

## Examining the Effects of Work Family Enrichment on Job Satisfaction and Family Satisfaction: The Moderating Role of Affectivity

Elham Ebrahimi<sup>1\*</sup>, Ali Shoja<sup>2</sup>

1. Assistant Professor IHCS, Institute for Humanities and Cultural Studies.
2. PhD Student University of Tehran, University of Tehran.

### Article history:

Received date: 2021/03/05

Review date: 2021/08/20

Accepted date: 2021/08/29

### Keywords:

Work Family Enrichment, Academic Society, Job Satisfaction, Family Satisfaction, Structural Equation Modeling

### Abstract

**Purpose:** The purpose of this study is to investigate the effect of both work to family enrichment and family to work enrichment on family satisfaction and work satisfaction. The moderating role of positive and negative affectivity is also examined in this regard.

**Methodology:** This Study is an empirical survey research with the statistical population of faculty members of Iran's universities. The research questionnaires were distributed among professors of five premier universities of Tehran. 200 people were used by simple random sampling. Carlson et al. (2000), Carlson, Kacmar, and Williams (2000), Brayfield and Crockett (1955), Schumm, McCollum, Bugaighis, Jurich, and Bollman (1986) and Agho et al. (1992) questionnaires were used and research hypotheses were tested through structural equation modeling by PLS software.

**Findings:** The results showed that according to path coefficient, work family enrichment has a positive and significant effect on faculty members' job satisfaction (0.7562) and family satisfaction (0.7362) both T-statistics are upper than 1.96. Positive affectivity enhances these relationships as a moderating variable (0.6423). However, negative affectivity had no significant effect on the relationship between work family enrichment and family and job satisfaction (both T-statistics are lower than 1.96).

**Conclusion:** positive aspects of work family interface, in other words, work family enrichment in comparison with work family conflict variable should be considered as an important variable in psychology of family and organization. The issue of work family enrichment in the scientific jobs of faculty members of universities which have distinctive job qualifications compared with other jobs could have a significant effect in job and family satisfaction.

**Please cite this article as:** Ebrahimi E, Shoja A. (2022), Examining the Effects of Work Family Enrichment on Job Satisfaction and Family Satisfaction: The Moderating Role of Affectivity, *Iranian journal of educational Sociology*. 4(4): 60-.75.

\* Corresponding author: e.ebrahimi@ihcs.ac.ir

## 1. Introduction

Work and family are considered the primary domains in a person's life. The interface between the work and family domains of life is studied across psychology subfields (e.g., clinical, developmental, social) and by other disciplines. Work family interface is a dynamic and complicated concept which has various dimensions including cognitive, emotional, social and behavioral dimensions (McMillan, Morris, & Atchley, 2011). As a matter of fact, existing concepts in the literature of work family life consists of three perspectives; Positive perspective, negative perspective and work family integration perspective.

The negative approach under the concepts of work family interface, is family conflict which was first defined as a kind of inter-role conflict by Greenhaus and Beutell (1985). Using role stress theory (which is known as Michigan Organization Stress Model) they presented the commonest definition of the concept of work family conflict as follows: "A form of inter role conflict in which the stress as a result of work family roles causes incompatibility between these two domains". work family conflict accounts for a large number of researches in this domain. Monteiro and Padhy (2020), for example, has identified disharmony in work and life as one of the most serious negative factors for organizations (Monteiro & Padhy, 2020).

The positive perspective concerns the idea that work and family life can have mutual benefits, tries to depict work family relationships more completely (Frone, 2003). In this perspective, it is assumed that the energy or the skill created or improved in work domain can improve the performance of the individual in non- work domain including family. The concepts of work family "balance" and "fit" are dealt with in this approach. less attention has been paid to more recent and new concepts including "positive spillover", "work family enrichment" or "work family facilitation" which represents positive perspective in the domain of work and family life (Carlson & Grzywacz, 2011; Greenhaus & Powell, 2006). Enrichment is realized through two paths: 1- Instrumental path in which the resources existing in one role causes an individual to directly improve their performance in other roles, 2- The affect path in which the advantages gained by a role leads an individual to improve their performance in other roles through creating a positive attitude in the individual. Enrichment contains four benefits: developmental gains (acquisition of knowledge, skills, perspectives or values), affective gains (alternation in behavior, attitude or other aspects of emotion), capital gains (gaining assets) and efficacy (enhancing focus level) (McMillan et al., 2011). In the present research, these dimensions have been used for operationalization of work family reciprocal enrichment. Since the work family positive interface can be considered as a reciprocal relationship, in the present research, separate measures have been used for the work family enrichment. In addition to that, academic people experience a high degree of spillover between work and family, due to the rather flexible nature of their jobs (Near & Sorcinelli, 1986) and in this regards, they are considered a good statistical population for studying.

Concerning work family interface, researchers mainly focused on the conflicts, operationalization of the concept and the consequences of the work family conflicts during the last decades (MacDermid, 2005). Although the study of these conflicts is of great importance, limiting the study to the explanation of negative dimensions will lead to the ignorance of positive dimensions. Therefore, in recent studies, the necessity of paying attention to the positive aspects of interaction between work family domains in the form of phrases such as "enrichment" and positive spillover have been pointed out (Carlson, Kacmar, Wayne, & Grzywacz, 2006; Khandelwal & Sehgal, 2018; Rhee, & Zheng, 2019; Kalliath et al. 2020; Koekemoer, Olckers, & Nel, 2020).

The population, is the faculty members of universities. The reason is that in spite of the fact that these occupations are of great importance, universities and research institutions are not credited with providing ideal conditions and paying attention to human resources preoccupations (Johnsrud, 2002). In other words, one of the domains in the study of work family interface which has been ignored or under-researched is related to academic staff, university professors and researchers (Beigi, Wang, & Arthur, 2017). But the distinct nature of these knowledge jobs shows the necessity of a thorough analysis of the topic in these professions (Beigi, Shirmohammadi, & Kim, 2016); because researches show that academic

staff experience a higher degree of work family spillover in work and family domains (Near & Sorcinelli, 1986). According to Yaghoubi, Nazem, and Imani (2017) through investing on intellectual, cultural and psychological grounds, a competitive advantage can be obtained by improving the strategic human resources management specially in faculty members' population. In this regard, Shahbazian and Beheshtifar (2021) acknowledged paying attention to various structural, cultural and managerial factors can enhance the psychological empowerment of professors. However, what is attracted the attention of researchers more than anything else, concerning the academic jobs is work family conflict (Beigi et al., 2016; Forster, 2000; Grandey & Cropanzano, 1999; Heijstra & Rafnsdottir, 2010; Van Hooff, Geurts, Kompier, & Taris, 2006). The concept of enrichment concerning academic population has been analyzed in very few studies (Creamer & Amelink, 2007).

