



# Job–Person Fit and Leader’s Performance: The Moderating Effect of the Rorschach Comprehensive System Variables

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## Abstract

Personality assessment is a complex process and there is an ongoing need for studies and for an improvement in the selection methods employed. Most assessment processes and methods focus on simply describing the personality, but at least on the leadership level, the need is to *understand and explain* behavior. Therefore this study suggests that the Rorschach Comprehensive System (RCS) will predict the leader’s performance more accurately than when performance is predicted only with self-reported personality methods. Furthermore, this study suggests that the RCS variables moderate the relationship between the preferred personality and the actual personality congruence or job–person (JP) fit and the leader’s performance, when the JP fit personality is measured by the self-reported assessment tool. Pearson correlations and stepwise hierarchical multiple regression analyses (n=203) confirmed several hypotheses and the results support the view that performance-based assessment method explains the personality more than the self-assessment based personality dimensions and should therefore be part of the personnel assessment process.

**Keywords:** Rorschach comprehensive system (RCS), Performance, Leader, Job–person fit.

## Contents


1. Introduction .....	19
2. Research Problems .....	20
3. Methods.....	21
4. Results .....	22
5. Discussion.....	25
References .....	26

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## 1. Introduction

“Prediction is very difficult, especially about the future”

Nils Bohr, Nobel Prize for Physics in 1922

Organizations all over the world are willing to pay for assessments conducted by psychologists, particularly when the organization is seeking to recruit leaders. One reason for this might be that two thirds of leaders fail in their work (Hogan, 2007) and the primary reason for this are issues with personality functions (Bentz, 1985; Van Velsor and Leslie, 1995; Dotlich and Cairo, 2003). The decision to hire a new leader is based on estimation, likelihood, and incomplete information. Psychologists are trusted to increase the likelihood of successful decisions by evaluating how the leader will behave under stress or when outside of their comfort zone. However, assessing a leader’s personality is a complex process, particularly if the assessment seeks to explain leader behavior rather than simply describing. Therefore there is an evident need for studies of assessment processes and of the associated selection methods.

Psychologists first became concerned that people may not respond accurately to transparent items as long ago as the 1920s (Hartshorne and May, 1928) revealing that the interest in measures indirectly related to the construct they are intended to indicate is not a new thing. However, even if respondents answer the questions as honestly as they can, the self-report personality assessment methods are difficult for people. Most individuals—even those with the most stable personality traits—are only moderately capable of assessing their own behavior because of self-enhancement, social desirability, and lack of self-knowledge (John and Robins, 1993; Morgeson *et al.*, 2007).

It seems that the experts in this field want to understand the candidates at a deeper level and also they seem to need to explain the behavior and not just describe it. Kets de Vries (2006) wants to recognize “the inner theatre,” Pratch and Levinson (2002) “the personality structure,” and Hogan and Hogan (2001) “the dark side of the personality.” Prior studies support the view that the performance-based personality assessment methods may be the only way to acquire this kind of information (e.g., Levinson (1994)). The Rorschach inkblot test is one example of a performance-based assessment method that can provide more individualized and complex information concerning thinking, emotional management, self-image, and interpersonal tendencies (Exner, 1993; 2003).

The purpose of this article is to explore the potential uses of the Rorschach Comprehensive System (RCS) in the recruitment process. This study suggests that the RCS will predict the leader’s performance more accurately than if the performance is evaluated only on using self-reported personality methods. Furthermore this study suggests that the RCS variables moderate the relationship between the preferred personality and the actual personality congruence known as job–person (JP) fit and the leader’s performance, when the JP fit personality is measured with the self-reported assessment tool.

### 1.1. Personnel Selection

Equal Employment Opportunity Commission (1978) recommends that personnel selection should be conducted on the basis of a job analysis based on JP fit that is assessed by many different selection tools. There are several researchers who agree, that these three issues—job analysis, theory of fit, and the multi-method approach—lie at the core of personnel selection. Each test measures some aspect of personality that the others do not. Therefore the multi-method approach—combining different personnel assessment methods—is a widely used and recommended strategy for personnel assessment (Schmidt and Hunter, 1998; Schuler, 2006). Moreover, the multi-method approach can increase the validity of both the assessment process and the decision (Schmidt and Hunter, 1998; Cortina *et al.*, 2000).

### 1.2. Theory of Fit and Job Performance

The theory of fit is the most widely used theory in the employee selection context (Sekiguchi, 2004) and employee selection processes have particularly focused on achieving JP fit (Werbel and Gilliland, 1999; Sekiguchi, 2004), which is the congruence between the abilities of a person and the demands of a job (Edwards, 1991; Kristof, 1996). The studies support the view that if there is JP fit employees will be satisfied with their work, which will have positive repercussions (Hall *et al.*, 1970; O’Reilly, 1977; Hollenbeck, 1989; Caldwell and O’Reilly, 1990; Edwards, 1991; 1996; Cable and Judge, 1996; Lauver and Kristof-Brown, 2001; Kristof-Brown *et al.*, 2005).

