Is Self-Monitoring Related to Social Comparison?
It Depends How You Ask

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ABSTRACT - Self-monitoring and social comparison are theoretically related, as the former involves searching the environment for information to inform changes in one's own behavior and the latter involves seeking out social information for the purposes of comparison. We examined the relation between these two constructs, while simultaneously examining how scale choice for self-monitoring can greatly influence one's results and possible conclusions. Self-monitoring measures differed in their relation with social comparison based on their theoretical background. Moreover, self-monitoring measures related to social comparison exhibited diverging relations with the two major aspects of social comparison. These results illuminate our understanding of self-monitoring and social comparison, and the psychometric distinction between construct and measurement.

Self-monitoring is the ability to manage one's self-presentation by controlling expressive behavior in response to environmental information (Snyder, 1974). Environmental information often takes the form of other people's opinions, creating a theoretical link between self-monitoring and the tendency to evaluate oneself against others, known as social comparison (Festinger, 1954). Social comparison might be a method by which high self-monitors collect information about their environments (Lennox & Wolfe, 1984).

There has, however, been little research on this putative relationship between self-monitoring and social-comparison and what does exist is often indirect. In one study, MBA students who were higher in self-monitoring were found to make decisions more similar to those of their peers (Kilduff, 1992). In another, children high in self-monitoring were found to pay more attention to the decisions of other children (Graziano, Leone, Musser & Lautenschalger, 1987). These findings, although related to social comparison, do not capture all the facets of modern social comparison theory. A more straight-forward approach would be to examine whether trait-levels of self-monitoring are related to social comparison tendencies, an approach adopted in this study.

Measuring social comparison tendencies is relatively straight-forward, as there is one predominant measure of this construct, known as the Iowa-Netherlands Comparison Orientation Measure (INCOM; Gibbons & Buunk, 1999). The INCOM measures a

person's use of both the abilities and the opinions of others for comparison information, in line with Festinger's (1954) original conception of this construct.

The problem of measuring self-monitoring is not as simple, however. A number of different measures exist and all are still being actively employed in current research. Here we focus on the most popular of these questionnaires, namely the Self-Monitoring Scale (SMS; Snyder, 1974) along with its revision (Self-Monitoring Scale—Revised, SMS-R; Snyder & Gangestad, 1986), as well as the Revised Self-Monitoring Scale (RSMS; Lennox & Wolfe, 1984). The history of these three scales is intrinsically tied to the question of how social comparison and self-monitoring relate. The SMS explicitly included "attention to social comparison information" as a key component of its measurement (pg. 529; Snyder, 1974). In response, however, some critics argued that self-monitoring and social comparison were separable and should remain distinct (Briggs, Cheek & Buss, 1980; Lennox & Wolfe 1984). This prompted the authors of the SMS to remove items related to social comparison, creating the SMS-R (Snyder & Gangestad, 1986). These authors theorized that although some individuals may utilize comparison information to avoid social threats, this socially defensive behavior is not congruent with the self-monitoring construct (Gangestad & Snyder, 2000).

The SMS was also criticized for disregarding an individual's sensitivity to social cues (separate from a tendency to compare, though clearly related), a key characteristic of self-monitoring (Briggs et al., 1980). To capture this aspect of self-monitoring, Lennox and Wolfe (1984) developed a new measure known as the RSMS and included both Sensitivity to the Behavior of Others and the Ability to Modify Self-Presentation as subscales. The Sensitivity subscale seems theoretically related to social comparison since social comparison involves being interested in what others think and feel (Gibbons & Buunk, 1999).

The different theoretical backgrounds of the SMS, SMS-R, and RSMS shaped each of these scales differently. Thus, any examination of the relationship between self-monitoring and social comparison is likely to be influenced by the self-monitoring scale selected. As all three scales are currently in active use, none could reasonably be excluded. The aims of this study are therefore two-fold: (1) to examine the relationship between the traits of self-monitoring and social comparison tendencies (with respect to both abilities and opinions), and (2) to examine how choice of self-monitoring scale might influence conclusions regarding this relationship. The first is a theoretical issue and the second a psychometric one, though the former cannot be answered adequately without considering the latter.