Job satisfaction has long attracted the attention of researchers as one of the most important variables in the domains of organizational behavior. The formal study of job satisfaction began in the early 1930 by Hawthorne and from then on it was widely studied. The classic school of thought made an attempt to define job satisfaction but eventually this was done by Robert Hapak. He believes that job satisfaction is a complicated concept which interacts with mental, social and physical factors (Ma & MacMillan, 1999). However, some researchers believe that job satisfaction is a function of compatibility of job expectations with the individual general needs and that job satisfaction is obtained as a result of compatibility and balance between these two factors and this issue is formed simultaneous by the interactions between organization expectations and individual needs (Tsai, 2014). Various models have been presented for the measurement of the employee job satisfaction, including Smith, Kendall and Hullin's study which was presented as a model in the University of Cornell in America in 1969. This model soon became popular as the job description Index which measures job satisfaction through five aspects including job nature, colleagues, supervisor, promotion and compensation (Smith, Kendall, & Hullin, 1969). In addition, job satisfaction construct have been explained by various variables such as autonomy and work group cohesion positively or by variables such as routinization negatively (Agho, Price, & Mueller, 1992). According to Zamiri, Heidari, Asgari and Makvandi (2020) Satisfied and motivated human resources play important roles in advancing regulatory policies and programs (Zamiri, Heidari, Asgari, & Makvandi, 2020). Since the nature of university professors' job enjoys relative independence and autonomy, promotion opportunities, clear payment and scientific nature, one can easily consider other aspects of the issue such as the positive effect of family and spillover of family satisfaction on the satisfaction of these jobs as effective.

Family satisfaction refers to the amount of satisfaction with the family structure and family interrelations (the relation between parents and children with each other and so on) in which these structures are formed (Bakalim & Taş delen-Karçkay, 2015). In the other definitions, family satisfaction is conceptualized as the amount which an individual is satisfied with her family status and position (Rathi & Barath, 2013). According to Bakalim and Taş delen-Karçkay (2015), the communication model in the family has an effect on the creation of love, interest and friendliness between family members and with other people. The family discipline in which the individual lives, affects all individual development areas and the way she ranks in human high position within her life. Those having high capacity to manage their relationships with others, enjoy higher family satisfaction. In the study done by Hesse, Rauscher, Roberts, and Ortega (2014), the role of parents was emphasized in family satisfaction and satisfaction with family life was considered as the main factor in children's satisfaction. In some studies, parents, spouse and children supports were determined as the most effective themes on employees' perception concerning work family interface (Baker, 2010). Generally, when people spend quality time on their family, there is no conflict between their work role and family role; moreover, they do not transfer their job stress to their family and naturally their family and their job are not in direct contradiction. It should be noted that it does not necessarily mean that there is a balance between family and work, rather work to family enrichment contains an important part of this balance. Banu (2016) believes that the only time that

employees can balance work factors with personal life factors is when family members support the individual in such a way that the individual succeeds in his family and work affairs. From family work conflict perspective, if an individual values his/her job very much, and it is considered as part of his identity, it is likely that the person considers family as a threat for the time and energy needed for the present job and as a result he develops a negative insight about his family (Rathi & Barath, 2013). The opposite of this is also true; from the perspective of enrichment, if job roles are of great importance for an individual, they can upgrade their family satisfaction, through transforming their knowledge, skills, values, affections and work capital to their family. That is the reason why some researchers have decided to test work family enrichment and its effects on job and family satisfaction (Chan et al., 2016).

Eventually the important contribution of this research is to consider an under-researched variable in work family interface. Affectivity is an expression which is used to describe a disposition and refers to sustainable individual differences concerning satisfaction with one aspect or all aspects of life. people who suffer from high level of negative affectivity, are usually more disgusted, angrier, more contempt, hate or feel more sinful and more nervous in all working and non-working situations. They would like to insist on their own negative attitudes even in situations such as getting a raise which generally leads to more satisfaction. On the other hand, research shows that people who enjoy positive affectivity, usually tend to work harder, have more organizational commitment and on the whole, experience more family and job satisfaction (Noe, Hollenbeck, Gerhart, & Wright, 2017). As an internal variable and personality feature, dispositional affectivity can affect job and family satisfaction along with other factors. For instance, not considering other factors, the staffs who are predisposed to be happy or in other words, have positive affectivity are more likely to experience job satisfaction. Of course the opposite is true (Agho et al., 1992). On the other hand, the results of studies show that personal features and personal qualities can affect work family enrichment through different means. For instance, people with a high degree of positive affectivity are more likely to experience work to family enrichment and also family to work enrichment (McNall, Scott, & Nicklin, 2015). McNall, Tombari and Brown, (2021) also concluded that employees acquire more positive work outcomes through higher positive affectivity and work-life enrichment.

All in all, what can be extracted by reviewing theoretical literature and background of the topic in addition to research gaps mentioned in the introduction section, is as follows: 1. Not paying much attention to the issue of “enrichment” in comparison with work family conflict, 2. The effect of personality features on work family reciprocal interactions, 3. Not paying much attention to the topic among a specific spectrum of some scientific jobs (faculty members). Also, the necessity of dealing with the topic in Iran’s special context is one of the contributions of the present research. Cultural differences are certainly effective in peoples’ work family interface and communications (Moore, 1995). The hypotheses in accordance with research conceptual model are shown in figure1.