In order to achieve the fit, employers must analyze what kind of demands the job places on the employee, and the personal abilities required to meet them. Accordingly, the main step at the beginning of the assessment process is to conduct a job analysis (Anderson and Wilson, 1997; Voskuijl, 2005; Schuler, 2006). Traditionally, job analysis has highlighted only education, experience and knowledge, skills and abilities (KSAs) (French *et al.*, 1982; Dawis and Lofquist, 1984; Caldwell and O’Reilly, 1990; Wilk and Sackett, 1996) and neglected the personality. More recent studies have examined the validity of personality measures as predictors in personnel selection. These studies have found personality traits to predict job performance (Barrick and Mount, 1991; Tett *et al.*, 1991; Hough, 1992; Mount and Barrick, 1995; Salgado, 1997; 1998; 2002; 2003; Hurtz and Donovan, 2000; Barrick *et al.*, 2001). Moreover, some studies have argued that personality traits may be an important determinant of fit in the case of specific jobs (O’Reilly, 1977; Jackson *et al.*, 1980; Paunonen *et al.*, 1987). In addition, there is some evidence that those people with certain personality traits are satisfied and successful in certain vocations (Spokane, 1985; Assouline and Meir, 1987).

### 1.3. Personality and Personality Measurement

Personality is a concept lacking a single, approved definition or theory. One of the well-known models is the McAdams’ view (McAdams, 1996; 2009) that form implies that personality information can be acquired on three levels: 1) dispositional traits, 2) characteristic adaptations (e.g., motives, values), and 3) integrative life stories.

### **1.3.1. Work Personality Inventory, WOPI**

The trait approach, especially the Big Five, has dominated personality research. The trait perspective and the Big Five methods have been criticized for being vulnerable to impression management (e.g., NEO Five Factor Inventory; [Costa and McCrae \(1992\)](#)); for measuring traits that are very easy to observe even in a stranger; and on the grounds that personality traits explain only a small part of human personality ([McAdams, 1995](#)). Therefore the self-evaluation method selected in this study is not a Big Five one but the Work Personality Inventory (WOPI), which approaches the construct of personality from a multifactorial angle ([Nederström and Niitamo, 2010](#)). WOPI measures motives, cognitive styles, and attitudes.

### **1.3.2. Rorschach Comprehensive System (RCS)**

One of the most widely used and scientifically researched performance-based assessment methods is the Rorschach inkblot test ([Rorschach, 1921](#)). The Rorschach test can provide more individualized and complex information concerning ways of thinking, emotional management, self-image, and interpersonal tendencies ([Exner, 1993; 2003](#)). In the leadership concept, the Rorschach test could offer a method that could explain leader behavior rather than just describing it [Del Giudice \(2010a\)](#).

The Rorschach and the Comprehensive System (= RCS) ([Exner, 1993; 2003](#)) for administration and coding has been infrequently used in the selection process, even though some researchers (see [Viglione and Hilsenroth \(2001\)](#)) argue that one would need some 50 other methods to replace the Rorschach process. One reason for the criticism may be that the reliability and validity of the Rorschach test was at one time seriously questioned. However, the situation has changed since John Exner developed the RCS and following the publication of hundreds of studies ([Meyer, 1997; 2000; 2001; 2002; Meyer et al., 1998; Erdberg and Shaffer, 1999; Viglione, 1999; Viglione and Hilsenroth, 2001; Weiner, 2001; Exner, 2003](#)). If the Rorschach test is administered, coded, and interpreted according to [Exner \(1993; 2000; 2003\)](#) equivalent reliability, and validity ratings to self-report measures have been established ([Ganellen, 1996; 2001; Society for Personality Assessment, 2005](#)). Secondly, some researchers still see that the Rorschach is a projective test and criticize it accordingly. It should be noted that the American Psychological Association stresses that the RCS is not an associative method but a performance-based personality test that focuses on perceptual, cognitive, and decision-making tasks ([Meyer et al., 1998](#)). Thirdly, some argue that the Rorschach is a method created to arrive at a clinical diagnosis and should not be used for other purposes ([Kottke et al., 2010](#)). However, according to [Weiner \(1997\)](#) the RCS is a method that the researcher can be used to gather information concerning personality states, traits, and motivations. These objectives are not dissimilar from other personality tests, such as the Sixteen Personality Factor Questionnaire ([Cattell et al., 1993](#)) or Myers Briggs Type Indicator ([Myers and McCalley, 1985](#)) and in essence only the methodology differs. One could also argue that clinical psychology is historically focused on assessing negative phenomena. However, this trend appears to be beginning to change in that field too ([Peterson and Seligman, 2004](#)).

