to the SM prototype score (r = -.06) even when it was based on self-descriptions, and again the correlation for Other-Directedness was significantly lower than that for Public Performing, t(81) = 2.9, p < .01.

The comparisons presented in Table 4 show that our findings are not limited to personality descriptions made by psychologists but generalize to self-descriptions as well. The importance of this replication across two data sources and over time cannot be overemphasized: It rules out the possibility that methodological artifacts associated with a particular set of observer descriptions might account for our findings.<sup>5</sup> Regardless of the occasion or data source, then, we found some evidence for the convergent validity of the 18-item SMS-R but little evidence for its uniqueness as a psychological construct.

# Discriminant Validity of the SMS-R: Partial Correlations

The demonstration of discriminant validity requires that measures of the same construct (operationalized by different methods) correlate more highly with each other than with measures of a different construct (Campbell & Fiske, 1959). However, Table 4 shows that neither the SMS-R total score nor the Public Performing subscale correlated more highly with the SM prototype score than did the Social Potency scale. Given that both the SMS-R and the Social Potency scale predicted a significant portion of the SM observer variance, how much of this variance can be attributed uniquely to the SMS-R?

Partial correlations can provide an answer to this question. Table 5 shows the partial correlations with the SM observer prototype scores when the effect of Social Potency was statistically controlled. Note that not one of these partial correlations was significant. The correlations for the SMS-R dropped from .33 to .08 at age 18 and from .30 to .06 at age 23. Similarly, for the Public Performing subscale, the correlations dropped from .40 to .10 and from .38 to .11, respectively. As shown in Table 5, these findings were replicated when the SM prototype score was based on the age 23 self-descriptions. Thus, neither the SMS-R nor the Public Performing subscale contributed significant variance above and beyond that shared with Social Potency.

In a second analysis, we tested whether the total SMS-R has any unique association with the SM prototype score above and

<sup>&</sup>lt;sup>5</sup> These conclusions are also consistent with a reanalysis of a sample of self and peer CAQ descriptions initially described by Funder and Harris (1986) and subsequently extended (Funder, personal communication, January 30, 1990). In the extended data set (N = 140), the correlations between the 25-item SMS and each of the 26 CAQ statements most central to SM (see Table 1) showed a very similar pattern across self and peer CAQ descriptions.

Table 5
Partial Correlations of the Revised Self-Monitoring Scale
(SMS-R) and Its Subscales With the CAQ Self-Monitoring
Prototype Controlling for Social Potency

SM prototype score	Total SMS-R	Public Performing	Other- Directedness
Observer data at age 18	.08	.10	.04
Observer data at age 23	.06	.11	.00
Self-reports at age 23	.10	.12	.00

Note. Ns range from 82 to 86. None of these correlations was significant. CAQ = California Adult Q-Set; SM = Self-monitoring.

beyond that already captured by its own Public Performing subscale. When controlling for Public Performing, the partial correlations of the SMS-R with the SM prototype score were all reduced to zero (.00, -.02, and .02 for the observer descriptions at ages 18 and 23 and the self-descriptions at age 23, respectively). The reverse, however, did not hold true; when the effect of the SMS-R was partialed, the criterion validity correlations of the Public Performing scale with the SM prototype score all remained significant (partial *rs* were .25, .25, and .23, respectively, all ps < .05). In other words, all of the valid variance the SMS-R shared with the SM prototype score could be accounted for by the much shorter Public Performing subscale, which in turn predicted valid variance above and beyond that predicted by the SMS-R.

Finally, discriminant-validity problems were also apparent in the observer- and self-based prototype scores. Specifically, the SM and Extraversion prototype scores were highly correlated, with rs of .87 at age 18 and .82 at age 23 for the observer prototype scores and .73 at age 23 for the self-description prototype scores.

