



## Human Resource Management Practices in Relation to Nurses' Innovative Work Behavior: Moderating Role of Eudaimonic Well-Being

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### ABSTRACT

**Background:** Most health care organizations aimed to extend its inventive innovative outcomes, thus effective role of human resource management practices become more crucial especially at critical care units which help reach desired level of innovative work behavior, better eudaimonic well-being, and better relationships with supervisors among nurses that will improve hospital' efficiency and cost-effectiveness. **Aim:** To determine the relation between human resource management practices and nurses' innovative work behavior and (eudaimonic well-being as moderating role). **Setting:** The present study was implemented at Intensive Care Units (ICU) and Operating Theaters of Tanta Universal Teaching Hospital. Participants: Simple random sample of nurses (n=300) who working at five ICUs (n=206), and nurses working at the operating theaters (n=94). **Tools:** Three tools were used namely; Human Resource Management Practices Scale (HRMPsS), Innovative Work Behavior Questionnaire (IWBQ), and Eudaimonic well-being Scale (EWBS). **Results:** There were statistically significant positive correlations between total HRMPs and total IWB ( $r=.700$ ,  $p<0.001$ ), and total HRMPs and total EWB ( $r=.291$ ,  $p<0.001$ ). Also, total IWB was significant positive correlation with EWB ( $r=.258$ ,  $p<0.001$ ). Total HRMPs (OR 0.707, CI95% 0.610-0.803) was highly significant predictor to total innovative work behavior ( $p<0.001$ ). Total EWB (OR 0.114, CI95% 0.00-0.228) was significant predictor to total innovative work behavior ( $p=0.050$ ). **Recommendations:** An educational intervention for unit nurse managers about HRMPs for achieving innovative work behavior and eudaimonic well-being which reflects on quality of health care.

**Keywords:** Eudaimonic Well-Being, Human Resource Management Practices, Innovative Work Behavior, Moderating Role & Nurses.

### Introduction

The intensive care unit (ICU) is specified place proposing accessibility for the prevention, diagnosis and treatment of various organ failures (Amy, Leanne, & Amanda, 2018). Consequently, twenty -four hours devoted on-site cover by a qualified nursing team who has satisfactory special qualification skills, proficiency, effective relationship exchange with others, and has challenge for continuing education and training for growth and self-development (Williams & Jennifer,

2014). Successful health organizational administration measured by its ability for effective utilization of its human resources management practices as cure managerial role especially at intensive care units to reach innovative work behavior desired level (Brun & Dugas, 2008).

Human resource management practices (HRMPs) are activities established for leading collectively and constructively to reach desired organization' goals and objectives (Xerri & Reid, 2018). Main human resource

management practices include recruitment, selection, involvement, training, development, and education, work conditions, competency-based performance appraisal, and compensation and rewards which lead to superior performance for the organization (Van, Wei & Chiang T, 2018). Recruitment and selection are the first important HRM practices that concentrate on clear capabilities, experiences of the preferred applicant which saves time and energy and pay off in in the extended period (Demo, Neiva, Nunes & Rozzett, 2012).

Training, development, and education practices support the innovative performance of ICUs nurses that the basic needs of each health organization's competitive environment (Chowhan, 2016). The complexity of nursing activities increases the need for training, development, and continuing education for facing technology and health care digitalization challenges (Xerri & Reid, 2018).

Most health care organizations have experienced a reorganizing of their work condition practices adoption like job rely on , delayering, and self-directed work-teams which add substantial value to the organization goals (Chowhan, 2016).

Competency-based performance appraisal allows nurses and supervisors to measure, manage performance competencies, and establish development plan which identifies knowledge, skills, abilities, critical behaviors for successful nurses' job roles and specific functions (Frenkel, Restubog & Bednall, 2012). While, compensations and rewards are benefitting for an employee in exchange for their labor which allows achieving organization' goals and objectives (Demo et al., 2012).

Today, digitalization and globalization in health care made creativity and innovativeness of critical

attribute in ICUs and operating theater nurses delivering high-quality service organizations (Bani-Melhem, Zeffane & Albaity, 2018). Innovative work behavior (IWB) aiming to attain the initiation and deliberated introduction within a work role, organization of newfangled valuable ideas, processes, services or procedures (Lee, Hallak & Sardeshmukh, 2019). Innovative work behavior is concerned with the level of individuals in organizations that includes four perspectives for innovation jobs, specifically idea or opportunity reconnoitering or problem recognition, idea generation, idea upgrading, and idea attainment which support and build coalitions by enthusiasm expressing the success of innovative work behavior, being persistent, and getting the right people involved to ensure eudaimonic well-being (Li & Hsu, 2016).

