

Predictive validity of value assessment in organizational settings

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The aim of this research was to examine values-related assessments as potential predictors of job performance and satisfaction. The participants were bank cashiers ($N = 300$) from a large banking organization. The predictors were two sets of measures related to values: ratings of the importance of 20 values measured by the WIS Values Scale, and ratings of the degree to which these values are perceived as attained in an individual's job. The criteria were performance ratings assessed by the superiors and self-assessed job satisfaction. A hierarchical multiple regression analysis was used to examine the extent to which the two sets of assessments predicted each of the two criteria. The predictors were unrelated to the performance ratings. However, job satisfaction was well predicted, primarily by the value-attainment ratings. Significant predictors included the following: perceived opportunities for participation in decision-making, perceived attainment of ability utilization, and the importance of lifestyle that was negatively related to job satisfaction of bank cashiers.

Complex behavior cannot be successfully predicted by simple means. Multiple predictors comprising various variables are needed instead. Traditionally, the selection paradigm focuses on personal variables (i.e., the attributes of individuals, chiefly abilities and personality traits) and neglects the situational variables. As Guion (1991) put it "selection researchers have customarily treated situational variables only as potential moderators, but they may be useful predictors in their own right" (p. 335). A similar view is shared also by Schneider *et al.* (1997), who suggest that "a consideration of situations, and the fit of persons to those situations, can contribute to prediction, especially when level of analysis concerns organizational effectiveness" (p. 406).

Based on the above assumption, the present paper examines value-attainment possibilities as potential organizational predictors. If we conceptualize *value* as "an objective, either psychological state, a relationship, or material condition, that one seeks to attain" (Super, 1980) and assume that the importance of any of the roles depends on an individual's perception of opportunities for the attainment of his/her salient values through that role (Šverko,

1989), the importance of value assessments becomes self-evident. Obviously, the opportunities to afford one's values is an extremely important organizational aspect, which defines the situation in which a new employee will work. In this paper, therefore, we concentrate primarily on the organizational aspects of values, that is, the opportunities that an organization offers for the attainment its employees' values.

Many years ago, Murray's (1938) need-press theory already proposed that whenever people's needs fit the environment (the 'press'), a positive outcome will follow. But since needs are difficult to define operationally, the present approach utilize the concept of values that presumably reflect the needs. Similar to this is a more recent approach of Pervin (1984). In his study of the person-environment fit, Pervin conceptualizes environments in terms of opportunities they offer individuals for goal affordance.

The measures used in this study were developed within the Work Importance Study (WIS), a large-scale cross-national project involving some dozen countries (Super & Šverko, 1995). WIS was concerned both with values, or rewards which people seek from life, and with salience, or importance, of five major human activities (work, study, homemaking, community activities, and leisure). Although the major goal was to advance cross-cultural comparison, much effort was devoted to the development of instruments that could be used in both research and practice. As a result, we obtained two truly international and psychometrically sound inventories — the Values Scale and the Salience Inventory. Detailed descriptions of both instruments are given in a series of national chapters of the

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WIS volume (Super & Šverko, 1995) and elsewhere (e.g., Coetsier & Claes, 1990; Fitzsimmons, Macnab, & Casserly, 1986; Nevill & Super, 1986 a, b; Šverko, 1987; Trentini, 1994).

Much is already known about the validity of the WIS instruments. Systematic efforts in their development – including the establishment of suitable models of values and roles that guided the invention of items and careful applications of psychometric rules in analyzing and selecting the items (see Ferreira Marques & Miranda, 1995) – assure the *content* validity of the WIS instruments. Studies of their convergent and discriminant validity (Fitzsimmons, Macnab, & Casserly, 1986), manifold examination of their factor structure (see Super & Šverko, 1995), and their ability to discriminate among occupational groups (Šverko, Jerneić, Kulenović, & Vizek-Vidović, 1995) strongly support the *construct* validity of the instruments. What is lacking, however, is data on their *predictive* validity.

In an attempt to amend the situation, we conducted a study in a large banking organization to examine the predictive validity of the WIS instrumentation. Our purpose was to explore the predictive validity of value assessment in organizational settings.