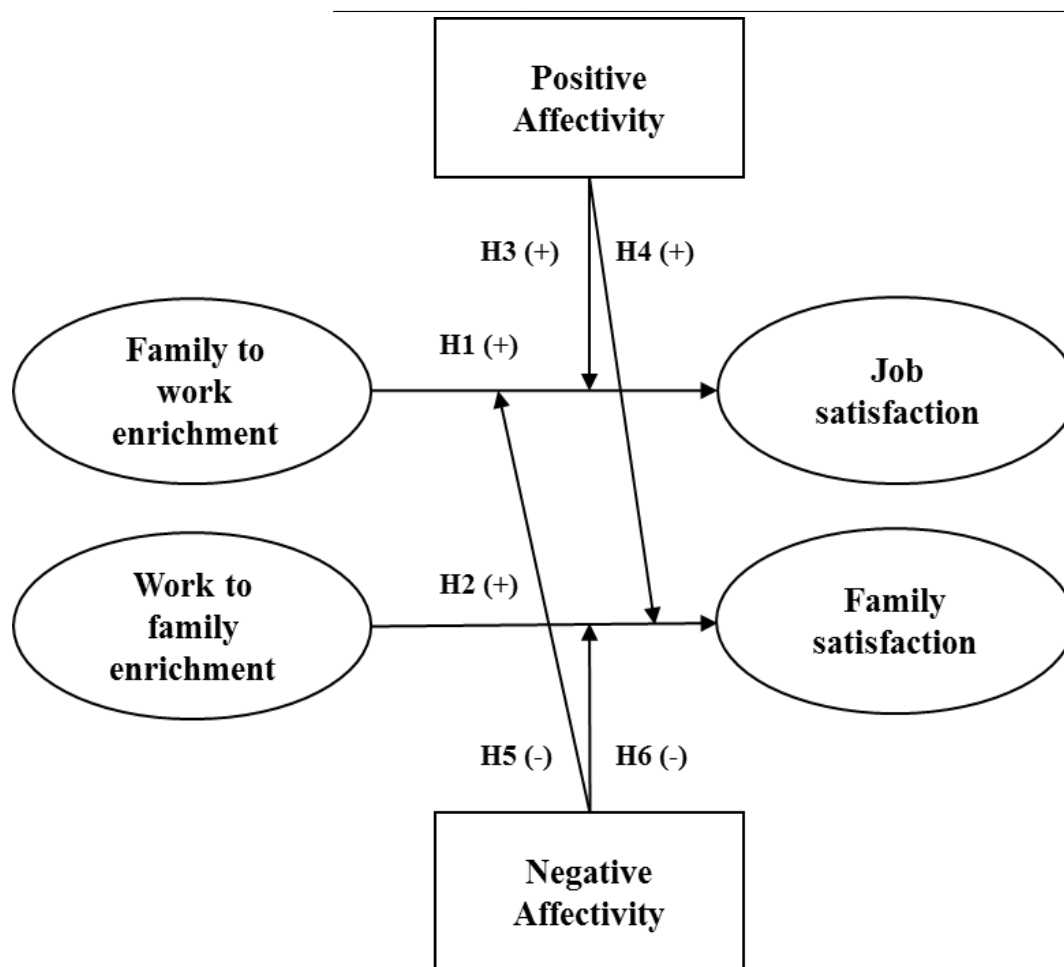


Fig. 1. Research theoretical model

## 2. Methodology

This research is a descriptive correlational research. The research questionnaires were distributed among professors of five premier universities of the capital city of Iran, Tehran in the second semester of 2020. As the population size is 410 people, according to Kergsey-Morgan Table, 196 sample is enough. Therefore 200 questionnaires were distributed among the professors and a total of 178 people answered and returned the questionnaires, of which 158 were usable. The response rate was thus 89 percent. Also a simple random method was used for sampling. 20 questionnaires were removed from the data since the number of missing values exceeded 15 percent. Missing values in the remaining questionnaires were handled using case wise deletion.

The following measures were used. The questionnaire was translated into Persian by two bilingual experts. Family to work Enrichment. It consists of 9 items developed by Carlson, Kacmar, Wayne, and Grzywacz (2006). Three items assessed family to work development (FWD), three items assessed family to work affect (FWA) and three items assessed family to work efficiency (FWE). Likert-type response scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used for each item.

Work to Family Enrichment. It consists of 9 items developed by Carlson, Kacmar, Wayne, and Grzywacz (2006). validity and reliability of these two scales (family to work enrichment and work to family enrichment) have been established by assessing the content adequacy, dimensionality, factor structure invariance, convergent validity, divergent validity in some research such as Wijaya (2021). Three items assessed work to family development (WFD), three items assessed work to family affect

(WFA) and three items assessed work to family capital (WFC). Likert-type response scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used for each item.

**Job satisfaction.** It consists of 6 items developed by Brayfield and Crockett (1955). Likert-type response scale, ranging from 1 (strongly dissatisfied) to 5 (strongly satisfied), was used for each item.

**Family satisfaction.** It consists of 4 items developed by Schumm, McCollum, Bugaighis, Jurich, and Bollman (1986). Likert-type response scale, ranging from 1 (strongly dissatisfied) to 5 (strongly satisfied), was used for each item.

**Positive affectivity.** It consists of 11 items developed by Agho et al. (1992). Likert-type response scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used for each item.

**Negative affectivity.** It consists of 11 items developed by Agho et al., (1992). The reliability of positive and negative affectivity has been tested by Cronbach's alpha test in Agho et al., (1992). Cronbach's alpha values of 0.83 and 0.79 indicate the optimal reliability of these variables. Livne and Goussinsky (2017) have also confirmed the validity of the mentioned structures. Likert-type response scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used for each item.

Smart PLS were used for data analysis, allowing for confirmatory factor analysis, as well as hypotheses testing. Compared to covariance-based structural equation modelling, PLS allows for the use of non-normal data, small sample sizes and the formative measurements of latent variables (Hair, Hult, Ringle, & Sarstedt, 2016; Hair, Sarstedt, Ringle, & Mena, 2012).

### 3. Findings

Respondents consisted of 84 men (53.2 percent) and 74 women (46.8 percent). As marital situation, 22 people (13.9 percent) were single and 136 (86.1 percent) were married. 31 people (19.6 percent) had no child, 76 (48.1 percent) had 1 or 2 child and 51 (32.3 percent) had more than 2 children. Respondents consisted of 12 (7.6 percent) under 35 years old, 66 (41.8 percent) between 35 to 45 years old, 65 (41.1 percent) between 45 to 55 years old and 15 (9.5 percent) above 55 years old. And finally, 67 (42.4 percent) were Assistant Professor, 54 (34.2 percent) were Associate Professor and 37 (23.4 percent) were Full Professors.

A partial least squares (PLS) model is analyzed and interpreted in two stages: the assessment of the reliability and validity of the measurement model, and the assessment of the structural model. Table 1 reports the mean, the standard error of the mean (SE mean), the standard deviation (SD) and factor loadings of each item of questionnaire. Composite reliability (CR) and average variance extracted (AVE) for each construct are also shown in Table 1.