Well-being is a classical notion concept for everyday routines and activities associated with personal self-growth and theoretically comprised from hedonic and eudaimonic dimensions (Ryff, 2014). Hedonic refers to sensory pleasure, happiness, and enjoyment immediately, while, eudaimonic refers to the consequences of self-growth and self-actualization (Knobloch, Robertson & Aitken, 2017). ICUs and operating theaters nursing as a profession is more seen as a break from everyday routines and increasingly activity associated with personal self-growth (Anglim, Horwood, Smillie, Marrero & Wood, 2020). Eudaimonic well-being (EWB) realizing human potentials and growth for the ultimate pursuit of life (Allan, Batz-Barbarich, Sterling & Tay, 2019). Consequently, eudaimonic well-being is the degree to which a person is fully functioning and flourishing considering aspects of well-being (Nikolova, 2019).

Eudaimonic well-being constructs to improve nursing innovative work behavior (Steel, Taras, Uggerslev & Bosco, 2018). It characterizes the fully-

functioning that fulfill nursing psychological needs of autonomy, competence, relatedness, self-acceptance, personal growth, environmental mastery, self-discovery, and improve the relation between nurses and their supervisors as an innovative behavior (Wiklund, Nikolaev, Shir, Foo & Bradle, 2019).

### Significance of the Study

The nature of nursing work at intensive care units and operating theaters is highly stressful and work loaded, where nurses' innovative work behavior reflects effective and successful human resource management practices utilization. Eudaimonic well-being is important cofactors to enhance promotion-focused employees and innovation levels among nurses (Bos-Nehles & Veenendaal, 2019). A mixture of all these variables including HRM practices and eudaimonic well-being represent a cornerstone in which a nurse has more autonomy, mastery over work condition, positive relationship with others, and has a purpose for improving their innovative work behavior and performance (Ansari, Siddiqui & Farrukh, 2018). So, the current study was conducted to determine the relation between human resource management practices, innovative work behavior and (eudaimonic well-being as moderating role) among nurses.

### Aim of the Study

The current study aimed to determine the relation between human resource management practices and nurses' innovative work behavior and (eudaimonic well-being as moderating role).

### Research Objectives

To assess levels of human resource management practices among nurses at Tanta Universal Teaching Hospital five ICUs and operating theaters.

To explore levels of innovative work behavior among nurses at Tanta Universal Teaching Hospital five ICUs and operating theaters.

To identify the degree of influence of eudaemonic well-being as moderating role on the relation between human resource management practices and nurses' innovative work behavior.

### Research Questions

-What is the relation between human resource management practices and nurses' innovative work behavior?

-Is Eudaemonic well-being influence the relation between human resource management practices and nurses' innovative work behavior?

**The below figure illustrates the researchers' explanation conceptual frame work of the current study variables HRMPs, IWB, and EWB as moderating role.**

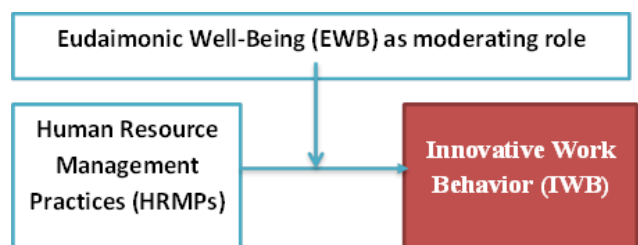


Figure (1): Researchers' explanation conceptual frame work of the current study variables

### Subjects and Method

**Research Design:** Non-experimental, descriptive correlational, via cross-sectional research design was used to conduct this study.

**Study Setting:** The present study was implemented at five Intensive Care Units (Renal Dialysis, Cardiology, Medical-Chest, Pediatric, and Neonatal ICUs) and Operating Theaters of Tanta Universal Teaching Hospital as one of governmental university hospitals in the delta region of Egypt

affiliated to the Ministry of Higher Education. Tanta Universal Teaching Hospital is included one main building containing inpatient, outpatient clinics, eight ICUs, and eight operating theaters with capacity of 750 beds.

