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Work-family Interface and Job Performance: Job Satisfaction as Mediator

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ABSTRACT

The objective of the study was to examine the relationships between work-family interface, job satisfaction and job performance in an Argentinean workers sample. A cross-sectional empirical study, based on explicative-associative strategy was designed. An availability sample of 383 workers (195 male) from different kinds of organizations was conformed. Based on past evidence, it was hypothesized the mediator role of job satisfaction. Structural equation analysis showed that the indirect effects of work-family interface dimensions (conflict and enrichment) on job performance through job satisfaction were statically significant, which indicated partial mediation. All variables explained 72% of job performance variance. The study provides new evidence regarding the interrelations between job-family articulation and individual job performance, illuminating the crucial role played by satisfaction. Empirical findings and practical implications of the study are discussed.

1. Introduction

Job performance (JP) is one of the constructs that has received most of the attention of the organizational behavior scholars. Possibly, its popularity is because competitiveness and productivity of the organizations are intimately linked to the individual performance of its members$^1$. In this sense, experts$^2$ note that an effective management of performance benefits both employees and organizations. For employees, it results in positive self-esteem, sense of achievement and self-efficiency. For organizations, it involved a workforce more motivated and committed to the mission. In short, job performance is a key to ensure the effectiveness and success of an organization. Thence the permanent interest of researchers and professionals to unravel the factors and mechanisms through which it is possible to influence the performance of their employees.

Regarding conceptualization of the construct, even though the pioneering contributions of Murphy$^3$ in relation to the accuracy of the scope of the term are recognized, currently, there is a renovated interest in establishing the nature of the concept and differentiate it from other similar constructs, such as productivity and efficiency$^1$. In relation to the nature of the performance, the current tendency conceives it as a multidimensional construct, and it is defined as "those behaviors which are relevant for organizational goals and are under the indi-
vidual’s control [4]. It must be said that, for specific literature [1, 2, 4], the performance is related to the behaviors task-oriented (and to the ones which exceed the demands of the role, or behaviors extra-role); while productivity and efficiency are considered to be consequences of those behaviors.

In the background of JP, there are many variables related to the work environment, such as organizational support, reward system and justice perceptions, and dispositional variables (for example: motivation, emotional intelligence, self-efficiency, achievement necessity, etc.) have been identified [5]. However, besides these traditional variables, the tendency in force [7] consists in analyzing the predictive potential of other factors, as well as the mediator or moderator mechanisms, which may have influence on the individual performance.

1.1 Job-family Articulation and Job Performance

Facing the increasing number of single-parent families and couples in which both members work outside their home, the analysis of the job-family interface has become a subject of central interest in modern societies. The analysis of literature shows that the negative and positive perspective of the job-family articulation has had an independent development. However, reality indicates that individuals experience both phenomena at the same time; that is why it is convenient to explore both phenomena simultaneously [9].

The negative perspective of the job-family articulation [9] refers to the conflict among roles in which the demands generated in a domain are incompatible with the ones of the other domain. Therefore, complying with the demands of one of them makes it difficult the completion in the other. Following with this definition, the job-family conflict may be delimited according to the orientation in which it is generated. That is to say, if it starts in the family and goes towards job (family-work conflict, FWC) or if it goes from job towards the family (work-family conflict, WFC).

The results concerning the impact of the WFC on general job performance have not been conclusive. In that regard, evidence [10] shows that the correlation tends to be small, specifying that when the FWC correlates significantly and negatively with job performance, the WFC does not present significant associations. In the same way, recent studies [11] show that friends support softens the negative effects of the FWC on the performance, and that co-workers support debilitates the correlation between the WFC and job performance.

Regarding the dimensions of job performance, it has been informed [10] that the WFC has a higher influence on the behaviors of organizational citizenship than on the general job performance. In this way, the employees who experience some kind of conflict may execute the habitual tasks in the same way, but they may opt to reduce the discretionary behaviors in benefit of the organization. Concurrently, it has been noted [13] that the WFC negatively predicts both the performance in the context and in the task, as long as the FWC is also negatively correlated to the last one.

Regarding the positive perspective of the articulation, named as job-family enrichment (WFE) [14] means that combining the job and family roles produces positive effects, which radiate to every domain of life. In this sense, resources gained at work contribute to improve the quality of family life. The same happens the other way around: resources gained in the family improve job performance. Greenhaus and Powell [14] defined resources as assets that may be available when it is necessary to solve a problem (skills, physical and psychological abilities, social capital).