**Table 1.** Descriptive statistics and construct validity

| Construct                                                                                               | Items                                                                                  | Mean | SE mean | SD    | Loading |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------|---------|-------|---------|
| Family to work enrichment<br>(items adapted from (Carlson et al., 2006))<br>CR = 0.7897<br>AVE = 0.5553 | My Involvement in my family...                                                         |      |         |       |         |
|                                                                                                         | FWD1: Helps me to gain knowledge and this helps me be a better worker.                 | 3.74 | 0.075   | 0.824 | 0.746   |
|                                                                                                         | FWD2: Helps me acquire skills and this helps me be a better worker.                    | 3.85 | 0.081   | 0.875 | 0.738   |
|                                                                                                         | FWD3: Helps me expand my knowledge of new things and this helps me be a better worker. | 3.74 | 0.082   | 0.835 | 0.762   |

| Construct                                                                                             | Items                                                                                             | Mean | SE mean | SD    | Loading            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------|---------|-------|--------------------|
|                                                                                                       | FWA1: Puts me in a good mood and this helps me be a better worker.                                | 3.32 | 0.087   | 0.765 | 0.451 <sup>a</sup> |
|                                                                                                       | FWA2: Makes me feel happy and this helps me be a better worker.                                   | 4.31 | 0.072   | 0.672 | 0.724              |
|                                                                                                       | FWA3: Makes me cheerful and this helps me be a better worker.                                     | 3.91 | 0.072   | 0.847 | 0.722              |
|                                                                                                       | FWE1: Requires me to avoid wasting time at work and this helps me be a better worker.             | 4.02 | 0.061   | 0.671 | 0.712              |
|                                                                                                       | FWE2: Encourages me to use my work time in a focused manner and this helps me be a better worker. | 4.14 | 0.068   | 0.721 | 0.754              |
|                                                                                                       | FWE3: Causes me to be more focused at work and this helps me be a better worker.                  | 3.72 | 0.081   | 0.891 | 0.726              |
| Work to family enrichment<br>(items adapted from Carlson et al., 2006)<br>CR = 0.8764<br>AVE = 0.5942 | My Involvement in my work...                                                                      |      |         |       |                    |
|                                                                                                       | WFD1: Helps me to understand different viewpoints and this helps me be a better family member.    | 4.53 | 0.065   | 0.674 | 0.881              |
|                                                                                                       | WFD2: Helps me to gain knowledge and this helps me be a better family member.                     | 4.21 | 0.045   | 0.623 | 0.842              |
|                                                                                                       | WFD3: Helps me acquire skills and this helps me be a better family member.                        | 4.19 | 0.053   | 0.550 | 0.813              |
|                                                                                                       | WFA1: Puts me in a good mood and this helps me be a better family member.                         | 4.05 | 0.075   | 0.782 | 0.420 <sup>a</sup> |
|                                                                                                       | WFA2: Makes me feel happy and this helps me be a better family member.                            | 4.04 | 0.068   | 0.742 | 0.735              |
|                                                                                                       | WFA3: Makes me cheerful and this helps me be a better family member.                              | 3.96 | 0.111   | 1.002 | 0.750              |
|                                                                                                       | WFC1: Helps me feel personally fulfilled and this helps me be a better family member.             | 4.54 | 0.057   | 0.645 | 0.742              |
|                                                                                                       | WFC2: Provides me with a sense of                                                                 | 4.51 | 0.061   | 0.640 | 0.781              |

| Construct                                                                                           | Items                                                                                  | Mean | SE mean | SD    | Loading            |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------|---------|-------|--------------------|
| Job satisfaction<br>(items adapted from (Brayfield & Crockett, 1955))<br>CR = 0.7896<br>AVE = 0.678 | accomplishment and this helps me be a better family member.                            |      |         |       |                    |
|                                                                                                     | WFC3: Provides me with a sense of success and this helps me be a better family member. | 4.34 | 0.071   | 0.513 | 0.752              |
|                                                                                                     | JS1: I find real enjoyment in my job.                                                  | 4.03 | 0.057   | 0.721 | 0.782              |
|                                                                                                     | JS2: I like my job better than the average person.                                     | 4.45 | 0.061   | 0.671 | 0.861              |
|                                                                                                     | JS3: I am seldom bored with my job. (R)                                                | 2.31 | 0.057   | 0.637 | 0.787              |
| Family satisfaction<br>(items adapted from (Schumm et al., 1986))<br>CR = 0.8432<br>AVE = 0.754     | JS4: I would not consider taking another kind of job.                                  | 3.94 | 0.081   | 0.921 | 0.726              |
|                                                                                                     | How satisfied are you with...<br>FS1: your family life                                 | 4.61 | 0.052   | 0.634 | 0.788              |
|                                                                                                     | FS2: your relationship with your spouse                                                | 4.29 | 0.078   | 0.728 | 0.796              |
|                                                                                                     | FS3: your relationship with your child(ren)                                            | 4.02 | 0.091   | 0.897 | 0.702              |
|                                                                                                     | FS4: your children's relationship with each other                                      | 4.15 | 0.0781  | 0.917 | 0.712              |
| Positive affectivity<br>(items adapted from (Agho et al., 1992))<br>CR = 0.7123<br>AVE = 0.678      | PA1: It is easy for me to become enthusiastic about things I am doing.                 | 4.56 | 0.062   | 0.714 | 0.754              |
|                                                                                                     | PA2: I often feel happy and satisfied for no particular reason.                        | 3.23 | 0.086   | 0.782 | 0.412 <sup>a</sup> |
|                                                                                                     | PA3: I live a very interesting life.                                                   | 3.78 | 0.094   | 0.891 | 0.701              |
|                                                                                                     | PA4: Every day I do things that are fun.                                               | 3.18 | 0.075   | 0.716 | 0.469 <sup>a</sup> |
|                                                                                                     | PA5: I usually find ways to liven up my day.                                           | 3.31 | 0.054   | 0.602 | 0.713              |
|                                                                                                     | PA6: Most days I have moments of real fun or joy.                                      | 3.45 | 0.051   | 0.702 | 0.712              |
|                                                                                                     | PA7: I often feel sort of lucky for no special reason.                                 | 3.18 | 0.075   | 0.716 | 0.469 <sup>a</sup> |
|                                                                                                     | PA8: Every day interesting things happen to me.                                        | 3.02 | 0.082   | 0.812 | 0.421 <sup>a</sup> |
|                                                                                                     | PA9: In my spare time I usually find something interesting to do.                      | 4.51 | 0.067   | 0.765 | 0.756              |
|                                                                                                     | PA10: For me life is a                                                                 | 3.96 | 0.076   | 0.765 | 0.782              |