# Internal and External Validity of the 18 Items on the SMS-R.

The preceding analyses examined the convergent and discriminant validity of the SMS-R and its subscales at the level of scale scores. However, Snyder (1987) has emphasized that some of the items on the scale may be better indicators of the underlying construct than others. Are there some items, or item subsets, that account for the convergent validity of the scale in predicting the SM prototype score, whereas other items contribute little to this validity, or even reduce it? Moreover, are these items the same as those that fail to show discriminant validity against the Social Potency scale?

In Table 6, we present four correlations for each of the 18 SMS-R items: the item's correlation with (a) the SMS-R itself (i.e., corrected item-total correlations), (b) the Social Potency scale, (c) the SM observer prototype score, and (d) the Extraversion observer prototype score. Because the pattern of findings was similar for ages 18 and 23, we aggregated the observer prototype scores across the two ages. In Table 6, the 12 SMS-R items most related to Public Performing and the 6 items most related to Other-Directedness are ordered by their item-total correlations with the SMS-R; these correlations, often referred to as internal item validities, indicate the degree to which each item is a good indicator of the total SMS-R score and thus the general SM factor.<sup>6</sup>

In this sample, 9 of the 18 SMS-R items had significant itemtotal correlations and all 9 of them were part of the Public Performing factor; 7 of these 9 items also correlated significantly with the Social Potency scale. In contrast, none of the 6 Other-Directedness items had significant item-total correlations (mean r = .02), nor did any of them correlate with Social Potency (mean r = -.08). Across the 18 items, the correlations with the total SMS-R and the correlations with Social Potency showed a very similar pattern, and the correlation between these two vectors of correlations (i.e., columns 1 and 2 of Table 6) was r = .83. That is, the best indicators of SM were the items most highly correlated with the Social Potency scale.

The third and fourth columns of Table 6 present the external validities of the 18 SMS-R items as assessed against the SM and Extraversion observer prototype scores, aggregated across ages 18 and 23. Six SMS-R items correlated significantly with the SM observer score, four correlated significantly with the Extraversion observer score as well, and all came from the Public Performing factor. None of the Other-Directedness items correlated significantly with either observer score.<sup>7</sup>

Looking across all four columns of Table 6, we see a remarkably consistent pattern, and this pattern can be described more formally by the correlations among these four columns (computed across the 18 SMS-R items). The items with the highest item-total correlations (column 1) tended to show the strongest convergent validities with the SM observer score (column 3), r = .77. As can be seen in Table 6, the content of these items involves attention-seeking, verbal fluency, and expressive skills. Perhaps not surprisingly, these are the same SMS-R items that also most lacked discriminant validity in relation to the Social Potency scale (column 2), r = .83, and the Extraversion observer score (column 4), r =.79. Moreover, the SMS-R items that best predicted the SM prototype score (column 3) were also the best predictors of the Extraversion prototype score (column 4), r = .93 across the 18 items.

Finally, the findings in Table 6 also pertain to the validity of the SM observer score as a measure of SM. Snyder (1987, pp. 175-180) argued that the best available indicators of the latent SM variable are those SMS items that load most highly on the first unrotated factor. The results in Table 6 show that the 7 SMS-R items with the highest loadings on the first unrotated factor of the original 25-item SMS (indicated in brackets in Table 6) also produced the seven strongest correlations with the SM prototype score (column 3), with six of the correlations significant beyond the .05 level. The data in Table 6 show that

<sup>&</sup>lt;sup>6</sup> Across the 18 items, the item-total correlations obtained in the present sample correlated .68 with the loadings of the items on the first unrotated factor of the 25-item scale in college samples (Briggs & Cheek, 1988); see Table 6 for the loading of each item.

<sup>&</sup>lt;sup>7</sup> This pattern of findings was closely replicated when the SM prototype score was based on the age 23 self-descriptions: The same 6 Public Performing items correlated significantly, and the mean r for the 12 items in Table 6 was .19; in contrast, none of the 6 Other-Directedness items correlated significantly, and their mean r was -.05.