In relation to its consequences, it has been noted [15, 16, 17] that the WFE predicts a higher level of satisfaction, lower resignation intentions and a higher organizational commitment. However, evidence shows that its impact on the performance is not direct but mediated by other factors [18]. Among these, job satisfaction stands out as a possible mediator capable of explaining the influence of the WFE on organizationally valuable results.

1.2 The Mediator Role of Job Satisfaction

Since its emergence in the academic world, job satisfaction has been the object of diverse conceptualizations. These include from its consideration as a positive feeling, to its definition in terms of favorability (or unfavorability) with which employees evaluate their job [20]. During the last years, the alternative of conceiving it as a group of affective and cognitive response to the working situation, with important implications in the behavior of employees and in the organizational results, has gained strength [21]. In this sense, the satisfied employees tend to experience more happiness and well-being; while organizations may be rewarded by an increase in productivity, higher commitment and lower resignation intentions by its members [20, 21].

Some evidence shows that satisfaction is significantly related to the articulation between job and family. In this respect, it has been found that, while the WFC predicts satisfaction negatively, the WFE is related to a positive attitude towards job [8, 16, 20, 22]. In accordance with such empirical evidence, the conceptual framework provided by the broaden-and-build model of emotions [23] allows to understand the possible mediator role of satisfac-
According to this theoretical perspective, positive emotional states increase the psychological resources and amplify the possibilities of attention, cognition and action, being it an ascending spiral of positive emotionality. International literature agrees on emphasizing that satisfaction is intrinsically associated with a pleasant emotional state and, as such, with a positive motivational factor with a significant effect on the behavior. Therefore, while the satisfaction resulting from the perceptions of the WFC may influence positively on the performance, dissatisfaction associated with the WFC may be detrimental for it.

The present study is oriented to covering an empirical gap, examining the interrelationships between the job-family articulation, job satisfaction and job performance. In this sense, based on the background described, it was hypothesized an explanatory model of job performance in which the job-family articulation, in its positive and negative dimensions, take the role of independent roles while job satisfaction performs the role of mediating variable.

2. Method

2.1 Design

The present research belongs to an empirical, quantitative and cross-sectional study with an associative-explanatory strategy, since its purpose was to explore the functional relationship existing among variables.

2.2 Participants

Following the recommendations of Lloret-Segura, Ferreres, Hernández and Tomás of counting on at least 200 cases in order to guarantee the verification of the conjectures of the structural equations analysis, the empirical verification was conducted through a convenience sampling (non-probability) of 383 workers. This sample was formed of 195 men and 188 women, all of them workers in the city of Rosario and area of influence in diverse activity trades, such as commerce, service, industry, health and education. The highest percentage of participants was between 21-30 years old (37.9%) and 31-40 years old (28.7%). Lower age percentages were between 18-20 years old (13.6%), and between 41 y 50 years old (11.7%); while the age range of the older than 50 years old (8.1%) was the least represented.

2.3 Instruments

2.3.1 Personal variables

Each employee was asked to provide information regarding his/her gender, age and sector of the company.

2.3.2 Job satisfaction

The Generic Job Satisfaction Scale developed by Mac Donald and Mac Intyre, adapted by Salesi and Omar, was used. The instrument formed of 7 items (for example: “I can make use of all my abilities and skills in my job”), provides a global estimation of the degree of job satisfaction. Each indicator is evaluated according to a Likert scale with 5 options of answers (1 = “totally disagree”; 5 = “totally agree”). The higher the score is, the higher job satisfaction is.

2.3.3 Job performance

The Argentine validation of the Individual Job Performance Scale of Koopmans et al. was used. The instrument is formed of 13 items distributed as follows: task performance (for example: “I performed challenging tasks at work when I had the opportunity to do so”), contextual performance (for example: “I actively participated in meetings at work”) and counterproductive work behaviors (for example: “I complained about unimportant matters at work”); just as the global JP. Each indicator is valued on a Likert scale of 5 points (going from 1 = “never” to 5 = “always”), where the higher the score is, the higher the JP is.

2.3.4 Job-family articulation

This was explored by means of the Argentine adaptation of the Survey Work-Home Interaction (SWING), formed of eight items with Likert format of 5 points (going from 1= “never” to 5= “always”). This scale explores the work-family enrichment through four items (for example: “I am more self-confident at work because my life at home is well-organized”), and the work-family conflict through four items (for example: “It is difficult for me to concentrate at work because I am worried about household issues”).

