

How work-family conflict and emotional intelligence of staff nurses affect their job performance: A correlational study

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Abstract

Background: Work-family conflict is one of the human being issues that may be inevitable. The overlapping of home and work roles could interfere with the roles at home or cause problems at work. These conflicts have a negative impact on job performance. Nurses who are proficient in practicing emotional intelligence had a better capacity to handle stress and job performance. **Aim:** It was to assess work-family conflict and emotional intelligence in relation to job performance of staff nurses. **Subjects & Methods:** A correlational descriptive design was conducted on staff nurses (270), who answered a questionnaire measuring work-family conflict in addition to emotional intelligence, whereas their job performance was evaluated by their head nurses using an observation checklist. **Results:** The highest percentages of staff nurses had a moderate level of work-family conflict and a high level of emotional intelligence, and 59.6% of them had a good level of job performance. Job performance had a statistically significant negative correlation with work-family conflict which had a statistically significant positive correlation with emotional intelligence. **Conclusion:** Job performance is negatively affected by work-family conflict. Emotional intelligence has a larger effect size than work-family conflict on job performance among staff nurses as emotional intelligence has a large effect size on their job performance compared to the moderate effect of work-family conflict. Both of them have a low effect size on each other. **Recommendations:** Training staff nurses targeting job performance skills improvement besides work-family conflict management and how to use the high level of emotional intelligence ability to improve are recommended.

Key words: Emotional intelligence, Job performance, Staff nurses, Work-family conflict.

Introduction:

Work-family conflict is one the human being issues that may be inevitable. The overlapping of home and work roles could interfere with the roles at home or cause problems at work. These conflicts have a negative impact on job performance (Rubio et al., 2015; Obrenovic et al., 2020; Wang et al., 2021). In nursing, the management of job performance is as vital as the nurses' role in healthcare especially since they work in a stressful profession facing many challenges and conflicts whether in the work environment, relations with the health work team, or the demanding nursing role itself (Abdelrazek et al., 2017) which reflects on the work-family conflict (Rubio et al., 2015; Wang et al., 2021). Emotional intelligence is one of the human being skills that could have

a positive impact on work-family conflict and job performance (Garavan et al., 2021; Miao et al., 2021).

Work-family conflict is "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role" (Greenhaus & Beutell, 1985 p.77). It is categorized into time, strain, and behavior-based conflict. Time-based conflict occurs once time demands of work or family conflict with each other whereas strain-based one occurs once the strain of work or family influences each other. Behavior-based conflict occurs once behavior necessary for family or work causes it more difficult to satisfy

the requirements of any one of them. Behavior-based conflict seems to be less predominant than other work-family conflict forms. Besides, it has not received much consideration in earlier literature (Bradley, 2013).

Some factors of work-family conflict originate from personal attributes such as personalities, and work or family identity (d'Argent, 2014). Also, when employees feel stressed from a demanding and non-supportive workplace environment, and work longer hours this generates work-family conflict (Raza et al., 2018). Besides, family domain factors including marital status, family size, stressors, involvement, and its development stage interfere with work-family conflict experience too (Bradley, 2013). There are several negative consequences of work-family conflict. They are grouped according to domains of employee's life: individual such as increased psychological distress, depression, somatization, and substance dependence disorders; familial as marital, parental, and family dissatisfaction; work as occupational dissatisfaction, burnout, and low job performance). Hence, difficulties in one area often influence the stability of the other (Bradley, 2013; d'Argent, 2014).

Emotional intelligence is a group of emotional and social capabilities that define how human beings could communicate effectively with their selves and others, and handle day-to-day burdens and stresses (Bar-On, 2002; Carragher & Gormley, 2017). It is defined by Mayer et al., (2008 p.507) as "the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought". It is concentrating on emotional perception and understanding. It is based on connecting the abilities of accurately perceiving and using emotions to facilitate thought in addition to understanding and managing emotions (Gallagher, 2011).

Persons with increased emotional intelligence have a strong capability to recognize, comprehend and manage emotions whether for others or themselves. Hence, they are likely to show enhanced social and psychological adjustment compared to low

emotional intelligent ones (García-Sancho, 2017). Hence, emotional intelligence's importance is raising more in health care and the nursing profession in particular. It helps deliver effective nursing care, satisfy patients' needs, and deal with job stressors and different clinical problems. It is a requirement in contemporary health care systems and positively affects job performance (Najimi et al., 2021).

Job performance is an important issue for any organization. It is the actual actions done to achieve organizational goals and business success. Also, it is important for individuals too to satisfy the sense of self-achievement as one of the needs satisfaction sources (Muchhal, 2014). In healthcare, staff nurses' job performance is the core of patient and health care, and assessing it is a continuous requirement to guarantee high performance level and high quality of nursing and patients care. Supervising and evaluating nurses' job performance is managerially the basic the role of their head nurses (Marquis & Huston, 2012; Huber, 2018).

Job performance is a group of authentic activities or staff behaviors representing what is done and in what way they well fulfill job responsibilities based on organizational standards of the job description (Abdelrazek et al., 2017). The quality of job performance is reduced when a high level of occupational stress is present. It is negatively affected by work-family conflict too (Obrenovic et al., 2020). However, there are other factors positively contributing to job performance and work-family conflict improvements such as supervisor and organizational support. Also, work engagement positively affects in-role performance (Zhong et al., 2016; Ekmekci et al., 2021).