Table 6

		Self-report scales		Observer prototypes	
	Item numbers and content on the 18-item SMS-R	SMS-R*	Social Potency	SM	Extraversion
	Items related to Public Performing				
4.†(5)	I can make impromptu speeches even on topics about which I have almost no information. (T) [.48/.01]	.46*	.41*	.35*	.21*
15.† (22)	At a party I let others keep the jokes and stories going. (F) [.54/19]	.43*	.40*	.22*	.19
7.†(12)	In a group of people I am rarely the center of attention. (F) [.55/16]	.41*	.67*	.40*	.28*
16.† (23)	I feel a bit awkward in public and do not show up quite as well as I should. (F) [.49/41]	.38*	.48*	.45*	.35*
12.†(18)	I have considered being an entertainer. (T) [.51/.18]	.36*	.43*	.15	.11
13.†(20)	I have never been good at games like charades or improvisational acting. (F) [.57/07]	.31*	.30*	.38*	.32*
3. (4)	I can only argue for ideas which I already believe. (F) [.20/.05]	.30*	.22*	.13	.15
14. (21)	I have trouble changing my behavior to suit different people and different situations. (F) [.28/.13]	.29*	.10	.04	.15
1.7(1)	I find it hard to imitate the behavior of other people. (F) [.29/.06]	.26*	.08	07	06
6.† (8)	I would probably make a good actor. (T) [.65/.17]	.21*	.56*	.22*	.07
9.†(14)	I am not particularly good at making other people like me. (F) [.35/27]	.19	.18	.11	.18
17. (24)	I can look anyone in the eye and tell a lie with a straight face (if for a right end). (T) [.27/.17]	.04	.08	.01	05
Mean of th	he 12 items related to Public Performing	.31	.33	.20	.16
	Items related to Other-Directedness				
.11. (17)	I would not change my opinions (or the way I do things) in order to please someone or win their favor. (F) [06/.23]	.12	06	.04	.03
2. (3)	At parties and social gatherings, I do not attempt to do or say things that others will like. (F) [.15/.15]	.07	03	10	.03
8. (13)	In different situations and with different people, I often act like very different persons. (T) [.08/.60]	.02	.06	.02	01
10. (16)	I'm not always the person I appear to be. (T) [.04/.55]	01	20	03	06
18. (25)	I may deceive people by being friendly when I really dislike them. (T) [.09/.39]	04	13	10	09
5. (6)	I guess I put on a show to impress or entertain others. (T) [.37/.45]	04	09	.04	.03
Mean of th	he 6 items related to Other-Directedness	.02	07	02	01

Correlations of Each Self-Monitoring (SM) Item With the SMS-R Total Score, Social Potency, and the SM and Extraversion CAQ Prototype Scores Based on Aggregated Age 18 and Age 23 Observer Data

*Note.* N = 86 for the self-report scales and N = 82 for the aggregated observer CAQ prototypes. Item numbers are from the 18-item SMS-R, with a dagger indicating that the item is scored on the Public Performing subscale; the item numbers from the original 25-item Self-Monitoring Scale (SMS) are given in parentheses. Items are ordered by their item-total SMS-R correlations. All items were scored in the direction of high SM; item keying (T = true and F = false) is indicated in parentheses. Loadings on the first and second unrotated factors of the 25-item SMS are given in brackets after each item (from Briggs & Check, 1988). SMS-R = revised Self-Monitoring Scale; CAQ = California Adult Q-Set.

\* Corrected part-whole correlation (i.e., of each item with the remainder of the SMS-R).

\* *p* < .05.

an item's correlation with the first unrotated factor of the SMS strongly predicted its correlation with the SM prototype score (column 3), r = .76. These findings provide further criterion validity for the SM prototype score.