| Construct                                                                                      | Items                                                              | Mean | SE mean | SD    | Loading            |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------|---------|-------|--------------------|
| Negative affectivity<br>(items adapted from (Agho et al., 1992)<br>CR = 0.7117<br>AVE = 0.5462 | great adventure.                                                   |      |         |       |                    |
|                                                                                                | PA11: I always seem to have something pleasant to look forward to. | 3.87 | 0.0865  | 0.865 | 0.743              |
|                                                                                                | NA1: I often find myself worrying about something.                 | 3.02 | 0.065   | 0.734 | 0.767              |
|                                                                                                | NA2: My feelings are hurt rather easily.                           | 2.21 | 0.067   | 0.654 | 0.723              |
|                                                                                                | NA3: Often I get irritated at little annoyances.                   | 2.01 | 0.0543  | 0.765 | 0.345 <sup>a</sup> |
|                                                                                                | NA4: I suffer from nervousness.                                    | 3.41 | 0.065   | 0.738 | 0.731              |
|                                                                                                | NA5: My mood often goes up and down.                               | 2.04 | 0.053   | 0.407 | 0.345 <sup>a</sup> |
|                                                                                                | NA6: I sometimes feel 'just miserable' for no good reason.         | 2.13 | 0.078   | 0.874 | 0.367 <sup>a</sup> |
|                                                                                                | NA7: I am easily startled by things that happen unexpectedly.      | 2.87 | 0.78    | 0.653 | 0.734              |
|                                                                                                | NA8: I often lose sleep over my worries.                           | 3.21 | 0.75    | 0.783 | 0.720              |
|                                                                                                | NA9: Minor setbacks sometimes irritate me too much.                | 2.34 | 0.82    | 0.673 | 0.714              |
|                                                                                                | NA10: There are days when I'm 'on edge' all of the time.           | 2.54 | 0.45    | 0.637 | 0.781              |
|                                                                                                | NA11: I am too sensitive for my own good.                          | 2.15 | 0.75    | 0.736 | 0.713              |

**Notes:** <sup>a</sup>item eliminated due to lower than 0.50 loading. All significant at  $p < 0.01$

The first step is to evaluate the measurement model. Thus, the model should be tested for indicator reliability, internal consistency, convergent validity and discriminant validity (Table 1 & 2). the PLS algorithm was run using case wise replacement missing value algorithm, path weighting scheme, maximum iterations of 500, an abort criterion of 1.0E-5 and initial weights of 1. Indicator reliability was examined through the evaluation of outer loadings. Multidimensional data with lower than a 0.50 factor loading were eliminated because they were not considered to be within the acceptable range (Hair et al., 2016). Nine items were eliminated (FWA1, WFA1, PA2, PA4, PA7, PA8, NA3, NA5 and NA6).

Internal consistency was examined via composite reliability (CR), which ranged from 0.7117 (NA) to 0.8567 (WFE), all greater than the threshold of 0.7 (Hair et al., 2016). Convergent validity was examined using the average variance extracted (AVE). An AVE of less than 0.50 indicates, on average, more errors remain in the terms that the variance explain in the construct (Hair et al., 2016). AVE values ranged from 0.5462 (NA) to 0.8764 (WFE), all above the 0.50 thresholds.

The second stage in measurement model evaluation is discriminant validity. The Fornell-Larcker criterion was used. As shown in Table 2, the measurement model had satisfactory discriminant validity, since all square roots of the AVE were higher than the highest correlation with any other construct in the model (Hair et al., 2016). Therefore, the constructs are appropriate for PLS analysis.

**Table 2.** Fornell-Larcker test report

| ITEM                      | FWE           | WFE           | JS            | FS            | PA            | NA            |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Family to work enrichment | <i>0.7806</i> |               |               |               |               |               |
| Work to family enrichment | 0.6223        | <i>0.7542</i> |               |               |               |               |
| Job satisfaction          | 0.3451        | 0.6723        | <i>0.7451</i> |               |               |               |
| Family satisfaction       | 0.6721        | 0.6245        | 0.6781        | <i>0.7235</i> |               |               |
| Positive affectivity      | 0.6523        | 0.6741        | 0.6823        | 0.6452        | <i>0.7142</i> |               |
| Negative affectivity      | 0.2456        | 0.5765        | 0.3345        | 0.4561        | 0.4351        | <i>0.7238</i> |

**Note:** Square root of AVE in *italic*

In this phase, the structural model results for collinearity, significance of the path coefficient, and predictive relevance of the path model were examined. Significance of the path coefficient estimated the six paths in the model following the bootstrap techniques resampling suggestion of (Hair et al., 2016). Table 3 shows the path correlation, SD, T-statistics and the significance levels of each hypothesis. According to the analysis of the PLS model, among the six hypotheses, four hypotheses (all except for the mediating role of negative affectivity) are supported at a significant level of 0.1 or less. In fact, two moderating hypotheses related to the negative affectivity variable, (H5 and H6) hypotheses were not meaningful and rejected.