2.4 Ethical Considerations

The participation in this research project was voluntary and all the participants signed an informed consent protocol. Anonymity and confidentiality of the information provided were guaranteed. Throughout the entire process, all ethical precautions related to research with human beings established by the American Psychology Association and the recommendations of CONICET (National Scientific and Technical Research Council) for research in the social and human sciences were taken into consideration.

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2.5 Strategy of Analysis

The matrix of data was examined in order to detect missing values, outliers as well as parametric assumptions. The suitability of the data for factor analysis was tested with the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity. The factors were extracted by means of Unweighted Least Squares analyses based on the polychoric correlation matrix and with help of the scree plot. Descriptive indexes (mean and standard deviation) and distribution measures (skewness, kurtosis and the Kolmogorov-Smirnov test) of the variables of the study were used to assess normality of the data. Following, the joint probability distribution of the variables was analyzed through the calculation of the coefficient of multivariate standardized kurtosis and a confirmatory factor analysis (CFA) was conducted in order to determine the adjustment of the measurement model used. Reliability was examined from Cronbach’s alpha coefficient and the index of composite reliability (CR). The convergent validity was determined by means of the average variance extracted (AVE). Discriminant validity was analyzed based on the square root of the AVE. The presence of potential biases due to the common method was evaluated from Harman’s single factor test.

The empirical verification was made from its modeling with structural equations. In this case, it was chosen to generate composite scores of the latent variables, bearing in mind the large quantity of observable variables and measurement error that they entail. This procedure was conducted through the imputation of the factor weight corresponding to each indicator creating a weighted average. In the structure model, the WFE and the WFC functioned as independent variables.

In order to perform estimations, the maximum likelihood method was used with the robust corrections of Satorra-Bentler (S-B), recommended when data comes from Likert scales. The goodness of fit was analyzed from the follows indexes: (a) the ratio among the corrected chi-square and the degrees of freedom (S-B\(\chi^2\)/df); (b) the goodness of fit index (GFI); (c) the comparative fit index (CFI) and; (d) the root mean square error of approximation (RMSEA). Additionally, the expected cross-validation index (ECVI) and the consistent Akaike information criterion (CAIC) were analyzed. As a complement, an analysis with bootstrapping was conducted in order to determine the statistical significance of the total, direct and indirect effects. With that purpose, 5,000 samples from the data set were randomly selected and the confidence intervals were estimated on 95%. The analyses were conducted with SPSS (version 23) and EQS (version 6.1) software.

3. Results

3.1 Preliminary analysis

Preliminary exploration, on 383 documents containing data, showed that there are not missing values. However, three univariate extreme observations were found once that the results of each variable transformed into standardized scores. In all the cases, data was found to be more than 3.5 DE above or below the mean of each variable. In addition, six cases that may be cataloged as multivariate outliers from the moment in which the values of the \(D^2\) index had a lower significance than the stipulated one (\(p<.001\)) were identified. Only two of those cases fulfilled the conditions of being both univariate and multivariate outliers. It was decided to eliminate six observations. So, 376 cases were considered valid to continue with the subsequent analysis.

Data was considered suitable for factor analysis since Bartlett’s test of sphericity was significant (\(\chi^2= 2305, 46; p<.000\)) and KMO test showed a value of .82. Unweighted Least Squares analysis suggested four factors with eigenvalues greater than 1. Scree plot also indicated a similar solution (Figure 1).

![Scree plot of the item-level factor analysis](Source: own authorship)

In Table 1, descriptive statistics and the measures of statistical dispersion are presented. The totality of the items presented appropriate skewness and kurtosis values. However, the distribution of the latent variables corresponding to WFC and WFE did not correctly adjust to the univariate normal distribution. Nevertheless, the specific literature has indicated that the analysis of the data resulting from instruments valued with Likert scales (polytomous categorical variables) usually results in non-normality results. For that reason, it was decided not to replace the parametric tests with its non-parametric alternatives. For its part, the coefficient of multivariate
standardized kurtosis was 42.30, being that much higher than the stipulated limit (-3; 3) to assume multi-normality \[^{30}\]. Based on that result, it was decided to use robust estimators for the calculation of parameters, both in the measurement model and in the structural model.

