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The Person-Job Fit Scale: psychometric properties for three samples of Greek employees

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In the literature regarding occupational fit and characteristics, for many years the most employed theory has been the Person-Environment fit of John Holland, which has resulted into several ways of assessment of this fit through the Self-Directed Search (*SDS*, Holland, 1985a) and other instruments such as the Vocational Preferences Inventory (*VPI*, Gottfredson, Jones & Holland, 1993; Holland, 1985b). There are, however, other attempts to measure similar constructs by devising other ways of person-occupation relationships and person-job congruence.

For such attempts, it is the extent of fit perceived by the individual that is assessed, that is, the extent of fit with the actual job that has to be performed within an occupation. This fit is distinguished from the person-organization or the person-environment fit and has been operationalized by Brkich, Jeffs and Carless in 2002. The same authors, for a sample of professionals and a sample of administrators have managed to connect their Global Self-Report measure of Person-Job Fit with empowerment within occupational activites and specifically with the match of values and beliefs with the work role, and also with job satisfaction, that is, satisfaction with the work itself.

Method and Procedures

The Global Self-Report Measure of Person-Job Fit consists of 9 items; these items assess a single underlying construct with internal consistency of .92. The authors of the scale arrived at this pool of items through several stages of item selection and item analysis. Interviews were employed at the first stage resulting into 14 items and after item selection through item and factor analysis, the final scale proposed by Brkich, Jeffs and Carless (BJC in short) consists of 9 items, all with loadings of .50 and above.

Table 1. The Person-Job Fit Scale (BJC) factorial structure as reported by Brkich, Jeffs and Carless (2002)

Items (*7-point Likert scale*)	Study 1 loadings (unifactorial)	Study 2 loadings (unifactorial)
My current job is not really me	.85	.84
This job is not really what I would like to be doing	.84	.73
All things considered, this job suits me	.79	.87
I feel like this is not the right type of work for me	.79	.75
I feel that my goals and needs are met in this job	.76	.81
I find my current job motivating	.72	.76
My abilities, skills, and talents are the right type for this job	.69	.73
I am sure there must be another job for which I am better suited	.68	.72
I am able to use my talents, skills and competencies in my current job	.53	.65
Cronbach α coefficients (Brkich, Jeffs, & Carless, 2002)	*.92*	*.92*

For the version used in this study, cultural differences were taken into consideration and several alternative items were composed for two reasons: **a**) to serve as possible replacements of original items, in the case that the construct assessed by the original BJC scale was not as clear in the Greek data, and **b)** to possibly constitute a diverse construct within the scale that might be contradistinctively related to the main Person-

Job Fit construct. In all, 23 more items were composed for the Greek version of the BJC scale, thus the questionnaire used in the study consisted of 32 items in all, phrased in a similar fashion with the original scale, placed in random order. Examples of the Greek version complementary items are: "*I feel that my skills, talents and abilities are underestimated in my job*" and "*I feel that I am effective in my job*". All 32 items were scored by the respondents on a "Yes – No" basis.

The three samples involved in this study were: 41 taxation officers (31.8%), 45 computer users-databank operarors (34.9%) and 43 university staff members (33.3%), in all, 129 participants. Most of the respondents were females (approximately 73%) due to the fact that the databank operators were mostly females; 27% of the sample were males.

Results and Discussion

We first focused on item selection from the initial 32 item databank, in order to avoid metric and methodological problems. On the basis of each item's relation to the overall component in the data, its variance levels and its correlation with each and everyone of the other items, we arrived at the final set of items to be analyzed which was comprised of 22 items-data points. At this first stage of the analysis, through principal component extraction with orthogonal rotation of the axes we arrived at the factor structure presented in Table 2.