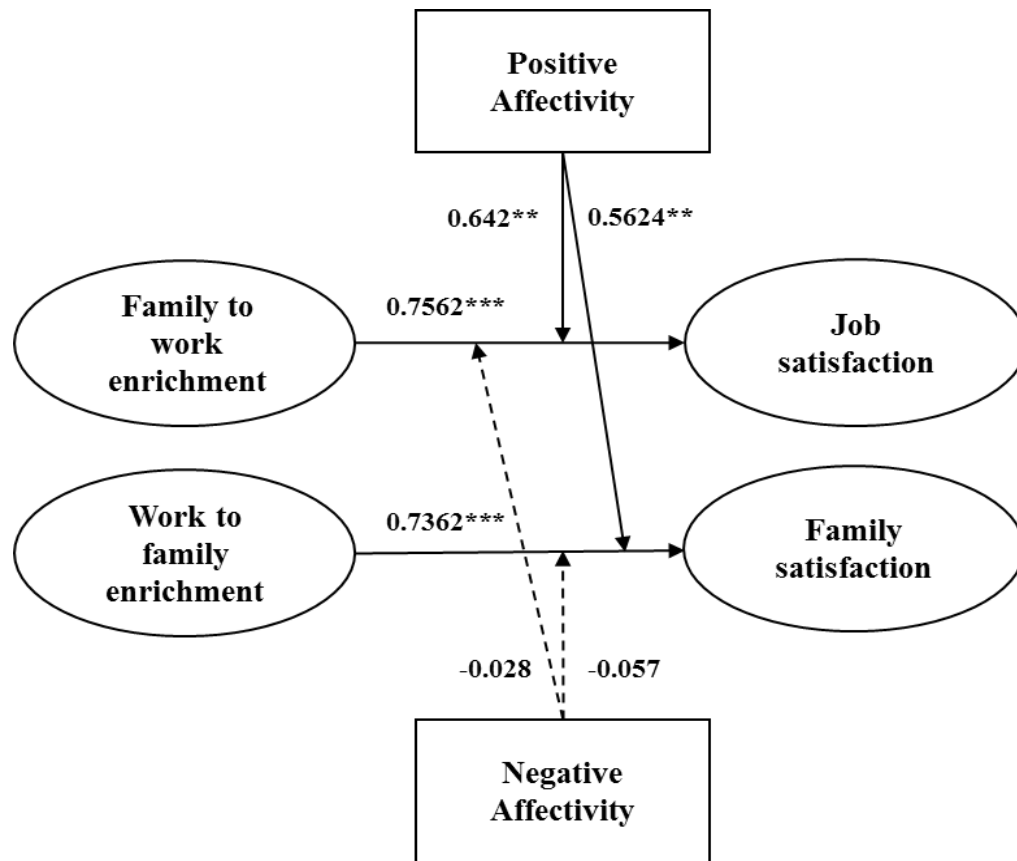
The goodness of fit (GoF) has been developed as an overall measure of model fit for PLS-SEM. The GoF index was introduced by (Tenenhaus, Amato, & Esposito, 2004) as a global goodness-of-fit measure for PLS-SEM that considers both the measurement model and the structural model (Wetzels, Odekerken-Schröder, & Van Oppen, 2009) describes GoF values of 0.36, 0.25 and 0.01 as substantial, moderate and weak, respectively. In this study, according to the analysis, the rate of this index (GoF) is 0.711, which is strong and acceptable.

**Table 3.** Hypotheses' path coefficients, standard deviations and T-statistics

| Path                       | Path coefficient | STDEV   | T-statistics | Supported hypothesis |
|----------------------------|------------------|---------|--------------|----------------------|
| H1: FWE → JS               | 0.7562           | 0.0632  | 13.2142      | Yes                  |
| H2: WFE → FS               | 0.7362           | 0.0618  | 10.5687      | Yes                  |
| H3:<br>PA<br>↓<br>FWE → JS | 0.6423           | 0.05671 | 3.4567       | Yes                  |
| H4:<br>PA<br>↓<br>WFE → FS | 0.5624           | 0.06862 | 3.5718       | Yes                  |
| H5:<br>NA<br>↓<br>FWE → JS | -0.0289          | 0.0532  | 1.3873       | No                   |
| H6:<br>NA<br>↓<br>WFE → FS | -0.0573          | 0.0678  | 1.2182       | No                   |

Sig level:  $P < 0.01$

Considering the analysis done, the result of hypotheses was shown in the form of path coefficient model in Figure 2.



Notes: \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

Fig. 2. Path coefficients results

#### 4. Discussion

The research was done by the purpose of examining the structural effects of work to family enrichment and family to work enrichment on family satisfaction and work satisfaction. In addition, the effects of positive and negative affectivity as two moderating variables of these relations were tested. The contributions of this research are as follows: First, in this article attention has been paid to the positive aspects of work family interface, in other words, work family enrichment in comparison with work family conflict variable which accounts for the most parts of researches have been considered. Second, the effects of two personality variables, that is, positive and negative affectivity as the moderating variables of these relations were tested. Third, the issue of work family enrichment in the scientific jobs of faculty members of universities which have distinctive job qualifications compared with other jobs was tested. The last but not the least, the issue was reviewed in the special context of Iran.

Confirming the conclusion of previous studies such as Koekemoer, Olckers, and Nel (2020) and Kalliath et al. (2020) that work-family enrichment can increase job satisfaction, the results of the hypotheses showed that family to work enrichment has a positive and significant effect on job satisfaction and work to family enrichment has a significant effect on university faculty members' family satisfaction. In other words, it can be expected that work family enrichment in academic jobs like many other jobs, has an effect on development of work and family roles and the reciprocal spillover of these two domains is significant in these professions too. The results of some studies are in line with this issue (Creamer & Amelink, 2007). Of

course, some experts believe that daily preoccupations of academic staff can make the borders of work family domains less effective or in some cases even ineffective (Wolf-Wendel & Ward, 2006). The story of academic staffs' life is a bout complicated process of work family delimitation (Brown, Fluit, Lent, & Herbert, 2011). This issue is the distinctive point between these jobs and other administrative jobs. In other words, in academic jobs, staffs' working roles do not come to an end at the end of working hours. Moreover, in comparison with other jobs, university professors enjoy more time and place flexibility. However, research projects as well as mental pressure are always with them and they cannot ride of them. This problem may lessen the effects of external motivational factors such as salary and benefit on job and family satisfaction. However, based on the results, of this research, it enhances the effects of internal motivational factors such as reciprocal work family enrichment. The scientific nature of these jobs, the possibility of learning some skills, interaction with a large spectrum of people especially students, all over considered as factors that enable the individual to transfer her job capital and capacity to her family effectively. Inconspicuousness of borders between work and family in this spectrum of jobs, causes family capitals to have positive spillover on work domains and results in job satisfaction. In Iran's oriental culture, families are very powerful and enjoy high priority in the life of every single individual. Unlike most European and American countries, the family is the first priority of every single individual and then her job in her next priority. The result of a study in Japan showed that the majority of faculty members (64%) consider their job as their first "real" priority in their lives and that only 28% of them considered their jobs as the first priority in their "ideal" life (Chatani et al., 2017). This issue will certainly affect the conclusion of such results, that is, the family to work enrichment and finally job satisfaction. In spite of such little salary and benefits of university staff in comparison with other jobs in Iran, the time and place flexibility of these jobs makes these people to hang out with their family and make up for an important part of their job dissatisfaction.