**The participants:** Simple random sample of nurses (n=300) who working at the five ICUs and operating theaters and agree to participate in the study. The sample divided into (n=206) working at the five ICUs and (n=94) working at operating theaters with inclusion criteria to nurses who had (nursing high school-diploma or nursing technical institute, or bachelor, or postgraduate level of nursing education, nurses' age ranged from 22-50 years, and any gender; and exclusion criteria to nurses' age less than 22 years and to nurses who had less than one year of experience to make sure their orientation by the nature and climate of work unit.

**Data Collection Tools:** Three tools were used in this study namely, Human Resource Management Practices Scale (HRMPsS), Innovative Work Behavior Questionnaire (IWBQ), and Eudaimonic Well-being Scale (EWBS). In addition, the personal data were also included.

#### **Tool I: Human Resource Management Practices Scale (HRMPsS)**

It consisted of two sections as the following:

**Section I: Personal data**, was designed by the researchers to gather the personal data of the participant nurses (such as; age, gender, marital status, department, educational level, and years of experience).

**Section II:** This tool was developed by Demo et al., (2012) to assess human resource management practices (HRMPs) levels among nurses, it consists of (39) descriptive questions items which were divided into 6 subscales as following; recruitment and selection

(6 items); involvement (11 items); training, development, and education (6 items); work condition (6 items); competency-based performance appraisal (5 items), and compensation and reward subscales (5 items). Each item was rated on a five-point Likert scale ranging from '1' (Strongly Disagree) to '5' (Strongly Agree).

**Scoring of HRMPs Scale:** The total score of HRMPsS was ranged from (39–195), which is the sum of all nurses' responses to this scale. Scores from (39–77) points were considered as "low HRMPs", scores from (78-116) were denoted as "moderate HRMPs", and scores from (117-195) were considered as "high HRMPs".

#### **Tool II: Innovative Work Behavior Questionnaire (IWBQ)**

Innovative Work Behavior questionnaire (IWBQ) was developed by Jong & Hartog (2010) to assess IWB levels among nurses. It was consisted of 26 items which constructed and measured on a 5-point numerical scale (from 1 = very little extent to 5 = very large extent). It consisted of (26) descriptive items: Innovative work behavior (supervisor rated) (15 items); participative leadership (employee rated) (6 items); and innovative output (employee rated) (5 items).

**Scoring of IWBQ:** The total score of innovative work behavior was ranged from (26–130), which is the sum of all nurses' responses to this questionnaire. Scores from (26–51) points were considered as "low innovative work behavior", scores from (52-77) were denoted as "moderate innovative work behavior", and scores from (78-130) were considered as "highly innovative work behavior".

#### **Tool III: Eudaimonic Well-Being Scale (EWBS)**

The eudaimonic well-being scale was adapted from Sua, Tanga & Nawijn (2020) and Alan, Seth, Byron &

Michelle (2010). The Scale was used to assess staff nurses' levels about eudaimonic well-being at ICUs and operating theaters setting. It consisted of 27 descriptive items. Each item is rated on a five-point Likert scale where 1= strongly disagree to 5=strongly agree.

**Scoring of Eudaimonic Well-Being Scale:** The total score of eudaimonic well-being scale was ranged from (27–135), which is the sum of all nurses' responses on this scale. Scores from (27–53) points were considered as “low eudaimonic well-being”, scores from (54-80) were denoted as “moderate eudaimonic well-being”, and scores from (81-135) were considered as “high eudaimonic well-being”.

**Method of Data Collection:** An agreement to conduct the study was obtained from both medical and nursing executives of Tanta Universal Teaching Hospital. All tools of the current study were translated into the Arabic language.

**Ethical Considerations:** Verbal and written consent were obtained from all participant nurses before collecting any data. The aim of the research was explained to participants then data was collected by researchers. Anonymity and confidentiality of participants' information were guaranteed. Voluntary participation in the study was assured to all participants. They were informed about rights to withdraw from the study at any time without giving any reason.

**Pilot Study:** A pilot study was performed on 10% of nurses (n=30) not included in the study sample to examine the practicability and applicability of the study tools, identify any difficulties, and estimate the time required to fill in the questionnaire. Also, the necessary alteration and clarification of some questions were done.