### Discussion

We began by suggesting that the availability of a second operational definition, one that uses an independent assessment method, could advance the interpretation of the construct measured by the self-report SMS-R. We have presented a series of analyses that use the CAQ-based prototype of SM (J. Block, 1991). Three sources of evidence support the validity of the SM prototype score as a measure of the revised SM construct. First, in terms of content validity, the prototype was based on the judgments of the foremost expert on the construct of SM, Mark Snyder, and covers a broad range of SM phenomena (see Table 1). Second, in terms of convergent validity, we demonstrated that Snyder's expert judgments showed substantial convergence with judgments obtained independently from a panel of undergraduates (Larkin, 1991). Third, in terms of criterion validity, the findings presented in Table 6 demonstrate that the SM prototype score correlates most strongly with those items that loaded most highly on the first unrotated factor of the SMS-the items that, according to Snyder (1987, pp. 175-180), are the best indicators or signs of the latent SM variable. For these reasons, we believe that our results can shed new light on the definition and measurement of the SM construct. We first discuss the evidence for the convergent and discriminant validity of the revised SMS-R and its two factors and then consider the implications of our findings for the measurement of SM in future research.

#### Convergent Validity of the 18-Item SMS-R

The significant correlations between the SMS-R and the SM prototype scores provide evidence for the convergent validity of these two measures of SM across instruments (SMS-R and CAQ), data sources (observers and self), and time (a 5-year interval). Our findings at age 23 show that the SMS-R correlates about equally with the CAQ prototype score, regardless of whether the score was based on the composited descriptions by multiple observers or on a single set of participants' self-descriptions (cf. Hofstee, 1994).

# Discriminant Validity Against Social Potency and Extraversion

The substantial correlations between the SMS-R and the Social Potency scale on the one hand, and between the SM prototype score and the Extraversion prototype score on the other hand, raise concerns about discriminant validity. In fact, there was little evidence for discriminant validity of the SMS-R against the Social Potency scale. Neither the SMS-R total score nor its Public Performing subscale correlated more highly with the SM prototype score than did the Social Potency scale, even when the SM prototype score was based on self-descriptions. Moreover, the partial-correlation analyses showed that neither the SMS-R nor Public Performing contributed significant variance above and beyond that already predicted by Social Potency. This lack of discriminant validity was also apparent at the item level: The SMS-R items that best predicted the SM prototype score were those that were most highly correlated with the Social Potency scale.

Our exploration of discriminant relations across methods (i.e., between the SMS-R and the Extraversion prototype score) further confirmed this conclusion. The SMS-R did not correlate more strongly with the SM prototype score than with the extraversion prototype score; these two correlations were not different from each other either when the prototype scores were based on two independent sets of observer descriptions nor when they were based on self-descriptions. Moreover, the SMS-R items that best predicted the SM prototype score were also the best predictors of the extraversion prototype score.

In short, the entire pattern of findings suggests that the items Snyder (1987) considered to be the best indicators of SM are empirically equivalent to extraversion items. Our findings thus replicate and extend the earlier finding that the 18-item SMS-R is difficult to distinguish from measures related to extraversion (Briggs & Cheek, 1988, Table 8). The correlations between long-studied measures of the extraversion domain and both the SMS-R and the SM prototype scores raise serious questions about the uniqueness of the construct measured by the SMS-R.

# Public Performing and Other-Directedness in the 18-Item SMS-R

As in previous research, Public Performing and Other-Directedness correlated near zero with each other in the present sample. However, the absence of correlation between the subscales does not preclude the possibility that each correlates significantly with criterion measures of the underlying SM variable (Snyder & Gangestad, 1986). Our data failed to sustain this theoretically possible outcome.

The Public Performing subscale, which most closely approximates the first unrotated factor described by Snyder and Gangestad (1986), correlated .40 (and .38 five years later) with the observer-based SM prototype score; these are substantial correlations for a short 9-item self-report scale. The correlations for the Other-Directedness subscale, however, were essentially zero and differed significantly from those for Public Performing. The overall pattern of our findings is thus consistent with previous suggestions from factor analytic studies that the variance cantured by the Other-Directedness items is orthogonal to the variance represented by the first unrotated factor, that is, Public Performing (Briggs & Cheek, 1988; Miller & Thayer, 1989; Nowack & Kammer, 1987). Similarly, Snyder and Gangestad (1986) noted that the second source of variation in the 18-item SMS-R is independent of the major source of variation, which they identified as SM.