Table 1. Descriptive indexes and K-S test for the variables under study (n = 376)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>X</th>
<th>SD</th>
<th>Z</th>
<th>K-S</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>3.84</td>
<td>0.68</td>
<td>1.35</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Job Performance</td>
<td>3.39</td>
<td>0.48</td>
<td>1.12</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Work-Family Enrichment</td>
<td>3.62</td>
<td>0.82</td>
<td>1.62</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Work-Family Conflict</td>
<td>2.33</td>
<td>0.62</td>
<td>1.53</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Source: own authorship.

The measurement model, formed by four correlated variables (WFE, WFC, JS and JP), their respective indicators, and the corresponding measurement errors did not achieve a satisfactory adjustment (S-Bχ²/df = 2.20, GFI = .85, CFI = .82, RMSEA = .07 [IC = .06; .07]). The elimination of six indicators (items 2 and 4 corresponding to JS; item 2 corresponding to WFE; item 3 corresponding to WFC; and items 9 and 12 corresponding to JP) that were not significantly linked with the corresponding variable allowed a more adequate adjustment to the empirical data (S-Bχ²/df = 2.05, GFI = .92, CFI = .93, RMSEA = .05 [IC = .04; .06]). Table 2 presents the results derived from the reliability and validity tests of the measurement model. In all cases, Cronbach’s alpha and composite reliability exceeded the minimum of .70, the AVE index for each construct was higher than .50, and its square root was higher than the correlation between that construct and all others \[^{31}\]. For its part, Harman’s single-factor test indicated that the data was not biased, since the variance explained by a single factor (17.75%) was well below the suggested limit of 50%.

3.2 Empirical Verification

Modeling with structural equations allowed the indexes of adjustment of the structure model set out, as well as the magnitude and direction of the regression coefficients among the stipulated relationships to be known. Those indexes showed that the posed model was correctly adjusted to the empirical data (S-Bχ²/df = 4.75; GFI = 0.93; CFI = 0.92; RMSEA = 0.04; ECVI = 2.05; CAIC = 57.82). Regarding regression coefficients, the WFE positively influenced job satisfaction (β = .61, p<.000), whereas the WFC do negatively (β= -.16, p<.000). In turn, the WFE linked to JP in a positive way (β = .35, p<.000), while the WFC was negatively linked (β = -.34, p<.000). For its part, JS positively linked to the dependent variable (β = .36, p<.000). So, the mediation mechanism could be verified.

Bootstrapping analysis allowed determining the statistical significance of the effects among the variables. Firstly, indirect effects of the dimensions of job-family articulation on JP through JS were statistically significant. Secondly, a reduction of the magnitude of the absolute value (total effects) in the presence of JS (direct effects) could be observed. However, the fact that the direct effects on JP continued being significant showed a type of partial mediation (Table 3).

Table 3. Standardized coefficients and confidence intervals corresponding to the indirect and direct effects of the W-F Conflict and Enrichment on the Job Performance (JP).

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Total Effects</th>
<th>Direct Effects</th>
<th>Indirect Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>95% CI</td>
<td>β</td>
</tr>
<tr>
<td>WFE=&gt;JP</td>
<td>.56</td>
<td>0.49; 0.62</td>
<td>.35</td>
</tr>
<tr>
<td>WFC=&gt;JP</td>
<td>-0.39</td>
<td>-0.46; -0.32</td>
<td>-0.34</td>
</tr>
</tbody>
</table>

Note: bold = p < 0.001 (Source: own authorship).

Figure 2 summarizes the standardized regression coefficients and the proportions of the explained variance (R²). In this case, the verified model explains almost 71% of the job performance variance.

4. Discussion

The present work intended to explore if job satisfaction
functions as mediator among the positive dimensions (enrichment) and negative dimensions (conflict) of the job-family articulation and job performance. The empirical verification conducted showed that, together, the job-family articulation and satisfaction explain 71% of the variability of individual job performance.

According to the findings obtained, while the WFC negatively affects job performance, the perceptions of WFE have a positive influence on it. Such results coincide with the conclusions reached by other specialists in the subject [10; 12; 13], who have noted that conflict erodes the performance causing unjustified absences, tardiness, lower attention levels and concentration on the task and, even, counterproductive job behaviors which put the organization at risk. In addition to that, specific literature [39] notes that the WFC contributes to increase psychological tension and burnout, affecting not only employee’s development in his/her functions but his/her level of well-being and occupational health. In contrast, the perceptions of balance and enrichment among the job and family domain influence favorably the performance thanks to its shock-absorbing effect on fatigue and work-related stress.