**Content Validity:** A panel of five experts was invited to review the questionnaire from the nursing administration specialty to assess the face and content

validity, as well as to check the relevance and appropriateness. The experts' responses were represented in three points rating scale ranging from (3-1); 3=strongly relevant, 2= relevant, and 1= not relevant. The modifications are done accordingly. The values of content validity for tool I, tool II, tool III (82.11%, 89.55%, and 80.74%) respectively.

**Testing Reliability:** All three tools were tested for reliability using the Cronbach Alpha Coefficient Factor Test and all were satisfactory ( $\alpha=0.931$ ,  $\alpha=0.908$ , and  $\alpha=0.815$ ) for HRMPsS, IWBQ, and EWBS respectively.

**Data Collection Phase:** The data was collected from participant staff nurses in different ICUs and the operating theaters during work hours through giving them questionnaire sheet to fill in. The researchers collected data at two study settings using complete protection by wearing special PPE and using infection control precaution and all nurses were protected by wearing PPE. The researchers told them that all information gathered will be used only for research purpose, and the results of the study will be published in aggregates. The estimated time to complete all questionnaires was 15-20 minutes. The data collection stage of the study was applied in three months from the first of January 2020 until the end of March 2020.

**Data Analysis:** Statistical Package for the Social Sciences (SPSS v. 19) was used. Descriptive statistics (i.e., means and standard deviations) were applied to describe and summarize the data. Chi-square test ( $\chi^2$ ) used to study association between two qualitative variables. Spearman correlation used to show correlation between two continuous not normally distributed variables. Odds Ratio (OR) was used to measuring the association between an exposure and an outcome. The OR represents the odds that an outcome occurred given a particular exposure, compared to the odds of the outcome occurring in the absence of that

exposure. A p-value of  $P < 0.005$  was considered significant (Pallant, 2019).

## Results

**Table 1:** Shows distribution of staff nurses regarding their personal data. As shown from this table the most of the nurses (83%) aged between 22-30 years. Also, (61%) of them were married and (62.3%) were female. More than half of them (63%) had bachelor nursing and (65%) had 5-10 years of experience.

**Figure 2:** Illustrates staff nurses' total levels regarding HRMPs, IWB and EWB. Concerning to total EWB, HRMPs, and IWB; staff nurses (68%, 58%, and 50%) had a moderate level respectively.

**Table 2:** Illustrates that, total percentage of HRMPs, IWB and EWB among staff nurses. As notices from the table, all HRMPs subscales were statistically significant differences among staff nurses ( $p < 0.05$ ). Except training, development, education and compensation & reward subscale ( $p > 0.05$ ). Regarding to, total EWB was significantly different among staff nurses ( $p = 0.03$ ). While, there was no significant difference between staff nurses regarding total IWB subscales ( $p = 0.059$ ).

**Table 3:** Shows spearman correlations between total HRMPs with total IWB and EWB, and with staff nurse's personal data. As noticed from the table, there was statistically significant negative correlation between total HRMPs with department ( $r = -0.282$ ,  $p < 0.001$ ) and experience ( $r = -0.177$ ,  $p = 0.002$ ). While, total HRMPs significantly positively correlated with age ( $r = 0.231$ ,  $p < 0.001$ ). Also, total IWB was statistically significant negative correlation with department ( $r = -0.268$ ,  $p < 0.001$ ) and experience years ( $r = -0.154$ ,  $p = 0.007$ ).

**Table 4:** Shows spearman correlations between total HRMPs with total IWB and EWB among staff nurses, As noticed from the table, there were

statistically significant positive correlations between total HRMPs with total IWB ( $r = 0.700$ ,  $p < 0.001$ ), and total HRMPs with total EWB ( $r = 0.291$ ,  $p < 0.001$ ). Also, total IWB was significant positive correlation with EWB ( $r = 0.258$ ,  $p < 0.001$ ).

**Table 5:** Shows logistic regression analysis for total HRMPs and EWB regarding total IWB among staff nurses. As noticed from the table, the total HRMPs (OR 0.707, CI95% 0.610-0.803) was highly significant predictor to total innovative work behavior ( $p < 0.001$ ). Total EWB (OR 0.114, CI95% 0.00-0.228) was significant predictor to total innovative work behavior ( $p = 0.050$ ).