Predictive hypothesis

Predictive or criterion-related validity is a type of empirical validity based on determining the extent to which the results of an assessment procedure are predictive of some (future) criterion of actual behavior. An essential step in determining criterion-related validity is the formulation of the predictive hypothesis (Guion, 1991). The hypothesis is most often given in a functional form, stating that $Y=f(X)$, where Y is the criterion construct to be predicted and X stands for one or more predictor variables. The predictive hypothesis thus includes the identification of both a criterion construct and a predictor construct, and the examination of the tenability of the hypothesis requires the construct to be operationalized.

The predictors in this study are the WIS measures related to values. As already noted, values are important goals that individuals desire, want, or seek to attain in their work and life in general. As characteristics, which are largely shaped by the early socialization process, values are considered to be relatively stable behavioral dispositions. According to Dawis (1991), values are “stable dispositions distilled from affective evaluations of numberless life experiences. As such, they are thought to be good indicators of motives, and therefore ... good indicators of performance” (p. 833). Two sets of predictors are used in this study: ratings of the importance of 20 values (as measured

by the Values Scale), and ratings of the degree to which these values are seen as attained or fulfilled in an individual's job. The latter ratings have been seen as major predictors for the reason already explained. An additional theoretical reason for their importance is given below.

Two validation criteria are used in this study: performance ratings and job satisfaction. We considered job satisfaction as our major criterion, because it is conceptually linked to values. According to Locke (1976), a number of theorists have stated explicitly that the perceived job situation in relation to individual values is the most direct determinant of job satisfaction. Locke himself proposes that “job satisfaction results from the perception that one's job fulfills or allows the fulfillment of one's important job values, providing ... that those values are congruent with one's needs” (Locke, 1976, p. 1307). Based on this theoretical proposition, our major predictive hypothesis states that:

$$\text{job satisfaction} = f(\text{value-attainment perceptions in a current job})$$

The above theorizing is similar to the VIE approach in motivation theory (e.g., Campbell and Pritchard, 1976; Lawler, 1973; Vroom, 1964): work values may be seen as work role “outcomes” having positive “valences”, and opportunities for their attainment in a job as perceived “instrumentality” of the job for the attainment of valued outcomes. Studies have supported the link between instrumentality and behavior.

METHODS

Participants

The participants were bank cashiers from a large banking organization in Zagreb. All participants had complete high school. Their age was between 23 and 35 years, and their years of service varied between 4 and 16 years. In our sample, 80% of the participants were women. Initially, there were 300 participants, but owing to the missing data their number in the final analyses dropped to 208 and 216.

Predictor Variables

In April 1997 we administered the scales tapping the predictor variables. We used the Croatian version of the WIS Values Scale (Šverko, 1987; Šverko *et al.*, 1995), which is a multiscale, Likert-type instrument providing assessments

of 20 values. The measured values are listed in Table 1, arranged in the five groups that reflect their factorial structure identified in a series of factor analyses (Kulenović, Jermeić, Šverko, & Vizek-Vidović, 1984).

There were five statements or items per scale. Preceded by the phrase "it is now or will be important for me to", the items were simple statements such as "do work that takes advantage of my abilities" (ability utilization), "get ahead" (advancement), "act on my own" (autonomy), "help people in need" (altruism), "have a high standard of living" (economics), "living according to my ideas" (life style), "be with people who jointly take decision" (participation), etc. The participants were asked to indicate the *importance* of each statement on a 4-point rating scale ranging from 1 ("Little or no importance") to 4 ("Very important"). Adding their importance ratings over the five items composing each scale derived their scores. The reliabilities (Cronbach's coefficients) of the 5-items scales ranged from .60 to .84 (Šverko, 1987).

Along with the Values Scale, we also administered its methodological counterpart coming from the Salience Inventory - the Value Attainment Scale. This set of scales asked the participants to rate the opportunities for attainment of each of the 20 values in their current job. Again, a 4-point rating scale was used, ranging from 1 ("Little or no opportunities") to 4 ("Very good opportunities").