### **1.4. RCS and Personnel Selection**

During the past few years, the use of the RCS has received some attention and generated discussion in the personnel selection context. For example, [Del Giudice \(2010a; 2010b\)](#) and [Kottke et al. \(2010\)](#) have published some reviews on the topic. [Zacker \(1997\)](#) suggests that the RCS may be a useful tool in pre-employment screening, while [Ganellen \(1994; 1996\)](#) suggests that the Rorschach may improve the quality of pre-employment screening, and especially when used in the conjunction with self-reported measures. [Güntert and Nascimento \(2000\)](#) studied the role of the high DEPI index in the executive selection concept. The DEPI index is an interesting indicator because recent studies suggest that executives are under considerable stress, which leads to a tendency to distance themselves from their own feelings, which in turn can increase the risk of their becoming depressed ([Lyons, 2002; O’Roark, 2002](#)). However, the papers concerning personnel assessment and recruitment are mainly reviews and empirical research is rare.

Prior research suggests the Rorschach method is especially helpful when trying to evaluate how the individual will perform in unpredictable, unstructured, and unfamiliar situations ([Dies, 1995; Finn, 1996](#)). Several studies concerning clinical settings have supported the view that the Rorschach has the ability to predict future behavior ([Exner, 1993; 2003; Hiller et al., 1999; Viglione, 1999; Smith et al., 2001](#)). This may mean that if the Rorschach is part of a battery of tests, it may improve the effectiveness of personality screening procedures.

## **2. Research Problems**

This study suggests first that RCS variables will explain a leader’s performance. Second, this study argues that the RCS variables moderate the relationship between JP fit and the leader’s performance. The purpose of this research is to offer new insights into the things that affect the leader’s job performance. This study suggests that the RCS is a potentially very useful tool in the assessment process and that executive professionals should add it to their methods toolbox. The research problems addressed in this study are:

H1. Personality—as evaluated by both self-assessment methods and the RCS—is associated with job performance.

H2. The RCS variables moderate the relationship between the JP fit and the leader’s performance.

The current research evaluates earlier studies ([Exner, 1993; Ganellen, 1994; 1996; Dies, 1995; Finn, 1996; Zacker, 1997; Hiller et al., 1999; Viglione, 1999; Del Giudice, 2010a; 2010b](#)) and concludes that the JP fit and RCS variables will explain the leader’s performance, and also moderate the relationship between the JP fit and the leader’s performance. The RCS variables of personality may either lead to bad performance (even when there is a fit measured with the self-report methods) or lead to good performance (even when there is no fit based on the self-reported method). For example, even if a leader had a good fit in the job (based on the self-reported methods), the performance will not be good if he/she does not have the required stress tolerance level.

### 3. Methods

Data (n = 203) were collected in Finland from a global manufacturing organization during 2010–2011. All but two of the firm's lower and middle level leaders participated in this research. Towards each leader it was selected between three and six subordinates who evaluated the leader's performance with the WOPI 360 tool. Five nominated subordinates had either retired or were on long-term sick leave and were therefore replaced by the employees next on the list. The supervisor, who analyzed what kind of personality traits would be ideal in a certain job, conducted each job analysis. Among the whole group of participants, 80 % were male and 20 % female, and their mean age was 46.

#### 3.1. Methods and Study Variables

First internal consistencies were computed for the scales. The Cronbach's alpha value for the WOPI 360 tool was 0.99, thus meeting the reliability criterion. In contrast the internal consistencies were 0.61 for the congruence of all dimensions. The congruence variable was constructed first by summing the single dimensions separately from the leaders' and the "ideal" person results that were evaluated by the supervisor, and then the absolute difference between the leader's score and the ideal personality score was calculated. Then the final sum dimension was calculated by summing these single sum dimensions. In spite of the low alpha values they are considered acceptable because newly developed scales may have values of under 0.7 (Nunnally and Bernstein, 1994).

The study involved 51 Rorschach protocols, all of them relating to managerial positions. According to Exner (1995) some 20% to 25% of all the protocols should be randomly selected by an independent professional. In this study, 20 randomly selected protocols were recoded by the clinician and researcher Tuula Ilonen. The intraclass correlations are presented in Table 1.