At the same time, differential correlation with job satisfaction has been found in this work. It shows an adverse impact by the JBC and a positive influence by the WFE. These findings are according to the evidence [8, 15, 16, 17, 20, 22], indicating that, while conflict is harmful for task commitment and pleasure, the perception of enrichment promotes positive feelings towards job and organization.

In agreement with studies that enlighten the ways through which the job-family articulation acts on performance [18, 19], the results obtained show that satisfaction acts as an underlying mechanism to the relationship among the variables being analyzed, partially explaining the effects of WFC and WFE on workers’ performance. In this sense, as indicated by the broaden-and-build model of emotions [23], positive emotional states associated with both WFE and satisfaction, would increase psychological resources and amplify attention, cognition and ability to act, translating into an ascending spiral that would positively affect job performance. On the contrary, negative emotions caused by WFC together with a low level of job satisfaction would limit psychological resources, ultimately diminishing the quality of the worker’s performance.

4.1 Practical Implications, Strengths and Limitations

The results of the study entail certain practical implications for organizations. Firstly, understanding how the ways of job-family articulation are linked to JP may become an advantage for human resource managers when designing business policies “friendly” for the family. In this sense, some authors [38] have suggested that some designs of tasks which include a certain degree of autonomy in decision-making, as well as opportunities of training and skills development, may be used in order to raise the level of WFE among employees. In turn, this kind of strategies may have a substantial impact on the dimensions of the JP, such as: (a) facilitate the achievement of duty and tasks specific to job description (task performance); (b) encourage behaviors directed to keep the psychological and interpersonal environment in which the technical nucleus is unfolded (performance in context).

Likewise, the possibilities of balancing the demands of both domains, results in work environments promoting greater satisfaction. Having satisfied employees favors performance at work and the achievement of organizational goals. Thus, the organization would be rewarded with higher quality performances; while employees would experience higher levels of well-being and occupational health [38].

In the third instance, the decrease in WFC levels could result in lower rates of tardiness and unjustified absences [39]; at the same time that counterproductive work behaviors could be reduced in the face of perceptions of inequity [40]. As regards the benefits of workers, psychological tensions could be lessened [41], inhibit emotional fatigue [42] and thus dampen the possibilities of developing work-related stress or burnout syndrome [43].

Like all empirical work, the present implies strengths and weaknesses. Among its limitations, we must emphasize, firstly, the cross-sectional design used, which limits any inference of causality is the strict sense between the variables studied. Therefore, in order to truly establish the causal order of the relationships found in the present work, it would be very valuable if future research use longitudinal designs. Secondly, since the sample selection procedure has not been probabilistic, generalizing the results to the population is inadvisable. However, it should be clarified that, in order to minimize any inconvenience derived from the sampling, it was intended that the sample be of sufficient size to detect significant relationships statistically. Finally, a third limitation of the study could be referred to as the possible contamination of the responses by the effects of social desirability (that is to say, the tendency to show an improved image of oneself). In order to improve this in future studies, some of the many measures of social desirability available in the battery of data collection can be used.

Among the strengths of this research, it is convenient to highlight that it is a genuine contribution to knowledge. Possibly, the greatest contribution that may be attributed

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to this study is that it poses a new perspective as an alternative to understand the binomial job-family and job performance; as well as that it demonstrated that, besides being a variable typically of result, satisfaction can also play a fundamental role as a mediating variable.

This study provided preliminary evidence regarding the mechanisms that are activated between the conflict perceptions or balance among the family and working duties, and the performance that people perceive at work. Reality indicates that individuals experience WFC and WFE simultaneously. Therefore, such phenomena must not be studied as watertight compartments. Following the same line, the present research makes a difference with other studies in the area, assuming that the articulation must be understood as the different ways of qualitative manifestation of the WFC and the WFE in people’s lives.[8,22,29].

As corollary of the conducted work, future studies may continue broadening the map of performance predictors. Given the nature of the constructs involved, it is possible that the variables such as commitment, confidence and organizational justice emerge as suitable background. Exploration of these alternative ways would be setting the agenda for subsequent researches in the field.

5. Conclusion

The empirical verification conducted provides new evidence regarding the interrelations between job-family articulation, satisfaction and individual job performance. Findings confirm the negative impact of the WFC on the levels of satisfaction and performance; as well as the positive impact of WFE on such variables. In turn, they confirm the partial mediating role that satisfaction plays between both dimensions of the job-family articulation and job performance.

References


[13] Oel-Dusseau, H. N., Britt, T. W., & Greene-Shortridge, T. M. Organizational work–family resources