The two sets of scales provided altogether 40 predictor variables.

Criterion Variables

One month later we collected the criterion scores. The *job performance ratings* or systematic evaluations of each participant were obtained from her or his superior. The official merit-rating system was used for that purpose, comprising seven performance factors:

- knowledge of the job
- quality of work
- quantity of work
- cooperation
- initiative
- learning
- appearance and manner.

Five-step verbally anchored rating scales provided for the rating on each performance trait. No reliability data for the scales were available, but the intercorrelations among the performance factors were relatively high (.54 on average). Hence, only total ratings, summed over the seven performance factors, were used as the criterion measures.

Our main criterion, the subjects' *job satisfaction*, was self-assessed by means of a questionnaire comprising seven questions:

- On the whole, how satisfied are you with your job?
- How satisfied are you as an employee of this organization?
- Comparing to the other employees, how satisfied are you with your job situation?
- Some people are seldom satisfied, other more often. How about you?
- What gives you more satisfaction – your job or your leisure activities?
- Do you feel that you would be more satisfied in another job and organization?
- Have you considered leaving your job in this organization?

Each question was accompanied by an appropriate five-level response scale. The intercorrelations among the seven indices of job satisfaction were high, and the reliability (Cronbach's coefficient) for the whole seven-item questionnaire was 0.82.

RESULTS

The means for each of the two sets of predictor variables are given in Table 1. A hierarchical multiple regression analysis was used to examine the extent to which the two sets of values-related assessments predicted each of the two criterion measures. The analysis was carried out in two steps. In the first step, all 20 value-attainment ratings were entered simultaneously. In the second step, the ratings of the importance of values were added. Table 2 summarizes the results.

The first three columns summarize the results for the performance criterion: coefficient of multiple correlation (R), proportion of accounted criterion variance (ΔR^2), and proportion of the variance added at each step (ΔR^2). Indeed, none of the values reached statistical significance. Thus, no set of our predictors is significantly related to performance, at least not to performance as it was rated by the subjects' superiors.

The next three columns summarize the results for job satisfaction taken as a criterion. As the results clearly show, job satisfaction is well predicted, primarily by the value attainments ratings. Their multiple correlation is highly significant ($p < .0001$) and they explain 25% of job satisfaction scores.

The values in the next row show what happens when the importance ratings are added to the regression equa-

Table 1

Mean importance ratings and mean attainment ratings (bank cashiers)

Values	Importance	Attainment
<i>Self-actualizing</i>		
Ability Utilization	3.5	2.5
Achievement	3.6	2.3
Personal Development	3.6	2.6
Aesthetics	3.1	2.1
Creativity	2.9	1.9
Participation	2.9	2.1
<i>Individualistic</i>		
Autonomy	2.7	2.4
Life Style	2.8	2.2
Variety	2.9	2.6
<i>Social</i>		
Altruism	3.2	2.6
Social Relations	3.5	2.9
Social Interaction	3.0	3.5
<i>Utilitarian</i>		
Working Conditions	3.3	2.8
Economics	3.5	1.7
Advancement	3.2	2.2
Prestige	3.1	2.6
Authority	2.3	1.9
Cultural Identity	2.7	2.5
<i>Adventurous</i>		
Physical Activity	2.7	1.7
Risk	2.4	1.9

tion. As can be seen, their inclusion in the analysis provides a statistically significant ($p .01$) addition to the variance explained. The cumulative portion of the explained criterion variance is 38%. When correction for the degrees of freedom is applied, the adjusted percentage drops to 24%.

Table 3 shows the significant individual predictors – those with *beta* coefficients significant at $p.01$ level. The perceived attainment of participation in decision-making and the perceived attainment of ability utilization are both positively related to job satisfaction: when the influence of other predictors is partialized out, their correlation with job satisfaction reaches 0.19. On the other hand, the importance of lifestyle is negatively related to job satisfaction in bank cashiers jobs.

