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Validating a New Measure of Self-Complexity

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Abstract

The construct of self-complexity has been recognized as important for understanding psychological adjustment. However, research in this area has been impeded by measurement problems. In particular, the most commonly used measure, Linville's *H* statistic, cannot assess this construct appropriately. This paper presents a new measure designed to tap two components of self-complexity separately: the number of self-aspects and the average distinction among them. A validation study with 131 Chinese college students was conducted. The results indicate that (1) this new measure is not confounded with conscious social desirability bias, (2) it has incremental validity beyond existing measures, and (3) the two components as assessed by this new measure are relatively independent and have different psychological functions. The implications of these findings for future studies of self-complexity and clinical practice are discussed.

Key words: number of self-aspects, average distinction, self-complexity

In recent years the construct of self-complexity has been recognized as salient to the processes of psychological adjustment. According to Linville (1985, 1987), knowledge about the self is represented in terms of multiple cognitive structures or categories, called self-aspects. "Greater self-complexity involves representing the self in terms of a greater number of cognitive self-aspects and maintaining greater distinctions among self-aspects" (Linville, 1987, p. 663). Linville also assumed that with a large number of distinct self-aspects, the thoughts and feelings evoked by a life event about a relevant self-aspect are less likely to "spill over" and color thoughts and feelings about other aspects and thus the whole self (Linville, 1987). Therefore, high self-complexity is presumed to be a cognitive buffer against stress-related physical and mental health problems (Linville, 1985, 1987). The construct of self-complexity has been employed to address diverse topics in social and clinical psychology, such as self-evaluation (Linville, 1985; Woolfolk, Novalany, Gara, Allen, & Polino, 1995), depression (Gara et al., 1993; Linville, 1987), trauma (Morgan & Janoff-Bulman, 1994), domestic violence (Steinberg, Pineles, Gardner, & Mineka, 2003) and narcissism (Rhodewalt, Madrian, & Cheney, 1998; Rhodewalt & Morf, 1995).

Linville (1985, 1987) used a trait-sorting task to measure self-complexity. In this task, participants are supplied with 33 cards with a trait on each card, such as "individualistic", "organized", etc., and their task is to sort these cards into groups, each group representing one aspect of the self. The number of self-aspect groups and the traits in each group are decided by participants. If necessary, participants can use any trait repeatedly to describe more than one self-aspect. The obtained aspects * traits matrix for each participant is summarized by the statistic, *H* (see Appendix A). According to Linville (1982, 1987), the single *H* statistic is a combined measure of two components of self-complexity: the greater the number of self-aspect groups and the less redundancy (or overlap) of the traits describing these groups, the greater is the *H* score. However, although *H* was found to be highly dependent on the number of self-aspects (e.g., Linville, 1987, $r = .72$; Rafaeli-Mor, Gotlib, & Revelle, 1999, $r = .71$), a few studies reported that the relationship between *H* and overlap was not linear but curvilinear in an inverted U shape (Locke, 2003; Luo & Watkins, 2008; Luo, Watkins, & Lam, in press). In effect, *H* is a direct measure of the independency among traits in terms of which aspect or aspects a trait uniquely describes, rather than the redundancy among self-aspects (Luo et al., in press). For example, if there are 4 traits and they uniquely describe different aspects, *H* will arrive at its maximum of 2, such as in the following two cases: (1) there are 4 self-aspect groups with each trait describing 1 group; and (2) there are 2 self-aspect groups with 1 trait uniquely describing each group, 1 common trait describing both groups, and 1 unendorsed trait. Recognizing the deficiency of the *H* statistic, we developed a new measure to assess self-complexity.

A New Measure of Self-Complexity

As suggested by some researchers (e.g., Lutz & Ross, 2003; Rafaeli-Mor et al., 1999; Rafaeli-Mor & Steinberg, 2002), we developed a new measure to assess the number and the distinction components of self-complexity separately. This new measure involves a trait-sorting subtask and a distinction rating subtask.

