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## Brief report: Construct validity of two identity status measures: the EIPQ and the EOM-EIS-II

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### Abstract

The present study was designed to examine construct validity of two identity status measures, the Ego Identity Process Questionnaire (EIPQ; *J. Adolescence* 18 (1995) 179) and the Extended Objective Measure of Ego Identity Status II (EOM-EIS-II; *J. Adolescent Res.* 1 (1986) 183). Construct validity was operationalized in terms of how identity status classifications generated by the EIPQ and EOM-EIS related to a measure of psychological agency, the Multi-Measure Agentic Personality Scale (MAPS; *J. Adolescence* 20 (1997) 421). Results indicated that, for the most part, the agentic personality scales differentiated the EIPQ diffused and moratorium statuses from the foreclosed and achieved statuses, whereas the agentic personality scales differentiated the EOM-EIS-II achieved status from the other three statuses. The EIPQ is recommended as the preferred instrument for making contrasts between or among identity statuses, whereas the EOM-EIS-II is recommended when the objective is to consider continuous measures of the identity statuses.

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Measurement in identity status-related research has lagged significantly behind the theoretical progress of the field (Schwartz, 2001). Most identity status<sup>1</sup> measures have taken the form of either structured interviews (e.g., Grotevant & Cooper, 1981; Marcia & Archer, 1993) or objective paper–pencil questionnaires (e.g., Balistreri, Busch-Rossnagel, & Geisinger, 1995; Bennion & Adams, 1986). Structured interviews are generally used to gather extensive qualitative or narrative data on a small number of participants, whereas objective questionnaires are generally used to gather quantitative data on larger samples.

Although both types of measures have been used in research linking the identity statuses to other psychosocial variables, most recent research has used objective measures (e.g., Bartle-Haring, Bruker, & Hock, 2002; Hunsberger, Pratt, & Pancer, 2001). However, despite the ease

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<sup>1</sup>For extensive reviews of identity status theory and research, see Berzonsky and Adams (1999) and Waterman (1999).

with which objective measures can be used, research investigating convergent validity among objective identity status measures has yielded more evidence for incompatibility than for compatibility among these measures (Goossens, 2001; Schwartz, 2002a). This is particularly true of categorical identity status assignments.

Using a large sample ( $N = 758$ ), Schwartz (2002a) examined convergent validity in identity status assignments between two commonly used identity status measures, the Ego Identity Process Questionnaire (EIPQ; Balistreri et al., 1995) and the Extended Objective Measure of Ego Identity Status-II (EOM-EIS-II; Bennion & Adams, 1986). Schwartz found that, across identity domains, the two measures yielded incompatible status assignments in the majority of cases. Further, individuals assigned to diffusion or foreclosure on either measure were least likely to be classified into the same status on both measures.

Despite the low levels convergent validity observed among objective identity status measures, it is possible that the various measures of identity status still possess adequate construct validity, that is, that they relate to comparison variables in similar ways. Adequate construct validity might temper the concerns associated with low convergent validity, whereas low levels of construct validity (in addition to low convergent validity) may necessitate that the results of correlational studies using objective identity measures be interpreted in light of the specific identity measure used. The present study extends Schwartz (2002a) by ascertaining the extent to which the EIPQ and EOM-EIS-II relate similarly to a comparison measure, the Multi-Measure Agentic Personality Scale (MAPS; Côté, 1997). The MAPS has been shown to be related to EOM-EIS-II status assignments in previous research (Côté & Schwartz, 2002), but its relationship to EIPQ status assignments has not been investigated.

## Method

### *Participants*

The present study uses the same data set reported in Schwartz (2002a). Participants in this study were 758 undergraduate students (174 males, 560 females, and 24 not reporting gender) from a large public university in the southeastern United States. In terms of ethnicity, 129 participants self-reported as non-Hispanic White, 74 as non-Hispanic Black, 467 as Hispanic, and 30 as other. The mean age of the sample was 21.3 years ( $s.d. = 5.2$ ), with 95% of the sample between the ages of 18 and 27. Participants were recruited from psychology classes and received course credit in exchange for their participation.