There are various studies geared to assess the relation between work-family conflict and job performance (d'Argent, 2014; Obrenovic et al., 2020; Wang et al., 2021), and how could organization's caring reduces the negative effects of work-family conflict on job performances (Wang et al., 2021), emotional intelligence and job performance (Miao et al., 2021; Najimi et al., 2021), and work-family conflict and emotional intelligence (Olugbenga, 2014; Garavan et al., 2021). However, few studies assess the relationship between the

studied variables among staff nurses, and none measure the effect size of the variables on each other.

Significance of the study

Work-family conflict is related to lower levels of satisfaction with one's job and higher levels of emotional exhaustion (Dodanwala & Shrestha, 2021), minor satisfaction with family and life in general (Priyanka et al., 2022), and lower job performance in specific (Wang et al., 2021). It predicts job stress and contributes to an organization's intention to leave (Labrague et al., 2021). Higher emotional intelligence contributes to more work-family conflict management (Gao et al., 2013). It creates properties to handle work-family conflicts (Bradley, 2013) and is positively related to nursing performance (Fujino et al., 2015). Keeping nurses at higher levels of performance is necessary. It should be taking measures regarding identifying what issues interfering with and required for its management. The previous studies targeted determining the relationship between the studied variables estimating the statistical power rather than measuring the effect size which reflects the practical/clinical effect of the studied variables. Hence, the current study targeted the work-family conflict and emotional intelligence of staff nurses in relation to their job performance to give them the chance for identifying their level of work-family conflict, emotional intelligence, and job performance, and how they could affect each other as a step for better job performance in nursing.

Aim of the study:

The current study aimed to assess work-family conflict and emotional intelligence in relation to job performance of staff nurses.

Research objectives:

- 1- Assess the level of work-family conflict and emotional intelligence of staff nurses.
- 2- Determine the level of the job performance of staff nurses from the point of view of their head nurses.
- 3- Assess the relationship between work-family conflict, emotional intelligence,

and job performance of staff nurses.

Research hypothesis:

Work-family conflict and emotional intelligence of staff nurses have a large effect size on their job performance.

Subjects and methods:

Research design:

A correlational descriptive design had been used for the current study to test the relationship between the studied variable. This is in addition to using eta and eta squared to determine the effect size of the studied variables on each other.

Setting:

The study was conducted at Ismailia General Hospital. It is the biggest governmental hospital in Ismailia city which serves a large number of people and includes variety of healthcare specialties. It is consisted of 11 departments and units: Cardiac Care Unit, Intensive Care Unit, Dialyses Unit, Hepatic Care Unit, Neonatal Intensive Care Unit, Operations unit, Surgery and Orthopedics Department, Pediatric Department, Obstetric Department, Emergency Department and Outpatient Department.

Sample:

The target population of the current study included staff nurses (three hundred) working at all 11 departments and units of Ismailia General Hospital after excluding nurses with less than one year of experience. All staff nurses as a comprehensive sample included two hundred and seventy staff nurses after excluding thirty nurses for the pilot study. The sample size (270) was calculated according to G*Power software version 3.1.9.6. A minimum total sample size of 224 participants is sufficient according to power ($1-\beta=0.99$) of 99% at a significance probability level of $p<0.05$. Adding a drop-off 20%, the total sample size (270 participants) has been applied (Cohen, 1988; Faul et al., 2007; Faul et al., 2013). The staff nurses had age ranged from twenty to forty five years old. About half of them were single rather than married ones. Most of them were female, and had associate degree with years of experience ranging from one to five years.

Tools of data collection:

A **questionnaire**: was used for data collection from staff nurses including:

Part 1: Socio-demographic and general characteristics of nurses: this part is concerned with the studied nurses' age, gender, level of education, years of experience and ...etc.

Part 2: The Work-Family Conflict Multidimensional Scale: it is a standardized scale developed by Carlson, Kacmar, and Williams (**Carlson et al., 2000**), and adopted to assess nurses' level of work-family conflict (WFC) through two directions which are work interfering with family (WIF), and family interfering with work (FIW). The scale is composed of 18 items. It is divided into 6 subscales which have 3 items in each subscale including time-based WIF, time-based FIW, strain-based WIF, strain-based FIW, behavior-based WIF, and behavior-based FIW. A five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) is used. The levels of WFC and its 6 subscales that are based on the mean scores ranging from 1.00-2.33, 2.34-3.66, and 3.67-5.00 are classified as low, moderate, and high levels respectively (**Lee & Hung, 2005**).

Part 3: The Emotional Intelligence Scale: it is a standardized self-report instrument designed by **Bar-On (2002)** and adopted to measure emotional intelligence levels. The instrument consists of 51 items. It is categorized into 6 subscales; intrapersonal emotional intelligence (7 items), interpersonal emotional intelligence (12 items), adaptability emotional intelligence (7 items), general mood emotional intelligence (6 items), stress management emotional intelligence (9 items) and positive impression and inconsistency index (10 items). This tool used a five-point Likert scale ranging from (1) very to (5) very often true of me. The total scores are classified into three descriptive categories, standard scores of 110-130+ are in the high range, 90-109 are in the average range, and below 70-89 are in the low range.

The Six Dimension Scale of Nursing**Performance (6-DSNP):**

It is a standardized observation checklist developed by **Schwirian (1978)**, and adopted to collect data about the nurse's job performance by their head nurses. It is composed of a series of 52 behaviors categorized into six performance dimensions namely: leadership (5 items), critical care (7 items), teaching/collaboration (11 items), planning/evaluation (7 items), interpersonal relation /communications (12 items), and professional development (10 items). Response choices for the scale items concerned with the quality of performance for items (1-42) ranging from (1) not very well to (4) very well. Those about professional development sub-scale items (43-52) focused on the frequency of involvement ranging from (1) seldom or never to (4) consistently. Qualitative terms were applied to the total percentage scores as follows: 100-81.25% (very good), 81.24-62.50% (good), 62.49-43.75% (fair), and 43.74-25.00% (poor) (**Stull, 1983**).