DISCUSSION

Values have occasionally been reported to correlate with job performance, but at a low level (Davis, 1991). In this study, however, they showed no relationship to job performance. Thus, what people value, and whether they can attain that in their job situation or not, does not seem to influence job performance. It does, however, influence their job satisfaction.

Both sets of predictor variables were significantly related to job satisfaction. Although a major part of the criterion variance was accounted for by the value-attainment ratings, the importance ratings provided a statistically significant addition to the variance explained. The cumulative

Table 2
Hierarchical multiple regression of criterion variables

Predictor variables entered	Criterion: Performance ratings ¹			Criterion: Job satisfaction ²		
	R	R ²	ΔR ²	R	R ²	ΔR ²
First step:						
Value attainment ratings	.319	.102	.102	.496	.246	.246**
	(.020)			(.169)		
Second step:						
+ Value importance ratings	.476	.227	.125	.618	.382	.136*
	(.041)			(.241)		

Note. ¹N=208 ²N=216.
In parentheses are values adjusted for the degrees of freedom.
*p < .01 **p < .0001

Table 3
Significant individual predictors of job satisfaction at the last step of hierarchical regression analysis

Predictor	r	r _{part}
Perceived attainment of Participation	.26*	.37
Perceived attainment of Ability Utilization	.21*	.25
Importance of Life Style	-.26*	-.16

Note: * p < .01

portion of explained job satisfaction variance was 38% or 24 % when corrected for the degrees of freedom. One could perhaps comment that the percentage of explained criterion variance is rather modest. But, job satisfaction is a multiple-cause phenomenon, not easy to cover in full. Therefore, considering also the criterion error variance (no correction for attenuation was applied in our analyses!), we can conclude that a noticeable portion of job satisfaction variance has been accounted for, primarily by the value at-

tainment ratings. This supports our predictive hypothesis stated above.

Let us now comment on the significant predictors. As shown in table 3, the first significant predictor is *perceived attainment of participation in decision-making*. Its major influence on job satisfaction perhaps comes as a surprise, because our earlier studies have never revealed participation as a factor of greater importance (e.g., Šverko, 1982). Its present ascendance is perhaps due to the current socio-

political situation, which may have enhanced its influence. Uncritically promulgated in the former 'self-management' system, participation is nowadays, in the post-communist era, relegated to the background in Croatia. As a matter of fact, any form of participative management tends to be equated with condemned 'socialistic self-management' and vigorously opposed. After several years of such practice which is not responsive to the needs and wishes of the people, the employees may have become more sensitive to the authoritarian managerial practices. After all, this would be in line with the prevailing view among the modern organizational theorists that "participative forms of management and organizations are prerequisites for the development and utilization of human resources and hence for organizational effectiveness" (Qvale, 1996, p. 29).

The next significant predictor is, not surprisingly, the perceived attainment of *ability utilization*. This intrinsic, inner-oriented value usually exerts its importance. Opportunities for its attainment are of the utmost importance for the self-actualization – a concept elaborated by the psychologists of the so-called human potential movement (e.g., Maslow, 1970).

The third significant predictor is the valuation of *lifestyle*. It is the rated importance of this value, not its attainability that is related to job satisfaction. Note also that this relationship shows up with the negative sign. That is, the respondents with high regard for an independent way of life, who value living according to their own ideas, are less satisfied in the job of bank cashier. This finding may be peculiar to bank cashiers, who perform repetitive and demanding work under very strict regulation.

There are, however, limitations of the present study that we need to address briefly. First, the failure to predict job performance may be partly due to the imperfection of the official rating system, especially the fact that our participants had different superiors who rated their performance. On the other hand, when considering the prediction of job satisfaction, one has to take into account that the same persons provided assessments for both the predictor and the criterion measures. This opens the door to some method variance.

We believe, however, that value-related assessments have demonstrated a real predictive power, at least in predicting job satisfaction. This opens the possibility of using value-based instruments in organizational settings for the assessments that may enhance the management of human resources. Predicting job satisfaction is important not only because of its impact on employee organizational commitment, absenteeism, and turnover. Increased emphasis on the quality of people's working life and general emotional well-being supports the attempts to explain job satisfaction in its own right.

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