Two hypotheses were confirmed concerning the moderating role of positive affectivity on the relation between work family enrichment and job and family satisfaction. In the other words, people who enjoy high degree of positive affectivity can easily spillover the positive effects of family and work in these two domains. In a study done by Hunter, Clark, and Carlson (2019), positive affect are introduced as an advantage that is gained as result of collapse of the borders between family and work. This is the same condition that takes place to the faculty members as a result of inconspicuousness of the borders. As mentioned before, people who are predisposed to be happy, free from external and environmental conditions, have a positive attitude concerning life and its events. In other words, these people are more optimistic and interpret their life experience in a positive way. They are more enthusiastic, energetic and focused and so it is logical that they enjoy the effects of work family positive spillover on the satisfaction with these two domains. Some research found relatively same results. For example, in a recent study the indirect effect of positive affectivity in the relation of job enrichment, mindfulness and work outcomes (such as work satisfaction) was concluded (McNall, et al., 2021). As another example, a survey study showed that positive affect can foster work-to-life enrichment (Daniel & Sonnentag, 2014).

Eventually, the moderating role of negative affectivity on the relation between work family enrichment and family and job satisfaction was rejected (in both directions). As, an important reason for that could be the low degree of negative affectivity of the community. In other words, it is possible that personality of people who follow their work path as faculty member, is more positive and they enjoy positive satisfaction with their environment. Regarding the results of this research, one can argue that since the nature of an academic job is very different from other jobs such as nursing and instead of relying on external motivations relies on mental structures of the person (Guan et al., 2014), people working in this domain enjoy positive affectivity and not negative one. According to research results, negative affectivity significantly correlates with work family conflict whereas positive affectivity merely correlates with work family enrichment (Tement & Korunka, 2013). In this regard, this study makes a contribution as it correlates negative affectivity and enrichment.

May be by considering current economic problems in Iran, it was expected that these people have negative affectivity. Of course, the personality of people is not formed by environmental conditions and the results of this research show that the relation between the nature of these jobs and its effects on personality features must deeply be analyzed. In study done by Karatepe and Uludag (2008), no positive significant relationship between negative affectivity and work family conflict was observed. These researchers believe that reviewing the effects of dispositional personality variables on work family interface needs more research and study. Thus, it is recommended that future researchers pay more attention to personality variables in the work family interface subject. Another future research suggestion is to investigate the concept of work life interface as a whole, not just the negative side (conflict) or the positive side (interface). Describing these to contrary side in relation to affectivity which has two adverse sides too, could have new insights for future research.

As other studies, this research had some limitations. First, accessing to respondents was rather difficult. Crona pandemic made this more tough, since personal referral was almost impossible and convincing the respondents to answer the questionnaire virtually through the internet link was hard enough. In addition, some subjects such as the difference between organizational cultures of universities, could reduce the generalizability of the findings. Thus, for example testing the model in Azad universities may result in different findings. Testing the similar models in different academic organization could provide more detailed and rich results.

In the end the authors would like to thank the professors whose honorable participation in the survey contributed doing the research. Also thanks to the reviewers whose valuable comments helped us improving the paper.

## References

- Agho O, Price L, Mueller W. (1992). Discriminant validity of measures of job satisfaction, positive affectivity and negative affectivity. *Journal of Occupational and Organizational Psychology*, 65(3): 185–195.
- Bakalim O, delen-Karçkay A. (2015). Positive and negative affect as predictors of family life satisfaction. *International Journal of Human Sciences*, 12(1): 1330–1337.
- Baker M. (2010). Choices or Constraints? Family Responsibilities, Gender and Academic Career. *Journal of Comparative Family Studies*, 41(1): 1-18.
- Banu R. (2016). A structural equation model: II for work-life balance of IT professionals in Chennai. *Serbian Journal of Management*, 11(1): 141–148.
- Beigi M, Wang J, Arthur B. (2017). Work–family interface in the context of career success: A qualitative inquiry. *Human Relations*, 70(9): 1091–1114.
- Beigi M., Shirmohammadi M, Kim S. (2016). Living the academic life: A model for work-family conflict. *Work*, 53(3): 459–468.
- Brayfield H, Crockett H. (1955). Employee attitudes and employee performance. *Psychological Bulletin*, 52(5): 396–424.
- Brown J, Fluit M, Lent B, Herbert C. (2011). Seeking balance: The complexity of choice-making among academic surgeons. *Academic Medicine*, 86(10): 1288–1292.
- Carlson S, Grzywacz G. (2011). Reflections and Future Directions on Measurement in Work-Family Research. In K. Korabik, D. S. Lero, & D. L. Whitehead (Eds.), *Handbook of Work-Family Integration: Research, Theory, and Best Practices* (57–73). Seiten: Academic Press.
- Carlson S, Kacmar M, Wayne H, Grzywacz G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale. *Journal of Vocational Behavior*, 68(1): 131–164.
- Carlson S, Kacmar M, Williams J. (2000). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior*, 56(2): 249–276.
- Chan W, Kalliath T, Brough P, Siu L, O'Driscoll P, Timms C. (2016). Work–family enrichment and satisfaction: the mediating role of self-efficacy and work–life balance. *International Journal of Human Resource Management*, 27(15): 1755–1776.
- Chatani Y, Nomura K, Horie S, Takemoto K, Takeuchi M, Sasamori Y, Smith D. (2017). Effects of gaps in priorities between ideal and real lives on psychological burnout among academic faculty members at a medical university in Japan: a cross-sectional study. *Environmental Health and Preventive Medicine*, 22(1): 32-39.
- Creamer G, Amelink T. (2007). Work-life spillover and job satisfaction of married/partnered faculty members. *Journal of Women and Minorities in Science and Engineering*, 13(4): 317–332.
- Daniel S, Sonnentag S. (2014). Work to non-work enrichment: The mediating roles of positive affect and positive work reflection. *Work & Stress*, 28(1): 49-66.
- Forster N. (2000). A case study of women academics' views on equal opportunities, career prospects and work- family conflicts in a British university. *Women in Management Review*, 15(7): 316–330.
- Frone R. (2003). Work-family balance. In *Handbook of occupational health psychology*. (143–162). Washington: American Psychological Association.
- Grandey A, Cropanzano R. (1999). The Conservation of Resources Model Applied to Work–Family Conflict and Strain. *Journal of Vocational Behavior*, 54(2): 350–370.
- Greenhaus H, Beutell J. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10(1): 76–88.
- Greenhaus H, Powell N. (2006). When Work and Family Are Allies: A Theory of Work-Family Enrichment. *The Academy of Management Review*, 31(1): 72–92.