Pilot study:

It was conducted on thirty nurses (10% of the target population) to check the applicability and feasibility of tools, and identify any obstacles or problems that may be encountered during data collection. It was concluded that questionnaire is understandable and applicable, and the time of fulfilling the questionnaire ranged from 15-20 minutes. The same was found for the observation checklist that needs 20 to 30 minutes to be fulfilled.

Validity and reliability of the tools:

The Work-Family Conflict Multidimensional Scale indicated high construct and content validity and its internal consistency range was 78-87, with 0.89 as overall Cronbach's alpha coefficient (**Carlson et al., 2000**). The scale was translated into Arabic followed by back translation, and the cross-matching between the original scale and the re-translated English copy was checked, then some modifications was done for the Arabic copy to be full cross-matched with original scale. Overall Cronbach's alpha coefficient was 0.78 in the current study. The Emotional Intelligence Scale also achieved high construct and content validity (**Stein et al.,**

2009), and its internal reliability coefficient range was 0.70-0.80 (Bar-On, 2002). The scale was translated into Arabic and checked for its content validity through a jury composed of nursing academic staff from nursing specialties (Elborai, 2016). The overall Cronbach's alpha was 0.84 in the current study. The 6-DSNP has high construct and content validity (Sears & Holmval, 2010), with 0.84 as Cronbach's alpha coefficient (Priyanka et al., 2022). In addition, The 6-DSNP was translated into Arabic and checked for its content validity through an expert panel of specialists in nursing administration (Shash, 2006). The overall Cronbach's alpha coefficient was 0.95 in the current study.

Method of data collection:

The data collection was from August 2018 to January 2019. An official consent was attained from Ismailia General Hospital's manager for collecting the data from staff nurses by the first researcher, and with the help of their head nurses. This was followed by the agreement of the nursing director of the hospital. After having the numbers of actually working nurses, and obtaining the informed written consent from staff nurses, the data were collected from staff nurses regarding work-family conflict and emotional intelligence as both are self-instructed instruments. The questionnaires were distributed on staff nurses along with the three shifts for their fulfilling, and returned by each staff nurse (along with one to three months) after checking their completeness by the researcher when receiving them from staff nurses. The time consumed for fulfilling the questionnaire ranged from 15 to 20 minutes. Whereas job performance scale was collected by head nurses using the observation method after attending a workshop with the researcher about job performance scale and how to use it to evaluate nurses' performance and having their agreement to participate in the study (informed written consent). They evaluated staff nurses for a complete month at morning shifts. The time consumed for fulfilling the job performance scale ranged from 20 to 30 minutes for each staff nurse.

Data analysis:

The statistical package of the social science (SPSS) program, version 25, was used for data analysis. Normality of the studied variables data was tested using Kolmogorov-Smirnov test, and the results showed that p-values were less than 0.05. Descriptive statistics using mean \pm standard deviation for quantitative data, and number and percentage for qualitative were computed. For inference statistics, the correlation coefficient spearman test was performed to evaluate the correlation between the studied variables. Also, Eta and Eta Squared were used to determine the strength of the relationship and the effect size of the variables on each other. Statistical significance was set at $p < 0.05$.

Ethical consideration:

Approval to conduct this study was obtained from the Ethics Committee of Faculty of Nursing - Suez Canal University (code 30:1/2018). The nurses' agreements to participate in the study in addition to their informed written consent were attained after explaining the aim of the study and its procedure, with the assurance of their voluntary participation. Also, they had been assured of their anonymity and using information for only research purposes. The authors confirm that all methods were performed in accordance with the relevant guidelines and regulations (Declaration of Helsinki).

Results:

Table (1) showed levels of work-family conflict among staff nurses. It was found that total work interfering with family scored its highest percentage (63.3%) at the high level including time-based work interfering with family which scored the highest percentage (83.0%) followed by strain-based work interfering with family (78.1%), compared to behavior-based work interfering with family which scored the lowest percentage (24.4%). On the other hand, the total family interfering with work scored its highest percentage (75.2%) at the moderate level including time-based family interfering with work which scored the highest percentage (54.8%) followed by behavior-based family interfering with work (52.6%), compared to strain-based family

interfering with work which scored the lowest percentage (41.5%). Totally, work-family conflict scored its highest percentage (71.9%) at the moderate level.

Table (2) illustrated levels of emotional intelligence among staff nurses. It was found that total emotional intelligence scored its highest percentage (94.8%) at the high level including positive impression and inconsistency index which scored the highest percentage (95.9%) followed by interpersonal emotional intelligence (95.2%) compared to intrapersonal emotional intelligence (85.2%) which scored the lowest percentage.

Table (3) showed levels of job performance among staff nurses. It was found that total job performance scored its highest percentage (59.6%) at the good level including professional development which scored the highest percentage (48.5%) at the good level, compared to leadership which scored the lowest percentage (21.9%) at the good level but the highest percentage (43.0%) in fair level.

Table (4) indicated that there was a statistically significant positive correlation ($r=0.214$, $p\text{-value}<0.001$) between total work-family conflict and total emotional intelligence. However, there was a statistically significant negative correlation ($r=-0.133$, $p\text{-value}<0.05$) between total work-family conflict and total job performance. Besides, there was no statistically significant positive correlation ($r=0.035$, $p\text{-value}>0.05$) between total emotional intelligence and total job performance.