**Table 1: Distribution of staff nurses regarding their personal data**

| Variables                   | Total (n=300) |      |
|-----------------------------|---------------|------|
|                             | N             | %    |
| <b>Age/years</b>            |               |      |
| 22-30                       | 249           | 83.0 |
| 31-40                       | 42            | 14.0 |
| 41-50                       | 9             | 3.0  |
| <b>Gender</b>               |               |      |
| Female                      | 187           | 62.3 |
| Male                        | 113           | 37.7 |
| <b>Marital Status</b>       |               |      |
| Single                      | 112           | 37.3 |
| Married                     | 183           | 61   |
| Divorced                    | 3             | 1    |
| Widow                       | 2             | 0.7  |
| <b>Department</b>           |               |      |
| Renal Dialysis ICU          | 50            | 16.7 |
| Cardiology ICU              | 43            | 14.3 |
| Medical and Chest ICU       | 32            | 10.7 |
| Pediatric ICU               | 30            | 10   |
| Neonatal ICU                | 51            | 17   |
| Operating Theaters          | 94            | 31.3 |
| <b>Educational level</b>    |               |      |
| Nursing High School-Diploma | 36            | 12.0 |
| Nursing Technical           | 60            | 20.0 |
| Institute                   | 189           | 63.0 |
| Bachelor                    | 15            | 5.0  |
| Postgraduate                |               |      |
| <b>Experience years</b>     |               |      |
| 1-5 years                   | 195           | 28.0 |
| 6-10 years                  | 84            | 65.0 |
| > 10 years                  | 21            | 7.0  |

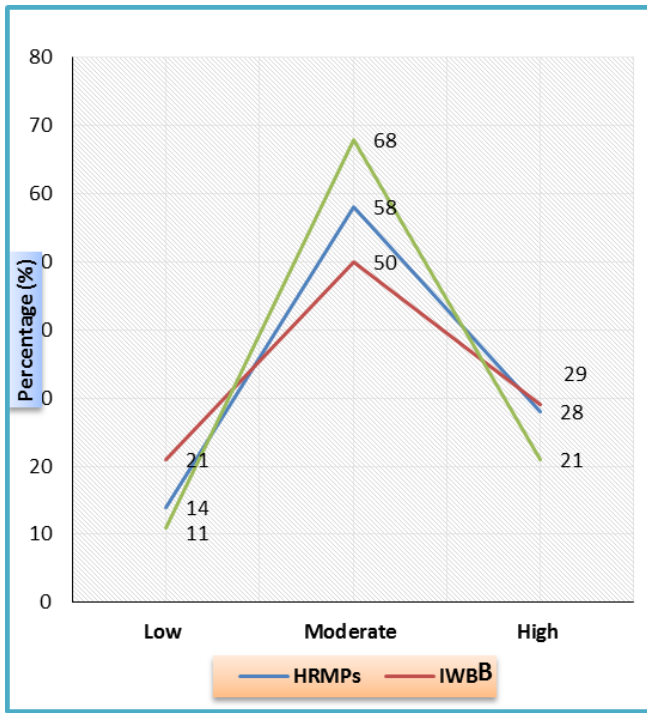


Figure 2: staff nurses total levels regarding HRMPs, IWB and EWB.