- Guan X, Sun T, Hou Y, Zhao L, Luan Z, Fan H. (2014). The relationship between job performance and perceived organizational support in faculty members at Chinese universities: a questionnaire survey. *BMC medical education*, 14(1): 1-10.
- Hair F, Hult G, Ringle C, Sarstedt M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: SAGE Publications.
- Hair F, Sarstedt M, Ringle M, Mena A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3): 414–433.
- Heijstra M, Rafnsdottir L. (2010). The internet and academics' workload and work–family balance. *The Internet and Higher Education*, 13(3): 158–163.
- Hesse C, Rauscher A, Roberts B, Ortega R. (2014). Investigating the role of hurtful family environment in the relationship between affectionate communication and family satisfaction. *Journal of Family Communication*, 14(2): 112–128.
- Hunter M, Clark A, Carlson S. (2019). Violating Work-Family Boundaries: Reactions to Interruptions at Work and Home. *Journal of Management*, 45(3): 1284–1308.
- Johnsrud K. (2002). Measuring the Quality of Faculty and Administrative Worklife: Implications for College and University Campuses. *Research in Higher Education*, 43(3): 379–395.
- Karatepe O, Uludag O. (2008). Affectivity, conflicts in the work–family interface, and hotel employee outcomes. *International Journal of Hospitality Management*, 27(1): 30–41.
- Khandelwal P, Sehgal A. (2018). Exploring work-family interface for Indian women entrepreneurs. *Gender in Management*, 33(3): 203-216.
- Livne Y, Goussinsky R. (2017). Workplace bullying and burnout among healthcare employees: The moderating effect of control-related resources. *Nursing and Health Sciences*, 20(1): 89-98.
- Ma X, MacMillan B. (1999). Influences of Workplace Conditions on Teachers' Job Satisfaction. *The Journal of Educational Research*, 93(1): 39–47.
- MacDermid M. (2005). (Re)Considering Conflict Between Work and Family. In E. E. Kossek & S. J. Lambert (Eds.), *Work and Life Integration* (19–40). New York: Psychology Press.
- MacMillan S, Morris L, Atchley K. (2011). Constructs of the work/ life interface: A synthesis of the literature and introduction of the concept of work/life harmony. *Human Resource Development Review*, 10(1): 6–25.
- McNall A, Tombari M, Brown M. (2021). Exploring How Mindfulness Links to Work Outcomes: Positive Affectivity and Work-Life Enrichment. *Applied Research Quality Life*, 16, 167–182.
- McNall L, Scott L, Nicklin J. (2015). Do positive affectivity and boundary preferences matter for work–family enrichment? A study of human service workers. *Journal of Occupational Health Psychology*, 20(1): 93–104.
- Monteiro S, Padhy M. (2020). Improving Work Performance: Examining the Role of Mindfulness and Perceived Control of Internal States in Work Engagement. *International Journal of Behavioral Sciences*, 14(1): 27–33.
- Moore D. (1995). Role conflict: Not only for women? A comparative analysis of 5 nations. *International Journal of Comparative Sociology*, 36(1): 17–35.
- Near P, Sorcinelli D. (1986). Work and life away from work: Predictors of faculty satisfaction. *Research in Higher Education*, 25(4): 377–394.
- Noe R, Hollenbeck J, Gerhart B, Wright P. (2017). *Human resource management: Gaining a competitive advantage*. Irwin: McGraw-Hill.
- Rathi N, Barath M. (2013). Work-family conflict and job and family satisfaction. *Equality, Diversity and Inclusion: An International Journal*, 32(4): 438–454.
- Rhee S, Zheng F. (2019). The effects of work-family enrichment on job and life satisfaction of Korean employees. *International Journal of Financial Research*, 10(5): 138-144.

- Schumm R, McCollum E, Bugaighis A, Jurich P, Bollman R. (1986). Characteristics of the Kansas Family Life Satisfaction Scale in a Regional Sample. *Psychological Reports*, 58(3): 975–980.
- Shahbazian A, Beheshtifar M. (2021). Identifying and Evaluating the Indicators and Dimensions of Psychological Empowerment of the Faculty Members of the Azad University of East Azerbaijan Province. *Iranian Journal of Educational Sociology*, In Press.
- Smith P, Kendall L, Hullin C. (1969). *The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes*. Chicago: Rand McNally.
- Tariq I, Asad S, Majeed A, Fahim, U. (2021). Work-Family Conflict, Psychological Empowerment, and Turnover Intentions among Married Female Doctors. *Bangladesh Journal of Medical Science*, 20(4): 855-863.
- Tement S, Korunka C. (2013). Does trait affectivity predict work-to-family conflict and enrichment beyond job characteristics?. *The Journal of Psychology*, 147(2): 197-216.
- Tenenhaus M, Amato S, Esposito V. (2004). A global goodness-of-fit index for PLS structural equation modelling. In *Proceedings of the XLII SIS scientific meeting* (739–742).
- Tsai C. (2014). The organizational climate and employees' job satisfaction in the Terminal Operation Context of Kaohsiung Port. *He Asian Journal of Ship and Log*, 30(3): 373–392.
- Van Hooff M, Geurts S, Kompier J, Taris W. (2006). Work–home interference: How does it manifest itself from day to day? *Work & Stress*, 20(2): 145–162.
- Wetzels M, Odekerken-Schröder G, Van Oppen C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 33(1): 177–195.
- Wijaya S. (2021). The Correlation between Social Support and Work-Family Enrichment with Psychological Well-Being among Married Nurses. *Journal Medicoeticolegal dan Manajemen Rumah Sakit*, 10(1): 46-56.
- Wolf-Wendel E, Ward K. (2006). Academic life and motherhood: Variations by institutional type. *Higher Education*, 52(3): 487–521.
- Yaghoubi M, Nazem F, Imani N. (2017). Designing a strategic human resources management pattern based on intellectual, cultural and psychological capitals. *Iranian Journal of Educational Sociology*, 1(4): 85–95.
- Zamiri A, Heidari A, Asgari P, Makvandi B. (2020). The Effectiveness of Organizational Intelligence, Workplace-Life Skills, and Employee Empowerment Training on Job Satisfaction and Organizational Culture of Employees with Job Stress. *International Journal of Behavioral Sciences*, 14(1): 13–19.