### *Measures*

#### *Identity Measures<sup>2</sup>*

Two identity measures were used in this study, the EIPQ and the EOM-EIS-II. The EIPQ contains 32 items. It assesses exploration and commitment in four ideological domains (politics,

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<sup>2</sup> Additional detail and psychometric information on these measures, as administered to this sample, is contained in Schwartz (2002a).

religion, occupation, values) and four interpersonal domains (friendships, dating, gender roles, family). The EIPQ assigns identity statuses to participants by way of median splits on the exploration and commitment scores. Status assignments are then made using Marcia's (1966) definitions of the statuses.

The second identity measure used in this study, the EOM-EIS-II, contains 64 items. It contains items targeting each of the four identity statuses in four ideological domains (politics, religion, occupation, lifestyle) and four interpersonal domains (friendships, dating, gender roles, recreation). The EOM-EIS-II assigns identity statuses to participants by way of a standardization technique. Each participant's four status scores are converted to standard scores, and the status with the highest standard score becomes the participant's classification. Participants whose status scores are all within one-half standard deviation of their respective means are assigned to an "undifferentiated" status (Jones, Akers, & White, 1994).

### *Comparison measure*

The Multi-Measure Agentic Personality Scale (MAPS; Côté, 1997) was used as a comparison measure to evaluate the construct validity of the EIPQ and EOM-EIS-II. The MAPS contains 74 items measuring psychological agency (i.e., self-esteem, purpose in life, ego strength, internal locus of control, and self-actualization).<sup>3</sup> The MAPS has been shown to relate to the EOM-EIS-II in prior research (Côté & Schwartz, 2002); specifically, the total agentic personality score (the sum of the five standardized scale scores) was positively related to achievement, negatively related to diffusion and moratorium, and unrelated to foreclosure. Additional detail on the MAPS can be found in Côté (1997). Cronbach's alpha estimates for scores on the MAPS scales in the present sample were: self-esteem, 0.85; purpose in life, 0.70; internal locus of control, 0.59; ego strength, 0.80; and self-actualization, 0.55.

### *Procedure*

Questionnaire packets containing the EIPQ, EOM-EIS-II, and MAPS were distributed to participants in class. Participants completed the measures at home over the weekend and returned them to their instructor the following week.

## **Results and discussion**

The patterns of mean differences in MAPS scale scores by identity status classifications were examined to compare those obtained using EIPQ status classifications against those obtained using EOM-EIS-II status classifications. Following Goossens' (2001) finding that objective identity measures may operate differently when analyzed at the overall level versus within domains, the MAPS scales were entered into separate one-way multivariate analyses of variance (MANOVAs) within the ideological, interpersonal, and overall domain clusters. Status assignments for the EIPQ and EOM-EIS-II were made based only on the six domains (three

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<sup>3</sup>The MAPS also includes the identity achievement subscale from the EOM-EIS-II; however, because the EOM-EIS-II was used in this study, the identity achievement subscale was dropped from the MAPS (cf. Côté & Schwartz, 2002).

ideological, three interpersonal) that the measures share in common. Participants assigned to the undifferentiated status by the EOM-EIS-II in any set of domains were omitted from analysis of both EIPQ and EOM-EIS-II status assignments for that set of domains. Because multiple MANOVAs were used for both the EIPQ and the EOM-EIS-II, a Bonferroni correction was applied to the alpha level. This resulted in an alpha of 0.017 (0.05/3). Univariate effects and pairwise comparisons within these MANOVAs were evaluated at the standard 0.05 alpha level.

### *A priori expectations*

Theoretically, the agentic personality characteristics assessed by the MAPS (with the exception of self-actualization) would be expected to vary as a function of the degree to which individuals are committed to a set of goals, values, and beliefs (Côté & Levine, 2002). That is, self-esteem, purpose in life, internal locus of control, and ego strength would be expected to be greater in people assigned to the achieved or foreclosed identity statuses than in those assigned to diffusion or moratorium. Self-actualization, inasmuch as it represents tapping into one's unique best potentials and openness to new experiences, would be expected to vary as a function of exploration (i.e., greater in moratorium and achievement than in diffusion and foreclosure). All of the MAPS scales, however, would be expected to differentiate diffusion from achievement and to differentiate foreclosure from moratorium.