Two related findings are worthy of comment: The Public Performing scale had valid criterion variance above and beyond that accounted for by the full SMS-R, and the validities of the 18 SMS-R items differed substantially and in predictable ways. Apparently, some of the items retained on SMS-R were not efficient indicators of the intended construct. In fact, when Snyder and Gangestad (1986) revised the original 25-item SMS. they found that 7 of the 18 items they retained on the SMS-R failed to load above .30 on the first unrotated factor they identified as SM. Our findings indicate that by scoring just half of the items (i.e., those on the Public Performing scale), one can obtain a scale that is more internally consistent than the full 18item SMS-R and that is at least as valid in relation to the observer-based SM prototype score. However, this further shortened scale would not capture the same range of phenomena as the original 25-item scale, which included 10 Other-Directedness items that formed a reliable subscale and were orthogonal to measures related to extraversion (Briggs et al., 1980).

#### Implications and Recommendations

Thus, our findings suggest an alternative research strategy to Snyder and Gangestad's (1986) abbreviation of the original construct and scale. We have seen that in terms of both internal and external validity, the Other-Directedness items retained on the SMS-R are unrelated to both the Public Performing subscale and the SM prototype scores. However, there are several important domains of SM phenomena that have been shown to be attributable primarily or exclusively to the Other-Directedness component included in the original 25-item SMS: inconsistency of attitudes and behavior, concern about behaving appropriately, and the tendency to use other people's behavior as a guide for what to do in social situations (e.g., Baize & Tetlock, 1985; Miell & LeVoi, 1985; Nowack, 1994; Paulhus & Martin, 1988; Wymer & Penner, 1985; see also Schwalbe, 1991). These behavioral domains, part of the original construct formulation and scale, are no longer well represented in the revised scale (Briggs & Cheek, 1988, Table 4; Snyder, 1987, p. 180). Thus, Snyder and Gangestad's (1986) abbreviation of the original SMS had the intended effect of making the scale more reliable and factorially pure but also had unintended effects: It weakened the conceptually important aspects of otherdirected self-presentation and thus shifted the construct toward extraversion.

A recent study further illustrates this point. Cheek (1995) collected peer ratings that included a criterion item used by Snyder (1974) in his peer-rating study: "Is concerned about acting appropriately in social situations." Aggregated across four peers, ratings on this item correlated .20 with participants' self-reports on the original 25-item SMS, .06 with the 18-item SMS-R, and -.12 with its Public Performing subscale. However, for the abbreviated Other-Directedness subscale on the SMS-R, the correlation was .30, and the full 10-item Other-Directedness subscale of the original SMS yielded a correlation of .41. This pattern of correlations suggests that the original SMS and its 10-item Other-Directedness subscale are more successful in capturing important aspects of the original SM construct, such as concern for social appropriateness.

What, then, ought to be the role of the behavioral domains represented by the Other-Directedness items? The present as well as previous findings suggest that a sufficiently reliable and valid Other-Directedness measure cannot be scored from the items remaining on the SMS-R. Thus, we recommend that researchers do not use the abbreviated 18-item scale. Instead, we recommend that researchers return to using the original 25item scale and score the Public Performing and Other-Directedness items as separate scales, rather than summing them together to form a single total-scale score. Thus, we do not suggest that the Other-Directedness items be discarded. In fact, in his meta-analysis of the literature on attitude-behavior consistency, Kraus (1995, p. 71) suggested that use of the original Other-Directedness subscale might produce larger moderating effects than the total scale (see also Baize & Tetlock, 1985). Similarly, in their recent attitude research DeBono and Snyder (1995) reverted to using the original 25-item SMS.8 Note that in twofactor solutions of the original set of 25 items, the Other-Directedness items account for almost as much of the total variance and almost as many item loadings above .30 as do the Public Performing items; in fact, Other-Directedness occasionally emerges as the first of two unrotated factors in the 25-item SMS (Briggs & Cheek, 1988; Nowack & Kammer, 1987). Therefore, we agree with Gangestad and Simpson's (1993, p. 136) suggestion that it makes sense to suppose that the two factors accounting for the bulk of the covariance between SM items are generated by two orthogonal latent variables.