Based on the different theoretical conceptions of self-monitoring that gave rise to each of these three scales, we predict that they will differ in their relationship to social comparison. Specifically, the SMS and RSMS include the perception and utilization of social information, whereas the SMS-R does not. Therefore, we hypothesize that scores on the SMS and RSMS, but not the SMS-R, will be related to social comparison.

Furthermore, we expect high self-monitors to be concerned with obtaining social information in order to adjust their behavior accordingly. Harmonious social interactions typically depend on the compatibility of opinions (Festinger, 1954). In contrast, comparisons based on abilities provide information about the self (Gibbons & Buunk, 1999), information not necessarily of use to the goals of self-monitors. Because high self-

monitors are focused on adapting socially, obtaining self-knowledge is secondary. Thus, a high self-monitor should place greater importance on comparing opinions rather than abilities. We therefore hypothesized that the SMS and RSMS, the two scales hypothesized to relate to social comparison, will be more strongly related to the Opinions subscale of the INCOM than the Abilities subscale. Lastly, with regard to the RSMS, we hypothesized that the Sensitivity subscale will be most related to the Opinions subscale of the INCOM, since attention to others' behavior is more theoretically linked to social comparison than modifying one's own behavior.

Methods

Participants

Three hundred undergraduate students (235 female) ranging in age from 17 to 42 (*M* = 19.61, *SD* = 3.13) received course credit for their participation.

Measures

Self-monitoring was measured using three different measures. The SMS scale consists of 25 true-false items (e.g., "In different situations and with different people, I often act like very different persons"; Snyder, 1974). Scores are summed and individuals scoring 13 and above are considered high self-monitors. Previous work has found this measure to have moderate internal reliability, with Cronbach's alpha ranging from 0.67 to .75 (Ahmed, Garg, & Braimoh, 1986; Briggs et al., 1980). The scale also exhibits good construct validity (for a review see Gangestad & Snyder, 2000), although there is evidence that the measure might be multi-faceted (Ahmed et al., 1986; Briggs & Cheek, 1986).

The revised version of the scale (SMS-R) is comprised of 18 items taken from the original SMS (Snyder & Gangestad, 1986). Items are tallied similarly and the scale uses a threshold score of 11 to differentiate high and low self-monitors. It boasts a moderately high internal reliability, with Cronbach's alpha ranging from 0.60 to 0.70 (John, Cheek & Klohnen, 1996; Snyder & Gangestad, 1986).

The RSMS is composed of 13 items and divided into two subscales (Lennox & Wolfe, 1984): Ability to Modify Self-presentation and Sensitivity to the Expressive Behavior of Others. Items are scored on a 6-point Likert scale ranging from 0 (*certainly, always false*) to 5 (*certainly, always true*). The Self-Presentation subscale consists of 7 items (e.g., "I have trouble changing my behavior to suit different people and different situations.") and the Sensitivity subscale consists of 6 items (e.g., "I am often able to read people's true emotions correctly through their eyes"). Cronbach's alpha in previous studies range from 0.75 to 0.83 (Lennox & Wolfe, 1984; Shuptrine, Bearden, & Teel 1990).

Social comparison tendency was measured using the Iowa-Netherlands Comparison Orientation Measure (INCOM), which consists of 11 items and is divided into two subscales (Gibbons & Buunk, 1999). The Abilities subscale is made up of 6 items (e.g., "I always pay a lot of attention to how I do things compared with how others do things") and the Opinions subscale consists of 5 items (e.g., "I always like to know what others in a similar situation would do"). Items are scored on a 5-point Likert scale ranging from 1 (*I disagree strongly*) to 5 (*I agree strongly*). Internal reliability is good, with Cronbach's

alpha ranging from .78 to .84 in large samples (Gibbons & Buunk, 1995). The measure correlates with related constructs, and individuals scoring higher in comparison orientation tend to engage in more social comparison than individuals lower in comparison orientation (Gibbons & Buunk, 1999).

Procedure

Participants completed an online survey consisting of a demographics questionnaire followed by the SMS, RSMS, and INCOM, presented in a randomized order within the context of other measures not related to this study. Because the SMS-R is a subset of items from the SMS, the scores on the former were derived from the latter.