The number of self-aspects. Similar to Linville (1987), a trait-sorting subtask was developed to generate personal self-aspects. The trait list in this subtask, however, was established by asking Chinese college students (94 females and 85 males from two universities in China) to provide personality adjectives to describe themselves. The valence of the 197 traits each generated by at least 3 participants was rated by another sample of Chinese college students (40 males and 32 females). Also, the 197 traits were sorted into five lists by referring to

Goldberg's (1992) Big Five factor marker lists and the explanations of the Big Five personality factors by Costa and McCrae (1992). From the 197 traits, we then selected the 44 most frequently used traits to form the trait list (see Appendix B for the English version). Compared to Linville’s (1987) trait list with a 2:1 ratio of positives to negatives, the 44 traits used in our trait-sorting subtask involve an equal number of positives (22) and negatives (22) (see Koch & Shepperd, 2004 and Showers, 1992 for the importance of the valence of the trait list). The number of positive or negative traits descriptive of each personality factor was basically in proportion to the total number of positive or negative traits in each factor list. The instructions of the trait-sorting subtask were similar to those used by Linville (1987). We made one modification to avoid the potential constricting effect of the trait list on generating personal self-aspects. In our new measure, participants are instructed to think about the important aspects in their life, such as important roles, activities, situations and so on, before they check the trait list and do the groupings. If they can think of more self-aspects in the middle of grouping, they can sort the traits into more groups. The trait-sorting subtask has been employed and reported in Luo and Watkins (2008), which used data from a different sample to clarify the measurement of self-complexity.

Average distinction. Based on a social cognitive view of the self, the distinction component “focuses on the cognitive relationship among different aspects of the self” (Linville, 1985, p. 98). Cognitively keeping high distinction among a large number of self-aspects means that “an event that causes a change in feelings about one aspect of the self is less likely to ‘spill over’ and change feelings about other aspects of the self” (Linville, 1982, p. 96). This cognitive relatedness among self-aspects may not be equivalent to their trait profiles or overlap (Koch & Shepperd, 2004). For example, a woman who can cognitively differentiate her roles as a wife and as a friend, and will not generalize the happenings in one role to the other, does not necessarily possess different personality attributes in these two roles. To measure self-complexity, Evans (1994) used a self-report measure, the Self-Complexity Inventory, to tap directly the cognitive relatedness among different self-aspects. Respondents are given some aspects (e.g., Close Friendships, Romantic Relations, Scholastic Ability, etc.) and asked to rate how badly they feel about each self-aspect when they imagine a negative scenario about one aspect. For example, respondents are instructed: “Imagine that you have just failed a test that you have studied hard for. How would you feel about yourself in the following areas?” Compared with the overlap of traits among self-aspects, this Inventory operationalizes self-complexity by directly referring to its spillover mechanism. In our new measure, we adopted this self-report method to tap the distinction component of self-complexity.

Compared with Evans’ (1994) Self-Complexity Inventory, our distinction rating subtask has two modifications. First, because individuals may have different personal important self-aspects, especially those from different cultures (Watkins & Regmi, 1999), the self-aspects rated in the distinction subtask are not preset; they are generated by participants themselves in the trait-sorting subtask. Second, rather than imagine a negative scenario for each self-aspect, participants are instructed to think about some positive or negative happenings that affect their feelings about each self-aspect and rate the general change of their feelings about each other self-aspect. “If your self-evaluation on the following aspect has changed because of some positive or negative happenings, will your self-evaluation on each of the other aspects be changed? And by how much will they be changed?” The ratings are based on a 5-point scale, ranging from 1 = no change at all to 5 = as much change as the referent aspect. It should be noted that unlike Evans’ (1994) Self-Complexity Inventory, the change in the referent aspect is not rated, and thus our distinction rating subtask only measures the degree of spillover in self-structure activated by stressful life events, rather than the impact of stressful life events on the whole self-structure.