Table (5) indicated that eta assured the significant correlation between total work-family conflict and total emotional intelligence ($\eta=0.533$), and total job performance ($\eta=0.652$), with a low effect size ($\eta\text{ squared}=0.284$) of total work-family conflict on total emotional intelligence and moderate effect size ($\eta\text{ squared}=0.425$) on job performance. However, eta showed a strong relationship between total emotional intelligence and total job performance ($\eta=0.978$) with a large effect size ($\eta\text{ squared}=0.956$) of emotional intelligence on total job performance.

Table 1: Levels of work-family conflict among staff nurses (n=270)

Work-family conflict factors	Low		Moderate		High	
	No.	%	No.	%	No.	%
Time-based work interfering with family	4	1.5%	42	15.6%	224	83.0%
Strain-based work interfering with family	9	3.3%	50	18.5%	211	78.1%
Behavior-based work interfering with family	50	18.5%	154	57.0%	66	24.4%
Total work interfering with family	6	2.2%	93	34.4%	171	63.3%
Time-based family interfering with work	74	27.4%	148	54.8%	48	17.8%
Strain-based family interfering with work	73	27.0%	112	41.5%	85	31.5%
Behavior-based family interfering with work	49	18.1%	142	52.6%	79	29.3%
Total family interfering with work	34	12.6%	203	75.2%	33	12.2%
Total work-family conflict	8	3.0%	194	71.9%	68	25.2%

Table 2: Levels of total emotional intelligence among staff nurses (n=270)

Emotional intelligence subscales	Low		Average		High	
	No.	%	No.	%	No.	%
Intrapersonal emotional intelligence	12	4.4%	28	10.4%	230	85.2%
Interpersonal emotional intelligence	6	2.2%	7	2.6%	257	95.2%
Adaptability emotional intelligence	16	5.9%	14	5.2%	240	88.9%
General mood emotional intelligence	14	5.2%	4	1.5%	252	93.3%
Stress management emotional intelligence	9	3.3%	21	7.8%	240	88.9%
Positive impression and inconsistency index	5	1.9%	6	2.2%	259	95.9%
Total emotional intelligence	3	1.1%	11	4.1%	256	94.8%

Table 3: Levels of job performance among staff nurses (n=270)

Job performance sub-scales	Poor		Fair		Good		very good	
	No.	%	No.	%	No.	%	No.	%
Leadership	73	27.0%	116	43.0%	59	21.9%	22	8.1%
Critical care	27	10.0%	56	20.7%	98	36.3%	89	33.0%
Teaching / collaboration	62	23.0%	102	37.8%	83	30.7%	23	8.5%
Planning / evaluation	62	23.0%	92	34.1%	71	26.3%	45	16.7%
Interpersonal relation / communications	26	9.6%	52	19.3%	120	44.4%	72	26.7%
Professional development	23	8.5%	73	27.0%	131	48.5%	43	15.9%
Total job performance	25	9.3%	69	25.6%	161	59.6%	15	5.6%

Table 4: Correlation between work-family conflict, emotional intelligence and job performance among staff nurses (n=270)

Variables	1	2	3	4	5
1. Total Work Interfering With Family	—				
2. Total Family Interfering With Work	0.386***	—			
3. Total Work -Family Conflict	0.808***	0.830***	—		
4.Total Emotional Intelligence	0.237***	0.157**	0.214***	—	
5.Total Job Performance	-0.100	-0.133*	-0.133*	0.035	—

*P-value < 0.05, **P-value < 0.01, ***P-value < 0.001

Table 5: Measures of association and effect size among the studied variables (n=270)

Variables	Eta	Eta Squared
Total Work-Family Conflict * Total Emotional Intelligence	0.533	0.284
Total Work-Family Conflict * Total Job Performance	0.652	0.425
Total Emotional Intelligence * Total Job Performance	0.978	0.956

Discussion:

The high level of time-based and strain-based work interfering with family could be due to the time spent in work (**Erdamar & Demirel, 2014**) as time occupied by the job causes difficulty in family responsibilities accomplishment, and stress created by work responsibilities may affect home and family responsibilities causing conflict (**Berger, 2018**). In this regard, Allen (**Allen, 2019**) reported that variables related to employees' work such as hours of work and job stress is strongly predicting work interfering with family (**Chiappo & DiDona, 2014**). The time factor is still a determinant factor in family interfering with work too in addition to behavior factor. However, they scored moderate levels. These levels may be because the highest percentage of nurses was single and usually have fewer household responsibilities with less time to be fulfilled. The moderate level of total work-family conflict agrees with **Labrague et al. (2021)** compared to **Alshutwi, (2016)** and contributes to the moderate effect size of total work-family conflict on job performance. Also, the high correlation between work interfering with family and family interfering with work assures that actions used to manage one of them will lead to managing the other leading to full work-family conflict management and hence better job performance.

Regarding levels of staff nurses' emotional intelligence, it was found that the highest percentage of staff nurses scored a high level of positive impression and inconsistency index. This agrees with **Juma (2013)** compared to **Kutash (2015)** who reported a moderate level of interpersonal emotional intelligence. In addition, the current study result of intrapersonal emotional intelligence which was lower than interpersonal emotional intelligence may be due to that nurses can understand others as well as interact and relate well with people more than having intrapersonal emotional intelligence (**Miller-Clarkson, 2013**) which is based on self-contrast and self-awareness.