**Table-1.** Internal reliability: intraclass correlation coefficients

Variable	Intraclass coefficients (n = 20)	p
Dd	1	< .001
S	.98	< .001
DQo	.99	< .001
DQv	.95	< .001
Dets	.98	< .001
Non F	.97	< .001
FQo	.92	< .001
FQ-	.96	< .001
(2)	.99	< .001
Cont	.99	< .001
P	.95	< .001
Zf	.98	< .001
Sum6	.76	< .001
Sum6 & NoSum6	1	< .001
Other SpSc	.88	< .001
Other SpSc+OtherSpSc	.98	< .001
SpSc	.80	< .001
SpSc & NoSpSc	.98	< .001

- *Dependent variable (Performance):* Leader's performance was measured by 203 subordinates with the WOPI 360 tool (Niitamo, 2010). WOPI 360 is a multi-rater tool for appraisal of competence resources and deficits (Niitamo, 2010).
- *Independent variable (JPfit):* Personality was measured with a standardized self-report questionnaire, the Work Personality Inventory (WOPI) (Nederström and Niitamo, 2010; Niitamo, 2010).
- *The Moderating Variable(s):* The personality was measured by the RCS (Exner, 1993; 2000; 2003).

*Personality and fit.* Personality was measured by a standardized self-report questionnaire, the Work Personality Inventory (WOPI) (Nederström and Niitamo, 2010; Niitamo, 2010). WOPI is based on the psychology of motivation (7 scales), thinking (4 scales) and attitudes (3 scales). The items were assessed on a dichotomous (True-False) scale (Niitamo, 2010). The inventory comprises 224 items, each with 14 scales measured by 14 items (Niitamo, 2010). These 14 dimensions are arranged along the five general competencies at work (Niitamo, 2010). In this study the items were examined at the level of the sum of dimensions rather than that of single dimensions. The dimension was studied and calculated using the data from primary single dimensions. The difference between the subordinate's evaluated ideal personality and leader's actual personality factors were calculated for the dimension sum (JPfit = ideal personality – actual personality). Personality was also measured by the Rorschach test, a personality assessment method. There are ten inkblots in the test and five of them are black while another five contain at least some colored ink. The person being tested is asked to respond to the question "What might this be?" for each card (Exner, 1993; 2003). The Rorschach and the Comprehensive System (Exner, 1993; 2000; 2003) has been proved to possess equivalent reliability and validity compared to self-report measures (Ganellen, 1996; 2001).

The test data falls into eight clusters and this study focuses on five of those and the variables that have received support in earlier studies, since it was not feasible to take all the variables from the RCS (Piotrowski and Rock, 1963; Porcelli and Meyer, 2002; Exner, 2003; Bornstein and Masling, 2005; De Villemor-Amaral, 2007). The clusters in this study are 1) stress tolerance (D, AdjD), 2) interpersonal perception (CDI, Fd, PHR, GHR, COP), 3) information processing (Zf, Zd), 4) cognitive mediation (XA%, X-%), and 5) self-perception (Fr+rF, EGOI, FD). Furthermore, the *DEPI (depression) index* was absorbed into this study since it has received support in earlier studies (Güntert and Nascimento, 2000). All the variables are included in Table 1.



**Table-2.** Variables, (Exner, 2000; 2003)

<b>Stress Tolerance</b>	
D	The individual's tendency to become disorganized when facing stressful situations and the individual's tendency to act impulsively in the stressful situations.
AdjD	The ability to maintain control under stress.
<b>Interpersonal Perception</b>	
CDI	The individual's vulnerability to chronic interpersonal difficulties. High scores usually reflect chaotic interpersonal history and a lack of sensitivity to the needs of others. CDI includes 11 variables and can yield scores of 0–5.
Fd	Food ( <i>Fd</i> ) responses typically indicates the dependency orientation. The value is expected to be zero. A value higher than zero suggests the behavior of the person reflects a higher level of dependency than is usual. People with one or more <i>Fd</i> responses tend to be naïve in their expectations concerning the support available and interpersonal relations.
PHR	Poor human representation ( <i>PHR</i> ) responses usually indicate an interpersonal history dominated by difficulties and failures. People with many PHR responses are usually rejected by others.
GHR	Good human representation ( <i>GHR</i> ) responses indicate an interpersonal history that has been dominated by adaptive behavior.
COP	Cooperative movement ( <i>COP</i> ) responses indicate that the interpersonal exchanges are positive. The COP responses indicate an interest in cooperating with others.
<b>Information Processing</b>	
Zf	<i>Zf</i> is the frequency of the numbers of responses to which the Z score has been assigned. The <i>Zf</i> gives an estimation of the processing effort. <i>Zf</i> has a positive correlation with intelligence and with the need for achievement (Exner <i>et al.</i> , 1984).
Zd	The <i>Zd</i> score gives an estimation of the efficiency of the scanning activity during processing operations. It may also give information on the motivation to process effectively. The value of <i>Zd</i> is expected to be between +3.0 and -3.0. If the <i>Zd</i> value is under -3.0, the person neglects some critical cues in the stimulus field. This may lead to less effective behavior. If the <i>Zd</i> score is over +3.0, the person puts more effort into scanning activities than is necessary. This is usually a trait-like style because the person wants to avoid making mistakes. However this style may indicate a person finds it difficult to make decisions.
<b>Cognitive Mediation</b>	
XA%	XA% gives direct information on data mediation. More specifically, the XA% indicates how well the mediation activities are to yield behaviors that are appropriate to the situation. The lower the value, the more the subject is likely to struggle with mediation activities.
X-%	X-% indicates the frequency of the uncommon responses in the blot contours. A significant amount of negative answers usually indicates problems with the cognitive dysfunction that can be related to psychological or neurological problems. The X-% is expected to be less than 0.15. If the X-% is over 0.25 there may be some mediational dysfunctions and inappropriate behavior is to be expected.
<b>Self-Perception</b>	
Fr+rF	Reflections ( <i>Fr + rF</i> ) typically indicate the narcissism-like personality features. Typically people with this kind of personality tend to value themselves very highly. This does not automatically mean that there are some pathological features in the personality but in some cases it is possible. If the <i>Fr+rF</i> is greater than zero, self-involvement tends to dominate perceptions. This feature typically has a strong influence on decision making and behavior.
EGOI	<i>The Egocentricity Index</i> reflects self-concern and self-esteem.
FD	<i>FD</i> responses indicate introspective behavior.
<b>The Complete Description</b>	
DEPI	<i>The DEPI (depression) index</i> includes 14 variables and can attract scores from zero to seven.