Since the self-aspects used in the distinction-rating subtask are read from the trait-sorting subtask, we designed a computer program named “Self-Complexity Task” to administer these two subtasks in Chinese. Using this new measure, two indicators will be obtained to index Linville’s two components of self-complexity separately: the number of self-aspect groups (NASPECTS) and the average distinction among self-aspects (DIST, see Appendix A).

A Validation Study

This validation study had three specific purposes. First, it examined the relations between the two components of self-complexity as assessed by this new measure. It is reasonable to argue that no matter how many self-aspects are represented in one’s self-structure, the average distinction among these self-aspects can be either high or low. Thus, we predicted that the number of self-aspects and average distinction would be uncorrelated or modestly correlated.

Second, this study examined the relationships of the two components of self-complexity to Linville’s *H* statistic and the overlap of traits among self-aspects obtained in the trait-sorting subtask. Based on the findings in previous studies (e.g., Locke, 2003; Luo & Watkins, 2008; Luo et al., in press; Rafaeli-Mor et al., 1999), we predicted that *H* would be highly correlated with the number of self-aspects but its relationship to overlap would be non-monotonic. Since overlap describes the trait profiles among self-aspects and Linville’s *H* statistic is highly dependent on the number of self-aspects and indirectly affected by overlap, we predicted that average distinction would be uncorrelated or only modestly correlated with overlap and *H*.

Third, this study investigated the relationships of the two components of self-complexity to five external constructs: self-concept clarity, self-monitoring, self-esteem, attributional complexity, and social desirability. In addition to providing some convergent and discriminant validity data for this new measure, we expected that this new measure should have incremental validity beyond overlap and *H*. Moreover, studying the two indicators separately would help improve our understanding of self-complexity. For example, we were particularly interested to know whether the two components have different adaptational functions.

Method

Participants

One hundred and thirty one freshmen in their second term from a university in China participated in this study. They were aged between 18 and 22 years with an average of 19.59 and a standard deviation of .69; 37% were males and 63% females.

Measures

The computerized Self-Complexity Task was used to measure the two components of self-complexity. The correlation of NASPECTS based on the odd and even splits of the trait list was .97, suggesting that NASPECTS is unaffected by the order of the traits in the trait list. In our recent longitudinal research, we found that the two components showed reasonable test-retest reliability over two weeks: *rs* =.78 and .69 on NASPECTS and DIST, respectively. In addition, by using the trait-sorting data obtained in the present study, we calculated *H* and Rafaeli-Mor et al.’ (1999) overlap (see Appendix A). In addition to the Self-Complexity Task, participants were also invited to do the following set of scales.

Self-concept clarity. Self-concept clarity is another self-structural variable, referring to “the extent to which the contents of an individual’s self-concept are clearly and confidently defined, internally consistent, and temporally stable” (Campbell et al., 1996, p. 141). People having a large number of independent self-aspects are expected to be less vulnerable to the ups and downs in any aspect and thus they may have more internally consistent and temporally stable self-opinions. In the present study, we hypothesized that self-complexity would be positively correlated with self-concept clarity. The 20-item Chinese Self-Concept Clarity Scale (Wu, 2004) was responded to on a 6-point scale from 1 = definitely false to 6 = definitely true, and the internal consistency reliability (alpha = .91) was satisfactory.

Self-monitoring. High self-monitors are expected to be particularly skillful in interpersonal give-and-take and very effective in social interaction (Lennox & Wolfe, 1984). Since higher differentiation in self-structure may allow individuals to discriminate more efficiently among varied demands of different roles and interpersonal situations and thus respond more quickly and appropriately (Linville, 1985), in the present study, we hypothesized that high self-complexity would be associated with high self-monitoring. A Chinese version of the Revised Self-Monitoring Scale (Lennox & Wolfe, 1984) was obtained by translation and back-translation. Using a 6-point scale from 1 = always false to 6 = always true, this inventory was administered to measure two aspects of self-monitoring: ability to modify one’s self-presentation (7 items, alpha = .70) and sensitivity to the expressive behavior of others (6 items, alpha = .81).