Table 2. Factor analysis (principal components, orthogonal rotation) for 22 items

Items	F1	F2	F3
All things considered, this job suits me (BJC3)	**.84**	.18	.13
My current job is really me (BJC1, positively phrased)	**.78**	.34	.10
This job is really what I would like to be doing (BJC2, positively phrased)	**.77**	.31	.17
My abilities, skills and talents are the right type for this job (BJC7)	**.70**	.24	-.04
I feel that my goals and needs are met in this job (BJC5)	**.64**	.00	.16
I am allowed to setup my working space	.24	**.77**	.14
I am allowed to find the best solution for petty matters	.17	**.71**	.15
I find my current job motivating (BJC6)	.16	**.59**	.29
I am allowed to work creatively	**.40**	**.58**	.25
I am able to use my skills, talents and competencies in my current job (BJC9)	.34	**.46**	.22
I have control over matters in my job	.29	**.38**	*.36*
There is human contact in my job	-.06	.19	**.81**
I receive satisfactory treatment from my colleagues	.17	.13	**.72**
My colleagues acknowledge my efforts	.23	.20	**.66**
My colleagues respect my opinion	.12	.20	**.65**
My employer aknowledges my efforts	.15	.07	.15
I receive satisfactory treatment from my employer	.16	.05	.21
My employer respects my opinion	.15	.21	.24
I feel like this is not the right type of work for me (BJC4)	.07	.13	.01
I am sure there must be another job for which I am better suited (BJC8)	.10	*.36*	.02
My skills, talents and abilities are underestimated in my job	*.36*	-.18	.19
I don't like innovations in my work	-.14	-.07	-.04
Cronbach α coefficients for the three factors, respectively:	**.87,**	**.80,**	**.80**

This exploratory solution resulted into three factors, all with satisfactory levels of internal consistency: the first factor is composed by six items with five of them being original Person-Job Fit items. The sixth item refers to a *creativity* element in the job which seems to be a correlate of the main core of person-job fit for the Greek employees. The same item loads on the second factor as well, a factor composed by six items, two of them being original person-job fit items. This factor could be named "Control and motivation in the job". The third factor is composed only by complementary items and might depict a facet that can be named "Relationships with colleagues". This last facet, according to the theory, is **not** a part of Person-job fit, which has only to do with the judgements made in relation to the tasks performed. However, even if this facet reflects some organizational or job-environment parameter, it might indicate that judgements that have to do with job tasks for Greek employees are strongly interconnected with human interaction within their job-framework. On the other hand, the three factors are orthogonal, meaning that factor scores are non-related; thus, one could fit perfectly in the job but at the same time, be very dissatisfied with colleagues.

The next analysis was carried out in order to explore for the factor structure by analyzing **only** the 9 original BJC scale items. This was done in an attempt to reproduce and compare the unifactorial structure of the original scale for the Greek samples. The exploratory outcomes showed that we might support the existence of a single factor in the data, but there were also some indication for a second factor. However, this factor could not be clearly identified, because it was composed of two items, which were "*I feel like this is not the right type of work for me*" and "*I am sure there must be another job for which I am better suited*" (Table 3).

Table 3. Single-factor and Two-factor exploratory factor analyses for the original 9-item Person-Job Fit Scale

Sample: 129 Greek employees	EFA 1	EFA 2	
My current job is really me (BJC1, positively phrased)	**.85**	**.85**	.20
This job is really what I would like to be doing (BJC2, positively phrased)	**.83**	**.83**	.20
All things considered, this job suits me (BJC3)	**.84**	**.83**	.21
I feel like this is not the right type of work for me (BJC4)	*.40*	.04	**.88**
I feel that my goals and needs are met in this job (BJC5)	**.63**	**.65**	.09
I find my current job motivating (BJC6)	**.54**	**.43**	.36
My abilities, skills and talents are the right type for this job (BJC7)	**.75**	**.71**	.25
I am sure there must be another job for which I am better suited (BJC8)	**.51**	.18	**.83**
I am able to use my skills, talents and competencies in my current job (BJC9)	**.51**	**.60**	-.09
Cronbach α coefficients	**.83**	**.85**	**.72***

** Pearson r correlation coefficient*

In comparing through Tucker Phi coefficients these exploratory outcomes with the original scale factor structures (Brkich, Jeffs & Carless, 2002), it was evident, as expected, that for the single factor solution the structures were identical but this was not the case for the two-factor structure where identity was present for the first factor (Phi=.91) and no similarity was present for the second factor (Phi<|.90|). This last result might give an indication that even without these two items, there is still strong

similarity in the person-job fit constructs as supported by the theory and this "reduced" scale.