*Leader's Performance.* Leader's performance was measured by the WOPI 360 tool (Niitamo, 2010). WOPI 360 is a multi-rater tool for the appraisal of competence resources and deficits (Niitamo, 2010). The leader's behavior was appraised with 45 standard questions. Questions were answered on a 0 (= not at all descriptive) to 6 (= very descriptive) Likert scale. In this study only one rater group was used, the manager's direct subordinates, the number of whom ranged from three to six for each manager.

### 3.2. Analysis

The data were analyzed with the SPSS 18.0 for Windows program. The associations between the JPfit, the leader's performance, and the RCS variables were examined by way of the Pearson correlation. The moderating models were tested with hierarchical regression analyses. A series of stepwise hierarchical multiple regression analyses were examined to test the interaction effect of RCS variables on the relationship between JP fit and leader's performance. The gender was entered in the first step of the analysis, the JP fit in the second step, the RCS variable in the third step, and the interaction term in the fourth step.

## 4. Results

*The correlations between Job–Person Fit, Performance, and the RCS variables:* Table 3 illustrates correlations among the variables. The JP fit had statistically meaningful positive associations with the leader's performance ( $r = 0.43$ ,  $p < .001$ ). The more similar the preferred personality and the actual personality congruence, the better the leader's performance was. The JP fit had a positive correlation with the stress tolerance variables (D,  $r = 0.24$ ,  $p < .01$ ; Adj D,  $r = 0.28$ ,  $p < .001$ ). It seems that the leaders with good fit with their work, also had high levels of stress tolerance. From the interpersonal perception variables, the CDI ( $r = -0.23$ ,  $p < .01$ ), Fd ( $r = 0.20$ ,  $p < .01$ ), and COP ( $r = 0.22$ ,  $p < .01$ ) were related to the JP fit. Leaders with a good fit on the personality level also seem to be interested

in cooperating with others, have fewer interpersonal difficulties, and to be sensitive to the needs of others. Among the interpersonal perception variables, the PHR ( $r = .05, p > .05$ ) and GHR ( $r = 0.10, p > .05$ ) showed no correlation to JP fit. Both variables concerning information processing were associated with JP fit (Zf,  $r = 0.17, p < .05$ ; Zd,  $r = .22, p < .01$ ). The closer the fit, the more effort the leader put into processing. Neither of the cognitive mediation variables (XA%,  $r = 0.02, p > .05$ ; X-%,  $r = 0.00, p > .05$ ) were associated with JP fit and only FD ( $r = -.22, p < .01$ ) among the self-perception variables (Fr+rF,  $r = -0.01, p > .05$ ; EGOI  $r = 0.13, p > .05$ ) was associated with that same JP fit. DEPI had negative association ( $r = -0.20, p > .01$ ) with JP fit. It seems that the leader with a good JP fit experiences fewer feelings of depression.