Self-esteem. Of the two components of self-complexity assessed by our new measure, average distinction signifies the average degree of spillover among self-aspects activated by stressful life events. During a relatively long period of time, we expect people can benefit from high average distinction despite the number of self-aspects. Accordingly, we hypothesized that average distinction would be related to global self-esteem. Since inconclusive results have been reported between adaptation and the *H* statistic, which is highly dependent on the number of self-aspects, we did not make any specific hypothesis about the relationship between self-esteem and the number component. The Chinese version (Robinson, Shaver, & Wrightsman, 1997) of the Rosenberg Self-Esteem Scale (SES, Rosenberg, 1965) was used to measure global self-esteem on a 6-point scale from 1 = definitely false to 6 = definitely true (10 items, alpha = .87).

Attributional complexity. According to Fletcher, Danilovics, Fernandez, Peterson, and Reeder (1986), people high in attributional complexity have high levels of intrinsic motivation to explain human behavior and prefer complex rather than simple explanations for a given behavior. Since both self-complexity and attributional complexity can be taken as an extension of cognitive complexity, the former to the domain of the self and the latter to attributional schemata, we predicted that self-complexity would be correlated positively with attributional complexity. Fourteen items selected from the original 28-item Attributional Complexity Scale (Fletcher et al., 1986) were translated into Chinese by translation and back-translation and employed to measure this construct on a 6-point scale from 1 = definitely false to 6 = definitely true (alpha = .80).

Social desirability. Paulhus (1984) identified two factors underlying socially desirable responding, which he labeled as self-deception and impression management. Self-deception defends against thoughts and feelings representing fundamental threats to the psyche, whereas impression management is characterized by socially desirable behaviors of an overt nature. In this study, we expected that the self-report measure of average distinction would be positively correlated with self-deception but would not be significantly correlated with impression management. With four irrelevant items excluded (Items 8, 13, 30, 33 about voting, customs, or driving), the Chinese version (Wang, Wang, & Ma, 1999) of the Balanced Inventory of Desirable

Responding (Paulhus, 1988) was used to measure self-deception (18 items, alpha = .76) and impression management (18 items, alpha = .74) on a 6-point scale from 1 = definitely false to 6 = definitely true.

Results

The number of self-aspects (NASPECTS) ranged from 2 to 12, with an average of 6.54 (*SD* = 2.29); average distinction (DIST) ranged from 2.00 to 5.00, with an average of 3.55 (*SD* = .62); Linville's *H* statistic ranged from .68 to 5.20, with an average of 2.83 (*SD* = .90); and overlap (OL) ranged from .00 to .51, with an average of .16 (*SD* = .12).

We expected that the two components of self-complexity as assessed by this new measure would be relatively independent of each other. As shown in Table 1, NASPECTS and DIST were only modestly correlated with each other. Consistent with our hypothesis, *H* was highly correlated with NASPECTS, while its relationship to OL was not linear. In general *H* was positively correlated with OL, but curve estimation revealed that compared with a linear model ($H = .38 * OL$, $R^2 = .15$) a quadratic model ($H = 1.04 * OL - .70 * OL^2$, $R^2 = .20$, $p (\Delta R^2) < .01$) fitted the data significantly better. Also as expected, DIST was not significantly correlated with either *H* or OL.

As shown in Table 1, the relationships of self-complexity to external variables were generally consistent with our hypotheses, but the two components were significantly correlated with different variables. NASPECTS was significantly correlated with attributional complexity and sensitivity to the expressive behavior of others, while DIST was significantly correlated with self-concept clarity, ability to modify one's self-presentation, self-esteem and self-deception. Both *H* and OL were significantly correlated with attributional complexity, and *H* was also slightly correlated with sensitivity to the expressive behavior of others. In addition, while only self-concept clarity was modestly correlated with impression management, all self-report measures in this study were significantly correlated with self-deception.