Totally, the highest percentage of staff nurses recorded a high level of emotional intelligence that is in agreement with two

studies (**Hajisabbagh et al., 2019; Tohemer, 2019**) compared to one study that disagrees with the results (**Tonioni, 2015**). Although emotional intelligence scored a high level as self-perceived emotional intelligence, it, as a competency (**Lough, 2016**), needs to be energized through training on how to use it in varied situations of work/job practice or with family issues (**Ruiz-Aranda et al., 2012**) as it could be learned through empirical exercises (**Sigmar et al., 2012**).

Concerning levels of the job performance of staff nurses, it was found that the highest percentage of staff nurses recorded a good level of professional development compared to leadership which recorded its highest percentage at a fair level. Also, teaching/collaboration and planning/evaluation score their highest percentages at a fair level. These results mean that three of six of total job performance skills needs to be improved. As half of job performance skills were in fair level, job training would be extremely needed to enhance job performance. This is compared to critical care skill that scored the highest percentage at very good level, the highest level of job performance. This indicates that the direct patient care is achieved at its highest level. The current study results disagree with **Lawson (2017)** who reported that nurses had their highest mean score in planning/evaluation in contrast to critical care.

Totally, job performance scored its highest percentage at a good level for more than half numbers of nurses. This result is in agreement with a study (**Yuxiu et al., 2011**) reported that job performance was perceived at a moderate level by nurses in contrast to another (**Tuttas, 2013**) reported that total performance scored a high level. The total performance level of staff nurses assured the need for more job performance management whether using training programs (knowledge, practice and attitude) to improve the level of job performance skills, more motivation (**Armstrong, 2017**), and support from their managers and organization (**Zhong et al., 2016**) to change staff nurses' performance level towards the highest level, the very good level for the majority of staff nurses. This is assured

by **Inayatullah and Jehangir (2012)** who

indicating that individuals' performance is determined by basic three elements which are the ability to do work, work environment and motivation.

Regarding correlation between total work-family conflict and total job performance, it is generally expected to be negative one as sufferings from conflict within work or family cause anxiety that negatively affect job performance (**Sun et al., 2022**) or disturbance staff attention at work (**Chiappo & DiDonna, 2014**). Also, working for long hours, workplace politics, and fierce competition among colleagues are detrimental to the well-being of the employee's family life as a source of work-family conflict, and hindering their performance at work (**Sharma, 2014**). In this regards, there are many studies confirmed the negative correlation between total work-family conflict and job performance (**Warokka & Febrilia, 2015; Obrenovic et al., 2020; Wang et al., 2021**). Whereas, other showed that work-family conflict hadn't any effect on job performance (**Cao et al., 2020**).

In addition, the moderate effect size of work-family conflict on job performance could be referred to the moderate level of the total of work-family conflict itself, and the effect of moderate level of family interfering with work that scored the highest percentages among staff nurses. Also, it could be moderated because of staff nurses' commitment to work responsibilities despite the need to balance their dual responsibility for work and family (**Cao et al., 2020**). However, this moderate level of work-family conflict should be decreased. Conducting training program on how to manage it and the stress associated with it can improve job performance (**Abdelrazek et al., 2017**). Also, building supportive work environment can contribute to relieving the adverse effects of workload and work-family interference on nurses (**Ekmekci et al., 2021**) and hence improves nurses' job performance (**Zhong et al., 2016**).

In addition, there was a statistically significant positive correlation between total

work-family conflict and total emotional intelligence. This result agrees with the study conducted by **Olugbenga (2014)** and disagrees with **Garavan et al. (2021)**. Whereas the non-statistical significant positive correlation between total emotional intelligence and total job performance agrees with **Najimi et al. (2021)** and disagrees with **Miao et al. (2021)**.

The statistically positive correlation between work-family conflict and emotional intelligence means that increasing work-family conflict induces increasing emotional intelligence that is logical to manage the personal work-family conflict. As low and moderate level of stress lead to positive actions (**Abdelrazek et al., 2017**), the low and moderate level of work-family conflict will lead positive actions too and hence more using of emotional intelligence because of stress and time conflict which constitute the work-family conflict. Individuals with high emotional intelligence had a better capacity to handle stress and hence better work-family conflict management (**Ceballos, 2014**). However, how this level of work-family conflict or the high levels of emotional intelligence could improve total job performance that is already its highest percentages at level scores at very good level (ranged between 62.50%-81.24%) which need to be improved particularly three of six job performance skills (leadership, teaching/collaboration, and planning/evaluation) that have their highest percentages at levels scores at fair level (ranged between 43.75%-62.49%).

Also, the non-statistical significant positive correlation between total emotional intelligence and total job performance could be interpreted as owing individuals for emotional intelligence ability doesn't mean that these individuals are able to practice well their job. Any profession/job has its distinguished competences that require individuals to be skillful for its well practice (**Miller-Clarkson, 2013**), then, the role of effective use of human being skill as emotional intelligence in job performance improvement.

Generally, comparing the results of the

high level of emotional intelligence with its relation to other study variables and its large effect size on job performance could indicate

that emotional intelligence may not be fully used effectively in work-family conflict and job performance management. As emotional intelligence a skill (Mayer et al., 2008) that requires training for acquiring more knowledge and attitude and being proficient practiced in different situations, the staff nurses need to be trained on emotional intelligence and how to use it in handling work-family conflict and supporting job performance. In this regard, Littlejohn (2012) clarified that promotion of emotional intelligence can lead to workplace stress and violence reduce, and nurse professionals can shift their attention away from common problems into satisfying patients' need for high quality and empathetic caring and hence better nursing performance (Shanta, 2013).