### *Ideological status assignments*

Except for self-actualization, all of the MAPS scales differed significantly by EIPQ ideological identity status, Wilks'  $\lambda = 0.81$ ,  $F(15,958) = 4.94$ ,  $p < 0.001$ ,  $\eta^2 = 0.07$ . The MAPS scales, with the exception of self-actualization, also differed by EOM-EIS-II ideological identity status, Wilks'  $\lambda = 0.80$ ,  $F(15,972) = 5.44$ ,  $p < 0.001$ ,  $\eta^2 = 0.07$ . Both similarities and discrepancies emerged in the patterns of pairwise differences between the two sets of status assignments. Similarities between the measures centered on differentiation between diffusion and achievement, the statuses representing the polar opposites of Erikson's (1950) identity stage continuum (cf. Côté & Levine, 2002). For three of the MAPS scales (purpose in life, internal locus of control, and ego strength), achievement was associated with the highest scores, and diffusion with lowest scores, for both the EIPQ and EOM-EIS. For the EIPQ status assignments, diffusion was generally significantly different from the remaining statuses, whereas for the EOM-EIS-II status assignments, achievement was generally different from the remaining statuses (see Table 1).

### *Interpersonal status assignments*

All of the MAPS scales differed significantly by EIPQ interpersonal identity status, Wilks'  $\lambda = 0.81$ ,  $F(15,1002) = 5.28$ ,  $p < 0.001$ ,  $\eta^2 = 0.07$ . The MAPS scales also differed significantly by EOM-EIS-II interpersonal identity status, Wilks'  $\lambda = 0.81$ ,  $F(15,1016) = 5.35$ ,  $p < 0.001$ ,  $\eta^2 = 0.07$ . Again, both similarities and discrepancies emerged across the two instruments in the patterns of differences among the statuses. As was the case with the ideological status assignments, similarities in interpersonal status assignments centered on differentiation between diffusion and achievement. On both the EIPQ and the EOM-EIS-II, achievement was associated with higher

Table 1  
MAPS scales by EIPQ and EOM-EIS-II status assignments

Scale	Pattern of mean differences <sup>a,b,c</sup>	
	EIPQ	EOM-EIS-II
<i>Ideological status assignments</i>		
Self-esteem	A = F > M = D (M = F)	A > M = D = F
Purpose in life	A = F > M > D	A > F = M = D
Internal locus of control	A = F = M > D (A > M)	A > F = M = D
Ego strength	A = F = M > D	A > M = F = D
Self-actualization	NS	NS
<i>Interpersonal status assignments</i>		
Self-esteem	A = F > D = M	A > F > M = D (F = D)
Purpose in life	A = F > D = M	A > F = M = D
Internal locus of control	F > M = D (A = M, F, D)	A > F = M = D
Ego strength	F = A > D = M	A > F = M = D
Self-actualization	M = A > D = F	M = D = A > F
<i>Overall status assignments</i>		
Self-esteem	A = F > D = M	A > F, D, M
Purpose in life	F = A > M = D	A > F, M, D
Internal locus of control	F = A > M = D	A > D, F, M
Ego strength	A = F > M = D	A > D, M, F
Self-actualization	M = A > F = D	NS

Note: A = Achievement; M = Moratorium; F = Foreclosure; D = Diffusion.

Note: NS = Univariate analysis was not significant at  $p < 0.05$ .

<sup>a</sup> Based on Tukey's least significant difference post-hoc tests.

<sup>b</sup> An equals sign indicates that the statuses in question did not differ significantly on that variable.