Results

Table 1 provides an overview of descriptive statistics for the self-monitoring and social comparison scales. The reliability coefficients of the SMS and the SMS-R were lower in this sample compared to previous reports (Briggs et al., 1980; Snyder & Gangestad, 1986).

Table 1
Correlations and Descriptives

	INCOM	Ability	Opinions	RSMS	Self-Presentation	Sensitivity	SMS	SMS-R
Abilities	.92*	-						
Opinions	.74*	.39*	-					
RSMS	.15*	.03	.29*	-				
Self-Presentation	.05	-.03	.16*	.83*	-			
Sensitivity	.20*	.08	.31*	.81*	.36*	-		
SMS	.22*	.23*	.12*	.34*	.41*	.14*	-	
SMS-R	.11*	.09	.10	.40*	.47*	.19*	.92*	-
M	3.51	3.35	3.71	4.31	4.15	4.49	12.64	9.43
SD	.60	.79	.60	.65	.76	.83	3.85	3.34
Cronbach's Alpha	.82	.84	.69	.84	.79	.85	.56	.45

Note. $* p < .05$

T-tests

T-tests were conducted to examine differences in INCOM scores for high and low self-monitoring individuals, as classified by the SMS (cutoff score of 13; High: $N = 156$; Low: $N = 144$) and SMS-R (cutoff score of 11; High: $N = 214$; Low: $N = 86$). The lower cut-off recommended by the SMS-R guidelines predictably resulted in more individuals categorized as high self-monitors. The RSMS does not recommend cut-offs for determining high and low self-monitors and so were not analyzed in this fashion.

Examining the SMS, high self-monitors scored higher on social comparison (total INCOM scores; $M = 3.63$, $SD = .58$) than low self-monitors ($M = 3.39$, $SD = .59$; $t = -3.49$, $ps < .05$ unless otherwise stated; $d = .40$), and the same pattern was observed for both the Abilities (High: $M = 3.49$, $SD = .76$; Low: $M = 3.19$, $SD = .80$; $t = -3.30$; $d = .38$) and Opinions subscale (High: $M = 3.79$, $SD = .59$; Low: $M = 3.63$, $SD = .61$; $t = -2.34$; $d = .27$). These differences are consistent with a positive relation between self-monitoring and social comparison.

Using the items that make up the revised version of this scale (SMS-R) however, the difference between total INCOM scores of high and low self-monitors became smaller

and statistically nonsignificant, High: $M = 3.55$, $SD = .59$; Low: $M = 3.41$, $SD = .62$; $t = -1.93$; $d = .24$. Similarly, for the Opinions subscale of the INCOM, high ($M = 3.72$, $SD = .60$) and low self-monitors ($M = 3.70$, $SD = .62$) appeared to respond roughly the same, $t = -.26$, $p > .05$, $d = .03$. This is in line with our hypothesis that the revision of the SMS would successfully attenuate relations with social comparison. Counter to our hypothesis, however, a difference for high ($M = 3.42$, $SD = .77$) and low self-monitors ($M = 3.17$, $SD = .82$) was observed for the Abilities subscale, $t = -2.44$, $d = .31$.

Correlations and Regressions

Pearson correlations were employed to examine the linear relation between self-monitoring and social comparison scores (see Table 1). The SMS and SMS-R scales were scored on a continuum instead of dichotomously (high versus low) to conduct these analyses. As expected, the SMS positively predicted scores on the INCOM and both of its subscales. The SMS-R also predicted total INCOM scores, but this association was determined to be statistically significantly weaker than that observed for the SMS, using a technique for testing the difference in magnitude for two correlations developed by Steiger (1980), $t(297) = 4.94$. No statistically significant correlations were found between the SMS-R and either the Opinions or the Abilities subscales of the INCOM, although the SMS-R was correlated with Opinions to almost the same degree as the SMS.[1] These analyses are consistent with the results of the *t*-tests: the SMS is positively related to higher social comparison tendencies but this is less true of the revised version (SMS-R).