In order to summarize the data in a more reductive way, all the seven external variables were factor analyzed by using Principal Axis Factoring followed by Varimax rotation. Based on eigenvalues over 1, two factors were extracted. It was found that impression management had low loadings on both factors (λs = .25 and -.11). This is reasonable because all the substantive measures were developed to avoid being confounded with impression management. Therefore, impression management was excluded and all the other six external variables were subjected to factor analysis again by using the same extraction and rotation methods. Two factors with eigenvalues over 1 were extracted and they explained 54.65% of the total variance in the six variables. Self-concept clarity (λ = .88), self-deception (λ = .79), self-esteem (λ = .63), and ability to modify one's self-presentation (λ = .50) loaded on the first factor, while sensitivity to the expressive behavior of others (λ = .73) and attributional complexity (λ = .60) loaded on the second factor. By calculating the correlations of the four self-complexity measures with the two factors, we found that only DIST was significantly correlated with Factor 1 ($r = .38$, $p < .001$), while NAPSECTS ($r = .27$, $p < .01$), OL ($r = .20$, $p < .05$) and H ($r = .29$, $p < .001$) were all significantly correlated with Factor 2.

In order to show clearly the incremental validity of this new measure beyond H and OL, we conducted two hierarchical regression analyses for each of the two criterion factors. First, we put H and OL in the first block, and NASPECTS and DIST in the second block. Then, for comparison the order of the variables was switched with NASPECTS and DIST in the first block and H and OL in the second block. In the first block, variables were entered by using the enter method, and in the second block variables were entered stepwise to avoid collinearity problems due to the high correlation between *H* and NASPECTS. The results are shown in Table 2. With Factor 1 as a criterion variable, when OL and *H* were put into the first block, DIST accounted for an additional 13% of the variance beyond them; however, when NASPECTS and DIST were put into the first block, *H* and OL did not significantly improve the prediction of Factor 1. With Factor 2 as a criterion variable, neither OL and *H* nor NASPECTS and DIST added significantly in the prediction beyond the other two measures.

Discussion

This paper presents a new measure of self-complexity developed in a Chinese context, which assesses the number and the distinction components of self-complexity (Linville, 1985, 1987) separately. The results of the validation study provided support for the validity of this new measure and improved our understanding of this construct.

First, neither of the two components as assessed by this new measure was confounded with impression management, which is a kind of conscious dissimulation and should be controlled in all self-report measures (Paulhus, 1984). In particular, the non-significant correlation between average distinction and impression management may be due to the improvement of our measure relative to Evans' (1994) Self-Complexity Inventory. In our distinction-rating subtask, participants were asked to think about either positive or negative happenings (rather than a negative scenario) in each self-aspect and rate the general change in each other self-aspect (rather than the change in the negative direction in all self-aspects).

Second, the two components as assessed by this new measure showed incremental validity beyond overlap and *H*. As in previous studies, *H* was highly correlated with the number of self-aspects. However, contrary to Linville's prediction *H* showed a curvilinear relationship and an overall positive correlation with overlap. The number of self-aspects, overlap and *H* were all significantly correlated with the factor underlying attributional complexity and sensitivity to the expressive behavior of others. Although the number of self-aspects and average distinction did not significantly improve the prediction of this factor beyond overlap and *H*, the latter two measures did not add incrementally in the prediction of this factor beyond our new measure either. In contrast, average distinction provided significant additional prediction of the factor underlying self-deception, self-concept clarity, self-esteem and ability to modify self-presentation beyond overlap and *H*, while the latter two measures did not show unique contribution to this factor beyond this new measure.

