

## *Validity Study*

### Relationship between the Performance Perspectives Inventory's Selling Scale and Job Performance of Real Estate Agents

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*We investigated the relationship between the Performance Perspectives Inventory's (PPI, Abraham & Morrison, 2002, 2003) Selling scale (a measure of sales orientation) and job performance in a sample of real estate agents. PPI Selling correlated significantly with supervisory ratings of overall job performance ( $r = .37$ ,  $n = 40$ ). The correlation between PPI Selling and supervisory ratings of potential as a real estate agent did not attain statistical significance ( $r = .17$ ,  $n = 40$ ). Additionally, correlations are reported between (a) job performance and Conscientiousness, Extraversion, and associated subscale scores; and (b) demographic variables (age, gender, education level, ethnic group) and other study variables.*

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#### **Sample**

The sample consisted of 40 independent real estate agents representing a residential real estate firm in the southeastern United States. The mean age of sample participants was 49 years, and the median education level was "high school graduate or equivalent." Twenty-seven percent were men, 69% were women, and 4% did not provide gender information. Thirteen percent were African American, 78% were White, 2% were Hispanic, 2% were Asian American, and 5% did not provide ethnic group information.

#### **Predictor Information**

The Performance Perspectives Inventory (PPI, Abraham & Morrison, 2002, 2003) is a 155-item measure of the Big Five personality factors (Digman & Takemoto-Chock, 1981; Goldberg, 1992). Respondents indicate how accurately each item describes them using a five-point scale. The PPI includes Big Five major scales (Agreeableness, Conscientiousness, Extraversion, Openness, Stability) and subscales, as well as several occupational scales designed for selection into specific organizational roles.

Of particular interest in this study was the PPI Selling occupational scale, a measure of sales orientation, which assesses individuals' proclivity for persuading prospective customers to purchase products or services. The Selling scale correlates positively with related measures such as the Hogan Personality Inventory's (Hogan & Hogan, 1995) Sales Orientation scale ( $r = .52$ ,  $n = 634$ ,  $p < .01$ ) and the Campbell Interest and Skills Survey's (Campbell, Hyne & Nilsen, 1992) Influencing Orientation - Skills ( $r = .46$ ,  $n = 491$ ,  $p < .01$ ) (see Abraham & Morrison, 2002). The

PPI Selling scale has an internal consistency (Cronbach's alpha) reliability of .80 (n = 995), and a test-retest reliability of .90 (n = 78, 32-day retest interval). In the present study, the PPI Selling scale had a mean of 3.90, with a standard deviation of .50.

In a meta-analytic review of sales selection techniques, Vinchur, Schippmann, Switzer, and Roth (1998) found both Conscientiousness (particularly the subdimension Achievement) and Extraversion (particularly the subdimension Potency) to be significantly correlated with managerial ratings of salesperson performance. Therefore, in this study, we also investigated the relationship between supervisory ratings of performance/potential and real estate agents' PPI Conscientiousness, PPI Extraversion, and subscale scores. Table 1 shows definitions for PPI Conscientiousness and Extraversion, and their associated subscales.

### Criterion Information

Supervisors provided ratings of both (a) overall performance and (b) overall potential as a real estate agent, using a five-point scale. Because only three raters utilized the lowest performance categories, performance was collapsed into three levels: (1) less than effective, (2) effective, and (3) very effective. The mean of the overall performance measure was 1.95, with a standard deviation of .64. The mean of the overall potential measure was 2.03, with a standard deviation of .62.

### Validity Information

Tables 2 and 3 show the results of the study. The Selling scale correlated significantly with supervisory ratings of overall performance as a real estate agent ( $r = .37$ ,  $n = 40$ ,  $p < .05$ ), but did not correlate significantly with supervisory ratings of overall potential as a real estate agent ( $r = .17$ ,  $n = 40$ , ns).

Additionally, we correlated PPI Selling with four demographic variables: age, educational level, gender (1 = male, 2 = female), and ethnic group (1 = White, 2 = African American). Neither age ( $r = -.24$ ,  $n = 37$ ), gender ( $r = -.01$ ,  $n = 39$ ), education level ( $r = .00$ ,  $n = 27$ ), nor ethnic group ( $r = .14$ ,  $n = 37$ ) correlated significantly with Selling scores.