Leader performance was associated with the JP fit ( $r = 0.43, p < .001$ ). The more similar the preferred personality and the actual personality congruence, the better the leader's performance was. Performance was also related to gender ( $r = .15, p < .05$ ) and the subordinates were more pleased with the female leaders' performance than that of male leaders. The leaders' performance was associated with both stress tolerance variables (D,  $r = 0.27, p < .001$ ; AdjD,  $r = .30, p < .001$ ). The better a leader's stress tolerance, the better the performance was. Performance was associated with GHR ( $r = .15, p < .05$ ) and COP ( $r = .15, p < .05$ ) among the Internal Perception variables whereas there was no correlation with CDI ( $r = -0.06, p > .05$ ), Fd ( $r = 0.09, p > .05$ ) and PHR ( $r = .11, p > .05$ ). If a leader had an adaptive interpersonal history and if the interpersonal exchanges were positive, the leader performance was also likely to be good. Among the information processing variables only Zd ( $r = -0.22, p < .01$ ) was associated with performance. Therefore the efficiency of the scanning activity during the processing operation is associated with the leader's performance. The Zf ( $r = 0.09, p > .05$ ) had no correlation with leader performance. From the cognitive mediation variables the XA% ( $r = 0.15, p < .05$ ) and X-% ( $r = -.23, p < .01$ ) showed a connection to the leader's performance. The result suggests that the better the leader is able to yield the mediational activities behaviors that are appropriate to the situation and the less the leader have the uncommon responses that in the blot contours the better the performance. The narcissism-like feature of personality (Fr + rF) was the only variable among the self-perception variables that was correlated with performance ( $r = 0.15, p < .05$ ). The more narcissism-like features the leader demonstrated, the better the performance. The depression index was also associated with performance ( $r = -.34, p < .01$ ). The less the leader experienced feelings of depression, the better the performance.

**Table-3.** Correlations between the leader's performance, burnout, and the fit between the actual personality and the ideal job demands.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	18	19
1. Gender (1 = male, 2 = female)	1																	
2. FIT	.05	1																
3. Performance	.15*	.43***	1															
4. D	.15*	.24**	.27***	1														
5. AdjD	.13	.28***	.30***	.86	1													
6. CDI	.03	-.23**	-.06	-.44	-.44	1												
7. Fd	.15*	.20**	.09	.18	.16	-.05	1											
8. PHR	-.11	.05	.11	.12	.12	-.16	.10	1										
9. GHR	.25***	.10	.15*	.43	.43	-.25	.00	-.37	1									
10. COP	.16*	.22**	.15*	.22	.10	-.17	-.10	-.17	.40	1								
11. Zf	.06	.17*	.09	.23	.05	-.23	-.00	.52	.19	.27	1							
12. Zd	-.17*	.22**	-.22**	-.04	-.27	-.28	-.09	-.03	-.15	.14	.13	1						
13. XA%	.11	.02	.15*	.32	.40	-.29	-.03	-.29	.47	-.01	.01	-.22	1					
14. X-%	-.10	.00	-.23**	-.28	-.32	.24	.07	.26	-.42	.02	-.04	.24	-.96	1				
15. Fr+rF	.06	-.01	.15*	-.30	-.26	.16	-.15	.12	-.07	.12	.15	.07	-.06	-.06	1			
16. EGOI	.04	.13	.09	-.12	-.06	.07	-.26	-.05	.05	.22	.01	.07	.20	-.23	.45	1		
17. FD	-.12	-.22**	-.03	-.03	-.06	-.21	.22	.21	.01	.07	.28	.08	-.03	.03	-.19	-.29	1	
18. DEPI	-.25***	-.20**	-.34**	.04	-.07	-.09	.03	.29	-.30	-.39	.10	.15	-.32	.30	-.25	-.58	.13	1

[0.21 – 0.26] significant at the 0.05 level, [0.27 – 0.64] significant at the 0.01 level

$r = |.25-.96|, p < .001$

$r = |.20-.24|, p < .01$

$r = |.14-.19|, p < .05$

**Job–Person fit and the association of the RCS variables with the leader's performance: regression analysis:** To examine the hypothesis regarding the moderating effect of stress tolerance, interpersonal perception, information processing, cognitive mediation, self-perception and DEPI, 15 separate hierarchical multiple regression analyses were performed. The first step assessed the effect of gender on the dependent variables and the second step assessed the JP fit. In the third step, the predictor variables were entered, followed by the inclusion of the interaction terms in the fourth step. The results concerning the hierarchical regression analysis are to be found in Tables 4–9.

**Stress Tolerance:** The moderating effect of stress tolerance on the relationship between job–person fit and leader's performance was examined first. Table 4 shows that JP fit (D,  $\beta = 0.35, p < .001$  and AdjD,  $\beta = 0.31, p < .001$ ) has a significant impact on leader's performance, after controlling for gender. In addition, AdjD ( $\beta = -0.28, p < .05$ ) had an impact on performance. The interaction terms D ( $\beta = -0.35, p < .05$ ) and AdjD ( $\beta = -0.53, p < .001$ ) with JP fit both show a significant effect on leader performance and in both cases added significant incremental variance at step 4. The interaction term model with D explained 25 % and with AdjD 29% in terms of leader performance.