Third, the two components of self-complexity were relatively independent and had different correlational patterns with external variables. The number of self-aspects was related to attributional complexity and sensitivity to the expressive behavior of others, while average distinction was associated with self-deception, self-concept clarity, self-esteem and ability to modify self-presentation. Comparison between the two components of self-complexity measured here reveals that they may be conceptually different. As a function in part of the number of actual roles in life, a large number of aspects in self-structure may lead people to make more complex and abstract explanations for human behavior. In addition, people with many self-aspects are likely to keep a large proportion of the whole self from being affected by the spillover process activated by life events (Linville, 1987). However, in the long run, people who are involved in more domains may need to employ more internal resources to deal with various demands from different life domains. Therefore, the number of self-aspects may indicate a balance between situational demands and personal resources and thus may not directly relate to psychological well-being. In contrast, regardless of the number of self-aspects, high average cognitive distinction among them can constrain the spillover of negative thoughts and feelings in self-structure evoked by life events regarding any self-aspect. Thus, in the long run, high average distinction is beneficial to adaptation, represented in this study by unconscious self-deception, self-concept clarity, self-esteem and flexibility to modify self-presentation in social situations. In particular, the relationship between average distinction and self-esteem was consistent with the correlation (r = .30) between the scores on the Self-Complexity Inventory and global self-worth in Evans (1994).

Since the two components of self-complexity are relatively independent and have different adaptational functions, it may be better to measure and examine them separately in future studies. Although the Self-Complexity Task was developed in the Chinese culture, the idiographic method used to develop this new measure would seem to be suitable for future research in this area whatever the cultural backgrounds of respondents.

The present research has important clinical implications. According to Linville (1985), the automatic spreading of negative thoughts about one self-aspect to associated self-aspects in self-structure may lead to the cycle of negative thoughts characteristic of depression. With self-complexity as a cognitive marker, especially its distinction component, the new measure developed in the present study might be a potentially useful diagnostic tool for identifying individuals who are more vulnerable to stress. For example, our recent research found a negative correlation between average distinction and depression (r = -.17) and that people with high average distinction tended to see stressful situations more positively (r = .32). We propose that due to the automatic spillover process in self-structure, low cognitive distinction among self-aspects may lead to overestimation of the significance of a stressful situation and thus negative appraisal of the stressful situation and negative affect. Under chronically stressful conditions, without the protection of enough positive affect, intense and prolonged negative affect may finally overwhelm the regulatory function of emotion and result in clinical depression (e.g., Folkman & Moskowitz, 2000; Gross & Munoz, 1995). In cognitive behavioral therapy, enhancing self-complexity could be a way to help people learn to appraise stressors positively and generate positive affect in stressful situations. In particular, for those who are diagnosed to be low in cognitive distinction among self-aspects, clinical practitioners can encourage and teach them to see different aspects in their life more separately, and thus they are unlikely to over-generalize the negative happenings in one aspect to the whole self.

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Appendix A

$$H = \log_2 n - (\sum n_i \log_2 n_i)/n .$$

Here, n is the total number of traits supplied (33 in Linville's case), n_i is the number of traits in the i_{th} group combination, i = 1, …, 2^k, with k as the number of self-aspect groups, and $n = \sum n_i$. When there are k groups formed, theoretically there will be 2^k group combinations. For example, when there are 2 self-aspect groups, g1 and g2, there will be four potential group combinations: gc1 (with traits describing g1 only), gc2 (with traits describing g2 only), gc12 (with traits describing both g1 and g2) and gcn (with traits not endorsed).

$$DIST = \sum_{i}^{k} \sum_{j}^{k} X_{ij} / k(k-1) .$$

Here, k is the number of self-aspect groups, X_{ij} is 6 (for a 5-point scale) minus the change score in the j_{th} self-aspect when the i_{th} referent aspect is changed, and i is not equal to j (i, j = 1, ..., k).

$$OL = (\sum_i (\sum_j C_{ij})/T_i)/k*(k-1) .$$

Here, C_{ij} is the number of common traits in the i_{th} and j_{th} aspect, T_i is the total number of traits in the i_{th} referent aspect, i is not equal to j (i, j = 1, …, k), and k is the number of self-aspect groups in a person's sort.