**Table 1: Definitions for PPI Conscientiousness, Extraversion & associated subscales**

Scale	Definition
Conscientiousness	The extent to which one persists at tasks, pursues goals, and takes an organized approach to assignments.
Achievement Focus	The extent to which persons find it important to set and meet challenging work, career, and personal goals.
Diligence	The extent to which persons prefer to pursue tasks with intensity and persistence.
Initiative	Individuals' willingness to take on tasks without guidance or direction from others.
Organization	Individuals' tendencies to impose structure on their work.
Thoroughness	Individuals' proclivity for exacting work and work involving details.
Extraversion	The extent to which one enjoys the company of others and prefers influencing or persuading others.
Influential	The extent to which one prefers leading others and gaining an audience for one's point of view.
Likes Attention	The extent to which one seeks and is comfortable with attention from others and public visibility.
Lively	The extent to which one is energetic, upbeat, and entertaining in social settings.
Sociable	The extent to which one seeks out and enjoys the company of others.

Table 2 also shows correlations between the supervisory ratings and participants' Extraversion, Conscientiousness, and associated subscale scores. The relationship between overall job performance and Extraversion was statistically significant ( $p < .05$ ), and the relationship between overall job performance and Conscientiousness approached significance ( $p < .10$ ). These results are generally consistent with Vinchur et. al.'s (1998) meta-analytic findings. PPI subscales Achievement Focus, Diligence, Initiative, and Sociable correlated significantly with overall job performance. Initiative also correlated significantly with overall potential as a real estate agent.

**Table 2: Correlations with Performance and Demographic Variables**

Variable	Reliability		Supervisor Ratings		Demographics			
	Alpha	Test-retest	Overall Performance	Overall Potential	Education (n=27)	Sex (n=39)	Race (n=37)	Age (n=37)
Overall Performance	n/a	n/a	n/a	.85**	-.05	.15	.04	.01
Overall Potential	n/a	n/a	.85**	n/a	-.06	.12	.00	-.05
PPI Scale								
Selling	.80	.90	.37*	.17	.00	-.01	.14	-.24
Conscientiousness	.88	.92	.29	.18	.13	.07	.12	-.28
Achievement Focus	.83	.73	.31*	.23	.08	.09	.15	-.34*
Diligence	.79	.89	.38*	.23	-.01	.23	.22	-.21
Initiative	.72	.78	.39*	.31*	.08	.07	-.08	-.05
Organization	.75	.88	.04	-.03	.26	-.02	.16	-.38*
Thoroughness	.80	.81	.06	-.02	.20	-.09	.07	-.25
Extraversion	.79	.89	.35*	.20	-.27	-.05	.18	-.22
Influential	.84	.87	.28	.08	-.08	-.17	.14	-.31
Likes Attention	.81	.79	.25	.14	-.23	-.14	.12	-.38*
Lively	.75	.84	.19	.15	-.29	-.01	.11	-.06
Sociable	.84	.84	.33*	.22	-.26	.19	.20	.14

Note: Except for job performance, all reliabilities are from the PPI Technical Manual or normative database

**Table 3: Correlations among PPI Scales**

PPI Scale	PPI Scale											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Selling	-	.83**	.82**	.73**	.71**	.68**	.63**	.69**	.78**	.49**	.22	.61**
2. Conscientiousness		-	.89**	.87**	.82**	.88**	.85**	.31	.48**	.13	.00	.32*
3. Ach. Focus			-	.76**	.69**	.72**	.67**	.39*	.48**	.29	.00	.42**
4. Diligence				-	.61**	.70**	.61**	.24	.38*	.07	-.06	.37*
5. Initiative					-	.58**	.62**	.32*	.46**	.13	.13	.26
6. Organization						-	.81**	.20	.41**	.06	-.03	.18
7. Thoroughness							-	.16	.36*	.02	-.02	.14
8. Extraversion								-	.81**	.88**	.64**	.66**
9. Influential									-	.65**	.34*	.46**
10. Likes Attention										-	.49**	.43**
11. Lively											-	.12
12. Sociable												-

\* p < .05, \*\* p < .01

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