The second stage employed confirmatory factor analysis models for the 22 items factor structure but mainly also for the original 9-item factor structure. Starting with the 9-item factor structure, it was shown that there was no perfect fit in the Greek data for all 9 items in a single factor solution; however, when the two error terms for the 4th and the 8th original person-job fit scale items were correlated, the fit was shown to be perfect, indicating a possible exogenous factor. This factor composed by these two items could be a cultural effect, thus, this might be an indication of possible cross-cultural differences (Figure 1).

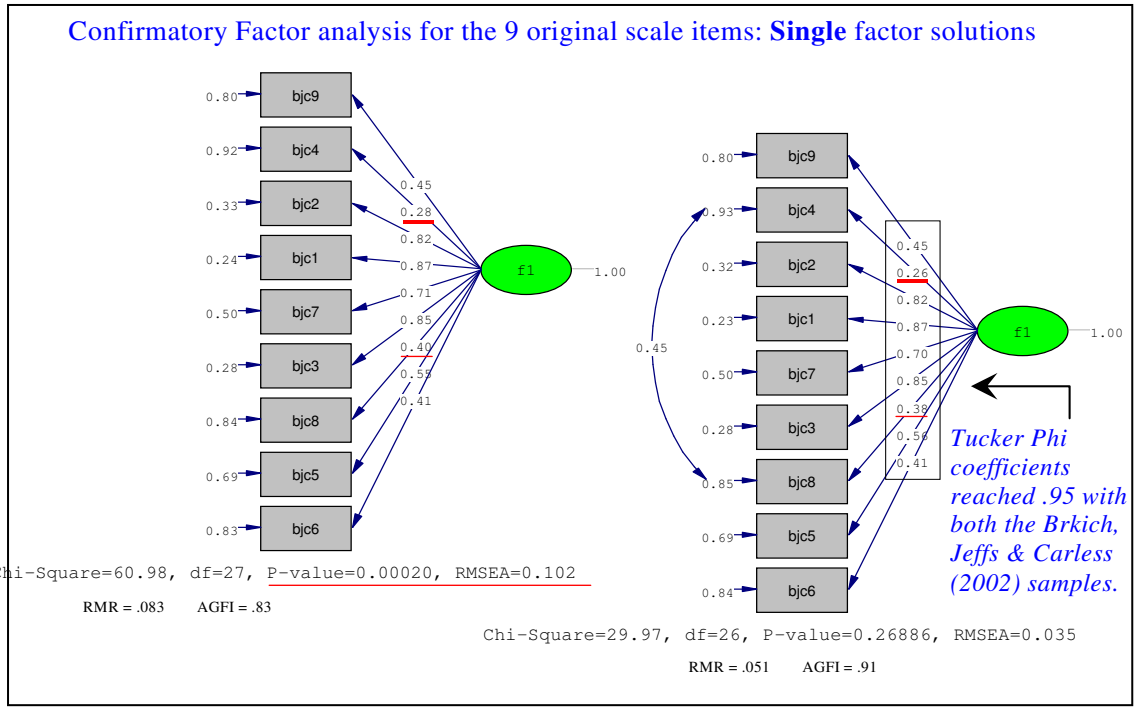

Figure 1. Confirmatory factor analysis standardized coefficients (unifactorial solutions) for the original 9-item person-Job Fit Scale.

A way to explore further for possible cultural specificities was to return to the 22 item pool and test for a three factor solution for the 15 items participating in the structure as computed through the exploratory factor analysis in the previous stage. This attempt would account for items that might clarify the nature of the factor structure for the Greek version of the scale.