Correlations revealed that the RSMS scores positively predicted total INCOM scores, as well as the Opinions subscale (but not Abilities; see Table 1). We predicted that the Sensitivity subscale of the RSMS would be most strongly associated with the Opinions subscale of the INCOM, and the data supported this prediction. First, the Sensitivity subscale was more strongly correlated with Opinions scores compared to the Self-Presentation subscale, $t = 2.41$. Second, the Sensitivity subscale was more strongly correlated with the Opinions subscale than with the Abilities subscale, $t = 3.77$.

In order to examine whether the subscales of the INCOM were uniquely related to self-monitoring, hierarchical linear regressions were conducted. Gender and age were entered in the first block as controls, followed by the Abilities and Opinions subscales of the INCOM, predicting each of the self-monitoring scales in separate analyses (see Table 2). Contrary to our hypothesis, the Abilities subscale was a unique predictor of SMS scores, but the Opinions subscale was not. However, consistent with our hypothesis, neither INCOM subscale was a unique predictor of SMS-R scores. Overall, these findings indicate that the subset of questions from the SMS that represent the SMS-R do not include social comparison tendencies as a component of self-monitoring behavior.

With respect to the RSMS, the relation between the INCOM subscales (Abilities and Opinions) and both RSMS subscales (Sensitivity and Self-Presentation) was explored using regression in a parallel procedure to that followed above (see Table 2). While controlling for gender and age, both Sensitivity and Self-Presentation were predicted by the Opinions subscale, but not by Abilities. This is consistent with our hypotheses, in that the RSMS was found to be related to social comparison, and more to the Opinions subscale than Abilities. Also in line with our prediction, this relationship was stronger for Sensitivity compared to Self-Presentation.[2]

Table 2
Regressions Showing Prediction of Self-monitoring Scales by
INCOM Subscales, Controlling for Gender and Age

SMS	Variable	B	SE	β	t
Model 1	Variable	B	SE	β	t
$R^2 = .03$	Age	-.21	.07	-.17	-.94*
$F (2, 296) = 5.07*$	Gender	-.66	.54	-.07	-.23
Model 2					
$R^2 = .09$	Age	-.20	.07	-.16	-2.85*
$F (4, 294) = 7.19*$	Gender	-.91	.53	-.10	-1.72
	Abilities	1.06	.29	.22	3.60*
	Opinions	.28	.39	.04	.73
SMS-R					
Model 1	Variable	B	SE	β	t
$R^2 = .02$	Age	-.14	.03	-.13	-2.23*
$F (2, 296) = 3.29*$	Gender	-.59	.47	-.07	-1.27
Model 2					
$R^2 = .04$	Age	-.13	.06	-.12	-2.16*
$F (4, 294) = 2.81*$	Gender	-.73	.47	-.09	-1.55
	Abilities	.27	.26	.06	1.03
	Opinions	.47	.34	.09	1.35
RSMS—Sensitivity					
Model 1	Variable	B	SE	β	t
$R^2 = .00$	Age	-.01	.02	-.04	-.62
$F (2, 296) = .26$	Gender	-.04	.12	-.02	.36
Model 2					
$R^2 = .11$	Age	-.01	.02	-.03	.51
$F (4, 294) = 9.11*$	Gender	-.12	.11	-.06	-1.06
	Abilities	-.06	.06	-.06	-.99
	Opinions	.48	.08	.35	5.84*
RSMS—Self-Presentation					
Model 1	Variable	B	SE	β	t
$R^2 = .02$	Age	-.03	.01	-.12	-2.15*
$F (2, 296) = 3.63*$	Gender	-.17	.11	-.09	-1.63
Model 2					
$R^2 = .07$	Age	-.03	.01	-.12	-2.15*
$F (4, 294) = 5.12*$	Gender	-.20	.11	-.11	-1.94
	Abilities	-.11	.06	-.11	-1.83
	Opinions	.28	.08	.22	3.56*

*Note. * $p < .05$

Discussion

The goals of this study were two-fold. First, we sought to examine the relationship between trait self-monitoring and the two aspects of a social comparison tendency. Second, we wanted to investigate how the choice of self-monitoring scale might impact conclusions about that relationship. Although the SMS, SMS-R and RSMS are all in wide use, they lead to quite different conclusions based on the theoretical background informing their development. The SMS and RSMS conceptualized self-monitoring as including a tendency to self-compare (SMS) or a sensitivity to the expressions of others (RSMS), both concepts related to social comparison. In line with these ideas, the SMS and RSMS are related to the major trait measure of social comparison tendency. In

contrast, the SMS-R was designed to exclude social comparison content, and it does so successfully based on the results of our study.