Appendix B

The 44 traits used in the trait-sorting subtask

1	calm	+	23	careless	-
2	sensitive	+	24	lazy	-
3	introverted	-	25	inconsistent	-
4	quiet	+	26	easy-going	+
5	childish	-	27	generous	+
6	optimistic	+	28	hesitating	-
7	timid	-	29	confused	-
8	depressed	-	30	honest	+
9	cheerful	+	31	stubborn	-
10	stable	+	32	clever	+
11	confident	+	33	kind	+
12	taciturn	-	34	self-indulgent	-
13	pessimistic	-	35	serious	+
14	active	+	36	thoughtful	+
15	playful	-	37	aloof	-
16	curious	+	38	hardworking	+
17	harebrained	-	39	cold	-
18	impulsive	-	40	irritable	-
19	responsible	+	41	helpful	+
20	self-deprecating	-	42	persistent	+
21	passionate	+	43	righteous	+
22	impatient	-	44	peacockish	-

Note. + represents a positive word; - represents a negative word.

Table 1

Correlations among Self-Complexity Measures and External Variables

	H	OL	DIST	SCC	SMM	SMS	SE	ATRCMP	SD	IM
NASPECTS	.85***	.21*	.18*	-.03	.07	.20*	.06	.29***	.06	.06
H		.38***	.08	-.12	.05	.18*	.015	.32***	-.07	.02
OL			.11	.14	.12	.17	.12	.22*	.07	.19*
DIST				.36***	.27**	.10	.21*	-.07	.30***	.05
SCC					.44***	.18*	.57***	.14	.71***	.23**
SMM						.38***	.47***	.29***	.48***	-.04
SMS							.33***	.46***	.31***	-.02
SE								.28**	.54***	.03
ATRCMP									.17*	-.03
SD										.20*

Note. NASPECTS = number of self-aspect groups; *H* = Linville's *H* statistic; OL = Rafaeli-Mor et al.'s (1999) overlap measure; DIST = average distinction among self-aspects; SCC = self-concept clarity; SMM = Self-monitoring factor: ability to modify one's self-presentation; SMS = Self-monitoring factor: sensitivity to the expressive behavior of others; SE = self-esteem; ATRCMP = attributional complexity; SD = self-deception; IM = impression management.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2

The Results of Hierarchical Regression Analyses

Criterion variable		Predictor variables	Predictors in equation	Standardized β	Significance of β	Adjusted R^2
Factor 1						
	Block 1	OL	OL	.15	.10	.03
		H	*H*	-.21	.02	
	Block 2	NASPECTS	DIST	.38	.00	.13
		DIST				
	Block 1	NASPECTS	NASPECTS	-.09	.30	
		DIST	DIST	.39	.00	.14
	Block 2	OL				
		H				
Factor 2						
	Block 1	OL	OL	.10	.26	
		H	*H*	.25	.01	.08
	Block 2	NASPECTS				
		DIST				
	Block 1	NASPECTS	NASPECTS	.27	.00	
		DIST	DIST	-.03	.72	.06
	Block 2	OL				
		H				

Note. NASPECTS = number of self-aspect groups; *H* = Linville's *H* statistic; OL = Rafaeli-Mor et al.'s (1999) overlap measure; DIST = average distinction among self-aspects. Factor 1was loaded by self-concept clarity, self-deception, self-esteem and ability to modify one's self-presentation; Factor 2 was loaded by sensitivity to the expressive behavior of others and attributional complexity. The adjusted R^2 for Block 2 variables is the additional variance explained over Block 1 variables.