<sup>c</sup> In each cell, statuses are listed in descending order of mean agentic personality scores.

agentic personality scores than was diffusion for three of the five MAPS scales (self-esteem, purpose in life, and ego strength). Again similar to the case for ideological status assignments, differences between the EIPQ and the EOM-EIS-II in interpersonal status assignments were obtained regarding the specific patterns of pairwise differences among the statuses. With regard to EIPQ interpersonal status assignments, the MAPS self-esteem, purpose in life, internal locus of control, and ego strength scores significantly differentiated the diffused and moratorium statuses from the foreclosed and achieved statuses (self-actualization significantly differentiated the moratorium and achieved statuses from the diffused and foreclosed statuses). With regard to EOM-EIS-II interpersonal status assignments, the achieved status was significantly different from the other statuses on self-esteem, purpose in life, internal locus of control, and ego strength (the foreclosed status was significantly different from the other statuses on self-actualization).

#### *Overall status assignments*

All of the MAPS scales differed significantly by EIPQ overall identity status, Wilks'  $\lambda = 0.78$ ,  $F(15,961) = 5.93$ ,  $p < 0.001$ ,  $\eta^2 = 0.08$ . With the exception of self-actualization, the MAPS scales

also differed significantly by EOM-EIS-II overall identity status, Wilks'  $\lambda = 0.78$ ,  $F(15,978) = 6.03$ ,  $p < 0.001$ ,  $\eta^2 = 0.08$ . As with the ideological and interpersonal domain clusters, similarities between the two measures in terms of pairwise differences among statuses centered on differentiation of achievement from diffusion, but specific patterns of pairwise differences among overall identity statuses were dissimilar across the two instruments. With regard to EIPQ overall status assignments, the MAPS self-esteem, purpose in life, internal locus of control, and ego strength scores significantly differentiated the diffused and moratorium statuses from the foreclosed and achieved statuses (self-actualization significantly differentiated the moratorium and achieved statuses from the diffused and foreclosed statuses). With regard to EOM-EIS-II overall status assignments, the achieved status was significantly different from the other three statuses on self-esteem, purpose in life, internal locus of control, and ego strength.

It is clear that the two identity measures examined in this study, the EIPQ and the EOM-EIS-II, behaved somewhat differently in relationship to the comparison measure. While the MAPS scales differentiated achievement from diffusion regardless of how identity status was measured, other between-status differences varied according to which measure was used to assign statuses. Therefore, it must be concluded that the findings of identity status studies may depend somewhat on the measure used to assign statuses to participants. Additionally, with regard to self-esteem, purpose in life, internal locus of control, and ego strength, the results obtained with the EIPQ were more in line with a priori theoretical expectations than were the results obtained with the EOM-EIS-II. In interpersonal and overall domain clusters, these four MAPS variables differentiated the low-commitment statuses (diffusion and moratorium) from the high-commitment statuses (foreclosure and achievement) as assigned by the EIPQ. However, these same MAPS variables were only able to differentiate achievement from the other three statuses on the EOM-EIS-II. Moreover, with regard to self-actualization, the results with the EIPQ supported theoretical expectations in two of three domain clusters; the results with the EOM-EIS-II did not support theoretical expectations in any of the three domain clusters. It appears that the EIPQ is preferable to the EOM-EIS-II when the objective is to differentially associate personality characteristics or other traits with identity status categories. The EOM-EIS-II may find its best use in studies where the goal is to investigate correlates or predictors of continuous measures of the identity statuses.

Theoretically speaking, there is evidence that achievement and diffusion are the most clearly divergent of all pairs of statuses, possibly because they represent Erikson's (1950) opposing poles of identity synthesis and identity confusion, respectively (Côté & Levine, 2002; Schwartz, 2002b). However, the intermediate statuses (moratorium and foreclosure) may be less clearly distinguishable from the polar statuses and from one another. This may potentially explain the lack of comparable construct validity (in relationships with the MAPS scales) between the EIPQ and the EOM-EIS-II in terms of differentiating these intermediate statuses from the polar statuses and from one another. Although the EIPQ provided results more compatible with theoretical expectations than did the EOM-EIS-II, it still yielded some theoretically inconsistent findings. A potentially useful recommendation for future measurement efforts in identity status research may be to more clearly delineate the intermediate statuses from one another and from the polar statuses. Such improvements may help to maintain construct validity regardless of which measure is used.

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