Our study goes beyond these broad associations, however, confirming our hypothesis that self-monitoring is most closely related to a tendency to compare with others' opinions, as opposed to their abilities. This was most evident when employing the RSMS, and less clear with the older SMS measure. This indicates that although both the SMS and RSMS are related to social comparison behavior, they are related to different aspects of this phenomenon.

With regard to the RSMS, we hypothesized that the Sensitivity subscale would be most related to the Opinions subscale of the INCOM. The data confirmed this hypothesis and furthermore, both of the RSMS subscales were uniquely predicted by the Opinions, but not Abilities, subscale. This association was also stronger for the Sensitivity subscale compared to Self-Presentation, as predicted.

There are some important limitations of this study. For one, the participant sample was not balanced with respect to gender. Our regression analyses, however, rule out a role for gender in these results. As well, the SMS and SMS-R had lower reliabilities compared to previous reports. It is unclear why this was the case. Lower reliability for the SMS and SMS-R means any association with these scales and another measure will be weakened and possibly underestimated. However, the pattern of results we observed could not be explained by these differences in reliability as evidenced by disattenuated correlations.[1]

This study presents a reminder to researchers that great care must be taken when selecting psychological measures. Our results demonstrate that the relationship observed between self-monitoring and social comparison depends greatly on what measure is selected. Although the SMS, SMS-R and the RSMS are all currently popular measures of self-monitoring behavior, they have clear differences in content that reflect their diverging theoretical roots. Despite the fact that these scales all claim to measure self-monitoring, they should not be viewed as interchangeable. With multiple scales claiming the same goals and often bearing very similar names, it is important that researchers select scales that match their own theoretical conceptions of a construct, rather than simply choosing based on popularity or ease of use. To choose unthinkingly could have dramatic consequence for one's findings. Because of this, it is difficult to make a recommendation as to which self-monitoring scale researchers should use, since this depends on one's conception of self-monitoring. Those who believe that a sensitivity to others is an important aspect of self-monitoring should consider the RSMS or perhaps the SMS. For those who believe that no aspect of considering social others should be included in the self-monitoring construct, the SMS-R would be most appropriate. The SMS and SMS-R rely on true/false responses for each item, along with a recommended cut-off for categorizing respondents as high or low in self-monitoring. Although this approach provides a simplicity that may be suited to some special populations, current statistical approaches favor regression-based approaches over splitting the data, in order to capitalize on all of the variance provided by the scores. The RSMS and its continuous scoring format based on Likert-style responses better suits this preferred analytical approach. The cut-offs recommended by the SMS and SMS-R might be useful, however, when distinguishing high from low self-monitors is important. When using these two

measures, however, it is important to keep in mind that the SMS-R employs a lower cut-off than the SMS. Although this lower cut-off was likely intended to correct for the fewer number of items in the SMS-R, it still results in categorizing far more individuals as high self-monitors than the SMS. In sum, each of the scales has its strengths and reflects a certain theoretical conception, so consideration should be given to each of these factors in the context of one's own study before choosing a measure of self-monitoring.

Footnotes

1. These differences cannot be attributed to differences in internal reliability as disattenuated correlations demonstrate the same pattern of relations, SMS-INCOM: $r = .32$; SMS-R-INCOM: $r = .18$; SMS-Ability: $r = .34$; SMS-R-Ability: $r = .15$; SMS-Opinion: $r = .19$; SMS-R-Opinion: $r = .18$.

2. Repeating the regressions without controlling for gender and age replicates the pattern of results. That is, Abilities but not Opinions predicts the SMS, neither uniquely predicts the SMS-R, Opinions but not Abilities predicts RSMS-Sensitivity, and Opinions but not Abilities predicts RSMS-Self-Presentation (although Opinions nears significance as a negative predictor with $p = .08$).

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