**Table-4.** Hierarchical regression analysis predicting moderation of stress tolerance

Independent variables	D			Adj D		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1	.13*	.02*	.02*	.14*	.02*	.02*
Gender (1 = male, 2 = female)						
Step 2	.35***	.20***	.18***	.31***	.20***	.18***
FIT						
						Continue

Step 3	-.14	.23*	.03*	-.28*	.23**	.03**
D/AdjD						
Step 4	-.35*	.25*	.03*	-.53***	.29***	.06***
FIT × D/AdjD						

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

**Interpersonal Perception:** The moderating effect of interpersonal perception on the relationship between job–person fit and the leader’s performance was confirmed for the variables Fd, PHR, and GHR. Table 5 shows that the coefficients were significant in Fd ( $\beta = -0.70, p < .001$ ), PHR ( $\beta = -0.77, p < .001$ ), and GHR ( $\beta = -0.36, p < .05$ ). The model with Fd explained 33%, with PHR 28%, and with GHR 23% in terms of leader performance. For CDI and COP, the coefficient was not significant and did not add significant incremental variance either in step 3 or step 4.

**Table-5.** Hierarchical regression analysis predicting the moderation effect of interpersonal perception

Independent variables	CDI			Fd			PHR			GHR			COP		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1	.13*	.02*	.02*	.22***	.02*	.02*	.14*	.02*	.02*	.15*	.02*	.02*	.14*	.02*	.02*
Gender (1 = male, 2 = female)															
Step 2	.33	.20***	.18***	.57***	.20***	.18***	.67***	.20***	.18***	.63***	.20***	.18***	.44***	.20***	.18***
FIT															
Step 3	.07	.20	.00	-.63***	.20	.00	-.59**	.21	.01	-.20	.21	.01	-.02	.20	.00
CDI/Fd/PHR/GHR/COP															
Step 4	.12	.21	.00	-.70***	.33***	.13***	-.77***	.28***	.07***	-.36*	.23*	.02*	-.07	.21	.00
FIT × CDI/Fd/PHR/GHR/COP															

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

**Information Processing:** Table 6 illustrates that the Zd factor relates to performance ( $\beta = 0.70, p < .001$ ). The Zd at Step 3 added significant incremental variance and the model explained 39 % of the leader’s performance. For Zf, the coefficient was not significant. The model did not add significant incremental variance in either step 3 or step 4.

**Table-6.** Hierarchical regression analysis predicting moderation of Information Processing

Independent variables	Zf			Zd		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1	.14*	.02*	.02*	.10	.02*	.02*
Gender (1 = male, 2 = female)						
Step 2	.55*	.20***	.18***	.52***	.20***	.18***
FIT						
Step 3	-.03	.20	.00	.30*	.30***	.09***
Zf/Zd						
Step 4	-.14	.20	.00	.70***	.39***	.09***
FIT × Zf/Zd						

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

**Cognitive Mediation:** Table 7 records how XA% and X-% at step 3 added significant incremental variance and the model explained 22% of the incremental variance in model XA% and 25% in the model X-%. The interaction terms at step 4 did not add significantly to the incremental variance and the cognitive mediators did not moderate the relationship between JP fit and leader performance.

**Table-7.** Hierarchical regression analysis predicting moderation of cognitive mediation

Independent Variables	XA%			X-%		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1				.11	.02*	.02*
Gender (1 = male, 2 = female)	.12	.02*	.02*			
Step 2	.30	.20***	.18***	.45***	.20***	.18***
FIT						
Step 3	.16	.22*	.02*	-.25	.25**	.05**
XA%/X-%						
Step 4	.13	.22	.00	-.04	.25	.00
FIT × XA%/ X-%						

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

**Self-Perception:** The moderating effect of self-perception variables on the relationship between JP fit and leader performance was confirmed by the variables Fr+rF and EGOI. Table 8 shows that only EGOI ( $\beta = -0.93, p < .001$ ) has a significant impact on a leader’s performance. The interaction terms in Fr+rF and EGOI with JP fit show a significant effect on a leader’s performance and in both cases added significant incremental variance at step 4. The

interaction term model with Fr+rF explained 25 % and with EGOI y 28% of the leaders' performance. For FD, the coefficient was not significant and the model did not add significant incremental variance either in step 3 or step 4.

**Table-8.** Hierarchical regression analysis predicting moderation of self-perception

Independent Variables	Fr+rF			EGOI			FD		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1	.16*	.02*	.02*	.12*	.02*	.02*	.14*	.02*	.02*
Gender (1 = male, 2 = female)									
Step 2	.52***	.20***	.18***	1.17***	.20***	.18***	.37***	.20***	.18***
FIT									
Step 3	-.15	.22*	.02*	-.56***	.20	.00	.31	.21	.01
Fr+rF/EGOI/FD									
Step 4	-.34*	.25*	.02*	-.93***	.28***	.07***	.27	.22	.01
FIT × Fr+rF /EGOI/FD									

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

DEPI: The moderating effect of DEPI on the relationship between JP fit and a leader's performance was confirmed (see Table 9). DEPI ( $\beta = 0.66, p < .01$ ) and had a significant impact on leaders' performance and the interaction term with JP fit added significant incremental variance at step 4. The interaction term model with DEPI explained 28 % of a leader's performance.