The outcomes showed that there was a nearly perfect fit to the data for the three factors but there was also a problem with the "*Allowed to work creatively*" item, which in the exploratory factor analysis loaded on both first and second factors. It seems that this Greek idiosynchratic connection of job with creativity might also indicate a confusion on the issue of creativity in Greek employees, and that this issue might be explored further in future research. However, overall, the main Person-job Fit factor can be explicated through the second "Control and motivation" factor for the Greek employees in our data; also, the "Relationships with colleagues" factor seems to be a vital part of this factor structure (Figure 2).

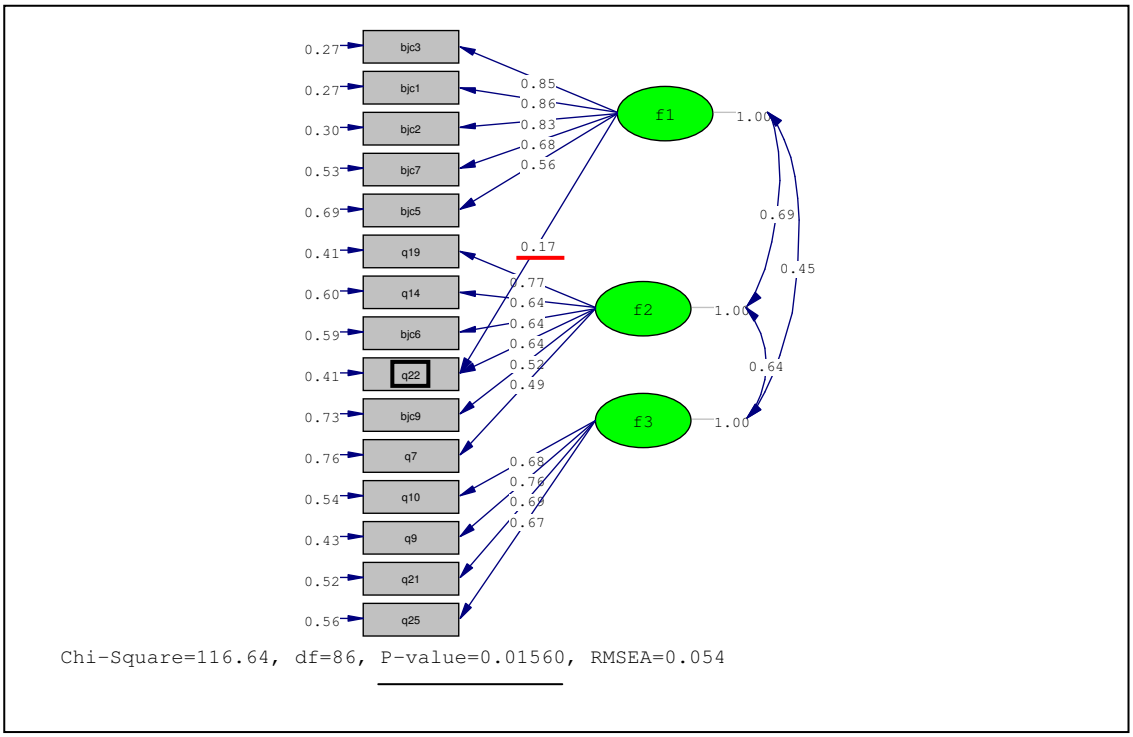

Figure 2. Confirmatory factor analysis (standardized coefficients) for a three factor model in the Greek data.

The main conclusions from this research project can be viewed through two perspectives: the first perspective is the psychometric one, although the second perspective which is a more theoretical one is also a possible discussion point under the present evidence. Therefore, in this study there is evidence for a single factor solution for the original Brkich, Jeffs and Carless Person-Job Fit Scale in the Greek data. However, there are also indications that a second factor, although less strong, could also be present in the data but it could be a possible outcome of bias in terms of culture.

A further approach to the Greek data through the complementary items and the respective factor structure denotes the presence of other facets connected to the original construct. The elaboration on these facets might be the source of information for possible metric inequivalences or cross-cultural differences for the construct.

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