Conclusion:

Job performance is negatively affected by work-family conflict. Emotional intelligence has a larger effect size than work-family conflict on job performance among staff nurses as emotional intelligence has a large effect size on their job performance compared to the moderate effect of work-family conflict. Both of them have a low effect size on each other. Staff nurses need a job training program combined with energizing job motivation and organizational support besides managing work-family conflict and the stress associated with it, and effective use of emotional intelligence for job performance improvement.

Recommendation:

Based on the study findings, there is a need for more job performance management that could be implemented using training programs to improve the level of job performance skills (leadership; teaching/collaboration; planning/evaluation) and maximize others. This is besides motivation and supporting actions from nursing managers and organization. Also, training staff nurses on work-family conflict management whether family or work issues focusing more on time and stress

management is recommended. Besides, training staff nurses on how to use the high level of emotional intelligence ability to improve both of them are recommended. In

addition, further studies may be conducted to thoroughly assess factors positively and negatively contributing to job performance.

References:

- Abdelrazek F, El-Ghabbour GMM, Fahmy MTK, El-Sayed NM. Effect of Stress Management Techniques on Stress and Performance Levels among Head Nurses. The 6th International Scientific Conference "Integration in Health Care: A Step towards Health System Evolution", 22th-23th, held by Faculty of Nursing - Suez Canal University, Egypt. 2017.
- Allen T. The Relationship Between Emotional Intelligence, Resilience, and Retention Among Baccalaureate Nursing Students. PhD. Dissertation in Nursing. University of Phoenix. 2019; <https://www.proquest.com/openview/e1754334d56f6687db7742e4f1b3a7a1/1?pq-origsite=gscholar&cbl=18750&diss=y>.
- Alshutwi SS. The Influences of Family Supportive Supervisor Behaviors on the Relationships Among Work-Family Conflict, Stress, and Turnover Intention in Saudi Arabian Registered Nurses. PhD. Dissertation in Nursing. University of Wisconsin-Milwaukee. 2016; <https://dc.uwm.edu/cgi/viewcontent.cgi?article=2347&context=etd>.
- Armstrong, M. Armstrong On Reinventing Performance Management: Building A Culture Of Continuous Improvement. London: Kogan Page; 2017.
- Bar-On R. Bar-On Emotional Quotient Inventory: Short. Technical manual. Toronto: Multi-Health Systems; 2002.
- Berger L. Working Mothers' Work and Family Satisfaction: The Influence of Time Demands and Time-based Conflict. J Ment

- Disord Treat. 2018;4(2):1-8. doi:10.4172/2471-271X.1000158.
- Bradley KJ. Gender and work-family conflict: The moderating role of a job's gender-type. MSc Thesis. Purdue University, Graduate School. 2013; <https://docs.lib.purdue.edu/dissertations/AAI1548035/>. Accessed 10 Dec 2021.
- Cao J, Liu C, Wu G, Zhao X, Jiang Z. Work-family conflict and job outcomes for construction professionals: the mediating role of affective organizational commitment. *Int J Environ Res Public Health*. 2020; 17(1443):1-24. doi: <https://doi.org/10.3390/ijerph17041443>
- Carlson DS, Kacmar KM, Williams LJ. Construction and initial validation of a multidimensional measure of work-family conflict. *J Vocational Behav*. 2000; 56(2):249-276. doi:10.1006/jvbe.1999.1713
- Carragher J, Gormley K. Leadership and emotional intelligence in nursing and midwifery education and practice: a discussion paper. *JAN*. 2017; 73(1): 85-96. doi: <https://doi.org/10.1111/jan.13141>
- Ceballos G A. The relationship between emotional intelligence and job satisfaction among nurses at a community hospital setting: Capella University; 2014.
- Chiappo IL, DiDonaT. (2014). Ethnicity on Work-Family, Family-Work Conflicts & Time-Based, Strain-Based Interferences. *Int J Ed & Social Sci*. 2014;1(4):50-60.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- d'Argent J. Understanding What an Individual Experiencing Work-Family Conflict Finds Helpful While in Counseling: A Case Study. PhD. Dissertation. Indiana University. 2014;
- doi: <https://www.proquest.com/docview/1498461060>
- Dodanwala TC, Shrestha P. Work-family conflict and job satisfaction among construction professionals: the mediating role of emotional exhaustion. *On The Horizon*. 2021;29(2): 62-75. doi 10.1108/OTH-11-2020-0042
- Ekmekci OT, Xhako D, Camgoz SM. The Buffering Effect of Perceived Organizational Support on the Relationships Among Workload, Work-Family Interference, and Affective Commitment: A Study on Nurses. *JNR*. 2021; 29(2):1-11. doi: 10.1097/JNR.0000000000000419.
- Elborai AS. Emotional intelligence versus motivation among faculty nursing students. Master thesis in nursing administration, Ain Shams University, Fac. Ng. Egypt. 2016. http://srv1.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=ThesisPicBdy&BibID=12329578&TotalNoOfRecords=147&PageNo=1&PageDirection=First
- Erdamar G, Demirel H. Investigation of work-family, family-work conflict of the teachers. *Procedia-Social & Behav Sci*, 116, 4919-4924. doi:10.1016/j.sbspro.2014.01.1050
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2013). *G*Power* Version 3.1.7 [computer software]. Universität Kiel, Germany. Retrieved from <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>.
- Faul, F., Erdfelder, E., & Lang, AG. et al.