**Table-9.** Hierarchical regression analysis predicting moderation of DEPI

Independent Variables	.DEPI		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1	.12	.02*	.02*
Gender (1 = male, 2 = female)			
Step 2	-.06	.20***	.18***
FIT			
Step 3	.16	.26***	.05***
DEPI			
Step	.66**	.28**	.03**
FIT × DEPI			

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

$\beta$  = standardized coefficient on the last step.,  $\Delta R^2 = R^2$  Change

## 5. Discussion

The present study conducted among leaders was designed to investigate the role of the RCS variables in the leaders' performance. More specifically this study examined whether the RCS variables had a moderating effect on the relationship between the JP fit and a leader's performance. Most of the hypotheses were supported by the results of a series of multiple hierarchical regression analyses.

Leader performance was associated with the JP fit. The more similar the preferred personality and the actual personality congruence the better the leader's performance. The leader's performance was positively associated with both stress tolerance variables. The better the leader's stress tolerance, the better the performance. Among the interpersonal perception variables, the GHR and COP were positively associated with performance. It seems that if the leader has an adaptive interpersonal history and if the interpersonal exchange has been positive, the performance as a leader is likely to be strong. It is interesting to note that only the positive variables among the interpersonal perception variables were associated with performance whereas the variables (CDI, Fd, and PHR) that suggest some form of problem with interpersonal perceptions showed no correlation. The Zd variable correlated with performance and therefore the efficiency of the scanning activity during the processing operation is associated with the leader's performance. The result is as expected since the Zd variable has an effect on the decision making. In contrast, the Zf variable did not correlate with leader performance, which was unexpected since the variable gives an estimation of the processing effort, and is associated with intelligence and with the need for achievement. Both cognitive mediation variables, XA% and X-%, had a connection with a leader's performance. The better the leader is able to yield the meditational activities behaviors that are appropriate to the situation, and the fewer uncommon responses in the blot contours, the better the performance. The narcissism-like feature of personality (Fr+rF) was the only variable from the self-perception variables that had a correlation with performance. Unexpectedly the correlation was positive rather than negative. This means that the more narcissism-like features the leader possessed, the better the performance. The depression index was also associated with performance. As expected, the less prone the leader is to feelings of depression, the better the ultimate performance.

The moderating effect of self-perception variables on the relationship between JP fit and leaders' performance was confirmed with the variables D, AdjD, Fd, Fr+rF, EGOI, PHR, GHR and DEPI. This means that even though there is a good fit between the ideal personality and the actual personality, the performance can still be poor if the leader does not have stress tolerance, has low self-esteem, or is suffering from feelings of depression. On the other hand, even when there is no fit, the performance may still be good, if the leader has strong interpersonal skills, or has high self-esteem.



## 5.1. Limitations

When generalizing these results there are some limitations that should be noted. The study is cross sectional, making it impossible to draw any conclusions on the direction of causality. Moreover, participants were mostly male, so these results best represent the situation prevalent in the manufacturing sector. It should also be noted that some variables were based on self-assessment. The weakness of self-assessment could lie in the socially desirable answering style or the unwillingness to answer some questions. The sample size (N = 203) is adequate to offer statistically significant results. However, it should also be noted that there might be some internal correlations since there were only 51 Rorschach protocols but 203 performance evaluations. The survey response rate was extremely encouraging, as only two leaders and five subordinates could not participate in the research.

## 5.2. Theoretical Implications and Future Studies

Overall the theory of fit is an interesting and important background theory for many human resources management processes, particularly for the recruitment process. It should also be noted that the WOPI-based JP fit was strongly associated with leaders' performance and the sum dimensions did explain some 18% of the variance at the second step alone. The trait approach, especially the Big Five, has dominated personality research, but WOPI and its multifactorial personality approach seem to be a strong alternative. Moreover, the results of the use of the RCS in the job assessment context are very promising. Based on this research, businesses might be wise to add the RCS method to their toolkits, and also to find the fit for deeper level personality features. However we cannot be certain about the causality of these variables. Longitudinal studies would be needed to clarify the cause and effect relationship.

It is also important to remember the recommendation about using multi-method tools, so the RCS method should never be used alone but as part of the method toolkit. While there were correlations between the Rorschach variables and the WOPI-based JP fit, there were no correlations with the thinking process variables or for example the narcissism-like personality trait. These are the variables that are extremely difficult for an individual to evaluate so this might also support the view from the multi-method evaluation that each test measures some aspect of personality that the others do not. Perhaps the most important aspect is the suggestion that in the field of recruitment, the Rorschach and self-report inventories complement each other and provide far more information when used together than is accessible when either test is used alone (Ganellen, 1996).

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