In the present research, the Public Performing subscale and the abbreviated Other-Directedness subscale of the SMS-R did not jointly predict the SM prototype scores. It is true that when measured with all 25 items on the original SMS, Public Performing and Other-Directedness sometimes do converge in predicting the same outcome variable (e.g., Krosnick & Sedikides, 1990). Such parallel findings may be particularly interesting to researchers investigating individual differences in expressive behavior and self-presentational styles (cf. Arkin, 1981). The idea that social skills (as reflected in the Public Performing subscale) are linked to a motivational tendency to engage in impression management (as reflected in the Other-Directedness subscale) has always been a key attraction of Snyder's (1974) conceptualization of SM (Schlenker, 1980, p. 77; Snyder, 1981, p. 102). However, our data suggest that the two are not necessarily linked. Therefore, researchers should compute Public Performing and Other-Directedness scores separately from the 25-item SMS in order to test for both individual and joint effects.<sup>9</sup> This approach avoids the ambiguity presented when the reader does not know whether an effect reported for the total scale is due to just one of the two orthogonal factors or to both (e.g., Jones, Brenner, & Knight, 1990; cf. Hull, Lehn, & Tedlie, 1991; Nunnally, 1978, p. 268). From this perspective, the high self-monitor would be defined as an individual who scores high on both of the two orthogonal factors scored from the original SMS. Eventually, both the Public Performing and Other-Directedness measures should be revised to improve their reliability and validity (cf. Briggs & Cheek, 1988, p. 675; Gangestad & Simpson, 1990, 1993; Hoyle & Lennox, 1991).

In conclusion, our approach appears to have been helpful in explicating the current stage in the evolution of the SM construct. Our work also adds to the ways in which research on SM has increased awareness of many general issues in the development and evaluation of personality scales and the explication of psychological constructs. In particular, we have shown how Qsort data based on extensive and multiple observations of each participant can help resolve a protracted controversy about the validity of one of the most frequently used self-report scales in personality research.

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<sup>&</sup>lt;sup>8</sup> Unfortunately, no findings were reported for the previously recommended 18-item SMS-R or for the separate effects of Public Performing and Other-Directedness.

<sup>&</sup>lt;sup>9</sup> See Briggs and Cheek's (1988) Table 1 for factor loadings of all 25 items on the first (Public Performing) and second (Other-Directedness) unrotated factors of SM. Because the Public Performing subscale and the more reliable Social Potency scale meet Nunnally's (1978, p. 230) criteria for alternative forms of tests of the same psychological construct, the items from the Social Potency scale that are most highly related to the first factor of the SMS could be used to improve the reliability of the Public Performing measure (see Gangestad & Simpson, 1993, Table 2).

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(Appendix follows on next page)

# Appendix

CAQ item number	Scoring value	CAQ item number	Scoring value
1	3	51	4
2	2	52	6
3	8	53	5
4	7	54	8
5	3	55	2
6	3	56	- 7
7	4	57	7
8	6	58	6
9	5	59	4
10	4	60	4
11	2	61	6
12	2	62	5
13	6	63	7
14	3	64	9
15	9	65	Ś
16	1	66	7
17	4	67	4
18	9	68	3
19	6	69	6
20	6	70	1
21	3	71	5
22	3	72	4
23	5	73	6
24	2	74	5
25	4	75	1
26	5	76	4
27	5	77	2
28	7	78	5
29	4	79	4
30	5	80	8
31	8	81	7
32	9	82	4
33	8	83	5
34	3	84	6
35	1	85	7
36	4	86	6
37	6	87	3
38	5	88	8
39	5	89	6
40	4	90	3
41	2	91	6
42	4	92	9
43	8	93	7
44	7	94	5
45	5	95	5
46	5	96	2
47	.3	97	3
48	6	98	8
49	6	99	7
50	7	100	1

# Scoring the Self-Monitoring Prototype From the California Adult Q-Set (CAQ)

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