- (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences *Behavior Research Methods* (2007) 39: 175. <https://doi.org/10.3758/BF03193146>.
- Fujino Y, Tanaka M, Yonemitsu Y, Kawamoto R. The relationship between characteristics of nursing performance and years of experience in nurses with high emotional intelligence. *Int J Nurs Pract.* 2015; 21(6):876-881. doi: <https://doi.org/10.1111/ijn.12311>.
- Gallagher S. Emotional Intelligence. In: Kreutzer, J.S., DeLuca, J., Caplan, B. (eds) *Encyclopedia of Clinical Neuropsychology*. Springer, New York, NY; 2011. https://doi.org/10.1007/978-0-387-79948-3_1452
- Gao Y, Shi J, Niu Q, Wang L. Work–family conflict and job satisfaction: Emotional intelligence as a moderator. *Stress & Health.* 2013;29(3):222-228. doi: <https://doi.org/10.1002/smi.2451>
- GaravanT, Srivastava S, Madan P, O'Brien F, Matthews-Smith G. Type A/B Personality, Work–Family, And Family–Work Conflict: The Moderating Effects Of Emotional Intelligence. *Human Res Resource Dev Q.* 2021; doi: <https://doi.org/10.1002/hrdq.21454>.
- García-Sancho E, Salguero JM, Fernández-Berrocal P. Ability emotional intelligence and its relation to aggression across time and age groups. *Scand J Psychol.* 2017; 58(1): 43-51. doi: 10.1111/sjop.12331
- Greenhaus JH, Beutell, N J. Sources of conflict between work and family roles. *Academy of Management Review.* 1985; 10 (1): 76–88. <http://www.jstor.org/stable/258214>.
- Hajisabbagh N, Fereidooni-Moghadam M, Etemadifar M. Coping strategies and their relationship with emotional intelligence in patients with epilepsy referred to Isfahan Epilepsy Society in 2017. *Epilepsy & Behav.* 2019; 92:200-205. doi: <https://doi.org/10.1016/j.yebeh.2018.12.032>
- Huber, D. L. *Leadership and nursing care management.* 6th ed., Missouri: Elsevier; 2018.
- Inayatullah A, & Jehangir P. Teacher’s job performance: The role of motivation. *Abasyn J. of Social Scien.* 2012; 5(2), 78-99.
- Juma DS. The relationship between emotional intelligence of principals and the overall organizational climate of public elementary schools. PhD. Dissertation in Education. Grand Canyon University. 2013; <https://www.proquest.com/openview/e498f30a6d447dd21619465ea86c5e4b/1?pq-origsite=gscholar&cbl=18750>.
- Kutash M. The Relationship Between Nurses' Emotional Intelligence and Patient Outcomes. PhD. Dissertation University of South Florida, College of Nursing. 2015; <https://www.proquest.com/openview/9df467efceb4bef1c4a02950a76f9082/1?q-origsite=gscholar&cbl=18750>.
- Labrague LJ, Ballard CA, Fronda DC. Predictors and outcomes of work–family conflict among nurses. *Int Nurs Review.* 2021;68(3):349-357. doi: <https://doi.org/10.1111/inr.12642>.
- Lawson PP. Transition to Practice Experience: The Impact on Newly Licensed RN Performance. PhD. Dissertation. Nova Southeastern University, College of Nursing. 2017; https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1038&context=hpd_con_stuetd/.
- Lee C, Hung k. Work-family conflict and its

- relationship with social support: a study at private educational institutions in Kuching, Sarawak, Malaysia. *Ed. Res J.* 2005; 20 (2):221-244. https://www.hkier.cuhk.edu.hk/journal/document/ERJ/erj_v20n2_221-244.pdf
- Littlejohn C. *Justification and the truth-connection*: Cambridge University Press; 2012.
- Lough L. *Emotional intelligence training intervention: A mixed methods study of Air Force Staff Sergeants*. University of Phoenix; 2016.
- Marquis B L, Huston C J. *Leadership roles and management functions in nursing: Theory and application*. 7th ed., Philadelphia: Williams & Wilkins; 2012.
- Mayer J D, Roberts R D, Barsade S G. *Human abilities: Emotional intelligence*. *Annu Rev Psychol.* 2008; 59:507-536. doi:10.1146/annurev.psych.59.103006.093646.
- Miao C, Humphrey RH, Qian S. *Emotional intelligence and job performance in the hospitality industry: a meta-analytic review*. *Int J Contemporary Hospitality Manag.* 2021; 33(8):2632-2652. doi:10.1108/IJCHM-04-2020-0323
- Miller-Clarkson J. *Examining the Relationships of Emotional Intelligence and Performance-Based Self-Esteem with Burnout among Pastors*. PhD. Dissertation. Walden University. College of Social and Behavioral Sciences. 2013; [https://www.proquest.com/openview/543901dfbf2e1034f9f65dbedb72ca4d/1?q-origsite=gscholar&cbl=18750](https://www.proquest.com/openview/543901dfbf2e1034f9f65dbedb72ca4d/1?pq-origsite=gscholar&cbl=18750).
- Muchhal DS. *HR practices and Job Performance*. IOSR-JHSS. 2014;19(4):55-61. doi: <https://doi.org/10.1111/j.1365-2834.2011.01240.x>
- Najimi A, Doustmohamadi P, Omid A. *The relationship between emotional intelligence, social responsibility, and job performance in health service providers*. *J Educ Health Promot.* 2021; 10: 1-5. doi: 10.4103/jehp.jehp_960_20
- Obrenovic B, Jianguo D, Khudaykulov A, Khan MAS. *Work- Family Conflict Impact on Psychological Safety and Psychological Well-Being: A Job Performance Model*. *Front Psychol.* 2020; 11(475):1-18. doi: <https://doi.org/10.3389/fpsyg.2020.00475>.
- Olugbenga BA. *Influence of Emotional Intelligence and Work-Family Conflict on Organizational Citizenship Behaviour of Secondary School Business Subjects' Teachers in Ogun State*. *JEHD.* 2014;3(3):301-308. doi: 10.15640/jehd.v3n3a24
- Priyanka TJ, Mily MA, Asadujjaman M. *Impacts of work-family role conflict on job and life satisfaction: a comparative study among doctors, engineers and university teachers*. *PSU Res Review.* 2022; doi 10.1108/PRR-10-2021-0058.
- Raza H, Eeden-Moorefield BV, Grzywacz JG, Linver MR, Lee S. *A Longitudinal Examination of Work-Family Conflict among Working Mothers in the United States*. In: Blair SL, Obradović J, editors. *The Work-Family Interface: Spillover, Complications, and Challenges (Contemporary Perspectives in Family Research, Vol. 13)*, Emerald Publishing Limited, Bingley. 2018; doi <https://doi.org/10.1108/S1530-35352018000013007>
- Rubio C, Osca A, Recio P, Urien B, Peiró JM. *Work-family conflict, self-efficacy, and emotional exhaustion: A test of longitudinal effects*. *Rev. psicol. trab. organ.* 2015; 31(3):147-154. doi:

- <https://doi.org/10.1016/j.rpto.2015.06.004>
- Ruiz-Aranda D, Castillo R, Salguero J M, Cabello R, Fernández-Berrocal P, Balluerka N. Short-and midterm effects of emotional intelligence training on adolescent mental health. *J. of Adoles. Health.* 2012; 51(5), 462-467.
- Schwirian PM. Toward an explanatory model of nursing performance. *Nurs Res.* 1978; 30(4):247-253.
- Sears GJ, Holmvall CM. The joint influence of supervisor and subordinate emotional intelligence on leader-member exchange. *J Business & Psychology.* 2010;25(4):593-605.
- Shanta L L, Connolly M. Using King's interacting systems theory to link emotional intelligence and nursing practice. *J. Profess. Ng.* 2013; 29(3):174-180.
- Sharma D. *Leadership Lessons from the Military*: SAGE Publications India; 2014.
- Shash H. The relationship between job stress, job performance, and social support among nurses at Alexandria Main University Hospital. Master thesis in nursing administration, Alexandria University, Fac. Ng. Egypt. 2006. http://srv1.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&BibID=12066049
- Sigmar L S, Hynes G E, Hill K L. Strategies for teaching social and emotional intelligence in business communication. *Business Commun. Q.* 2012; 75(3), 301-317.
- Stein SJ, Papadogiannis P, Yip JA, Sitarenios G. Emotional intelligence of leaders: A profile of top executives. *Leadership & Org. Dev J.* 2009; 30(1):87-101.
- Stull MK. Improving the performance of staff nurses through goal-setting and performance feedback: Theoretical and methodological considerations. In proceedings of the second national conference for nursing service administration research, ed. b. mark, Medical College of Virginia. 1983.
- Sun J, Sarfraz M, Ivascu L, Iqbal K, Athar Mansoor A. How Did Work-Related Depression, Anxiety, and Stress Hamper Healthcare Employee Performance during COVID-19? The Mediating Role of Job Burnout and Mental Health. *Int. J. Environ. Res. Public Health.* 2022; 19, 10359: 1-8. <https://doi.org/10.3390/ijerph191610359>
- Tohemer M. The Association between Emotional Intelligence and Work Engagement in Frontline Nursing. PhD. Dissertation. Capella University, School of Counseling and Human Services. 2019; <https://www.proquest.com/openview/e531e8d16ac79d8d1f309ed1a2fac58f/1?pq-origsite=gscholar&cbl=18750&diss=y>.
- Tonioni R. The relationship between emotional intelligence and leadership style among community college leaders. PhD. Dissertation. Aurora University. 2015; Retrieved from Proquest Dissertations & Theses.
- Tuttas, C. A. Travel nurse job performance: Integration factors as predictors, and travel nurse integration experiences. PhD. Dissertation. Faculty of the University of Miami. 2013; <https://sigma.nursingrepository.org/bitstream/handle/10755/22300/Dissertation.pdf?sequence=1&isAllowed=y>.
- Wang A, Tsai H, Lee M, Ko R. The effect of work-family conflict on emotional exhaustion and job performance among service workers: the cross-level moderating effects of organizational reward and caring. *Int J Human Resource Manag.* 2021; 32 (14):3112-3133. <https://doi.org/10.1080/09585192.2019.16>

Warokka A, Febrilia I. Work-family conflict and job performance: lesson from a Southeast Asian emerging market. *J Southeast Asian Res.* 2015; doi: 10.5171/2015.420802

Yuxiu P, Kunaviktikul W, Thungjaroenkul, P. Job characteristics and job performance among professional nurses in the university hospitals of people's Republic of China. *Chiang Mai University J Natural Sci.* 2011; 10(2):171-180.

Zhong L, Wayne SJ, Liden RC. Job engagement, perceived organizational support, high-performance human resource practices, and cultural value orientations: A cross-level investigation. *J. Organiz. Behav.* 2016;37:823-844. doi: 10.1002/job.2076.