Table 2: Total percentage of HRMPs, IWB and EWB among staff nurses

| Study variables                                    | Staff Nurses (n=300) |            |            |            |           |            |              | X <sup>2</sup> | p value |
|--|----------------------|------------|------------|------------|-----------|------------|--------------|----------------|---------|
|  | Low                  |            | Moderate   |            | High      |            |              |                |         |
|  | No.                  | %          | No.        | %          | No.       | %          |              |                |         |
| <b>Human resource management practices (HRMPs)</b> |                      |            |            |            |           |            |              |                |         |
| Recruitment & selection                            | 92                   | 30.67%     | 83         | 27.67%     | 124       | 41.33%     | 2.94         | 0.048*         |         |
| Involvement  | 83                   | 27.67%     | 82         | 27%        | 135       | 45%        | 3.38         | 0.046*         |         |
| Training, development & education                  | 87                   | 29%        | 89         | 29.67%     | 126       | 42%        | 2.11         | 0.083          |         |
| Work condition                                     | 79                   | 26.33%     | 84         | 28%        | 139       | 46.33%     | 3.78         | 0.043*         |         |
| Competency based performance appraisal             | 137                  | 45.67%     | 75         | 25%        | 88        | 29.33%     | 4.21         | 0.029*         |         |
| Compensation & reward                              | 89                   | 29.67%     | 107        | 35.67%     | 102       | 34%        | 0.12         | 0.940          |         |
| <b>Total HRMBs</b>                                 | <b>42</b>            | <b>14</b>  | <b>174</b> | <b>58</b>  | <b>84</b> | <b>28</b>  | <b>3.67</b>  | <b>0.046*</b>  |         |
| <b>Innovative work behavior (IWB)</b>              |                      |            |            |            |           |            |              |                |         |
| Supervisor rated                                   | 99                   | 33%        | 80         | 26.67%     | 117       | 39%        | 1.55         | 0.080          |         |
| Participative leadership                           | 84                   | 28%        | 100        | 33.33%     | 116       | 38.67%     | 1.72         | 0.067          |         |
| Innovative output                                  | 106                  | 35.33%     | 91         | 30.4%      | 103       | 34.33%     | 0.81         | 0.422          |         |
| <b>Total (IWB)</b>                                 | <b>63</b>            | <b>21</b>  | <b>150</b> | <b>50</b>  | <b>87</b> | <b>29</b>  | <b>0.059</b> | <b>0.059</b>   |         |
| <b>Eudaimonic Well-Being (EWB)</b>                 |                      |            |            |            |           |            |              |                |         |
| <b>Total (EWB)</b>                                 | <b>33</b>            | <b>11%</b> | <b>204</b> | <b>68%</b> | <b>63</b> | <b>21%</b> | <b>5.21</b>  | <b>0.030*</b>  |         |

HRMPs: Human Resource Management Practices IWB: Innovative Work behavior EWB: Eudaimonic Well-being. X<sup>2</sup>: Chi-squared test, \*significant

Table 3: Spearman correlations between total HRMPs with total IWB and EWB with staff nurse's personal data

| Variables         | Staff Nurses (n=300) |         |           |         |           |         |
|-------------------|----------------------|---------|-----------|---------|-----------|---------|
|                   | Total HRMPs          |         | Total IWB |         | Total EWB |         |
|                   | r                    | P value | r         | P value | r         | P value |
| Age/year          | 0.231                | <0.001* | 0.052     | 0.366   | 0.015     | 0.791   |
| Marital Status    | 0.072                | 0.214   | 0.098     | 0.091   | 0.025     | 0.665   |
| Department        | -0.282               | <0.001* | -0.268    | <0.001* | 0.009     | 0.871   |
| Educational level | 0.011                | 0.997   | 0.009     | 0.881   | 0.007     | 0.903   |
| Experience years  | -0.177               | 0.002*  | -0.154    | 0.007*  | -0.058    | 0.317   |

HRMPs: Human Resource Management Practices IWB: Innovative Work behavior EWB: Eudaimonic Well-being  
r: Spearman coefficient \*: significant< 0.001

Table 4: Spearman correlations between total HRMPs with total IWB and EWB

| Variables   | Staff Nurses (n=300) |         |           |         |           |         |
|-------------|----------------------|---------|-----------|---------|-----------|---------|
|             | Total HRMPs          |         | Total IWB |         | Total EWB |         |
|             | r                    | P value | r         | P value | r         | P value |
| Total HRMPs | ---                  | ---     | 0.700     | <0.001* | 0.291     | <0.001* |
| Total IWB   | 0.700                | <0.001* | --        | --      | 0.258     | <0.001* |
| Total EWB   | 0.291                | <0.001* | 0.258     | <0.001* | ---       | --      |

HRMPs: Human Resource Management Practices IWB: Innovative Work behavior EWB: Eudaimonic Well-being.  
r: Spearman coefficient \*: significant<0.001

Table 5: Logistic regression analysis for total HRMPs and EWB regarding total IWB among staff nurses

| Variables                    | Staff Nurses (n=300) |             |         |
|------------------------------|----------------------|-------------|---------|
|                              | OR                   | 95% CI      | P value |
| Total HRMPs regarding to IWB | 0.707                | 0.610-0.803 | <0.001* |
| Total EWB regarding to IWB   | 0.114                | 0.000-0.228 | 0.050*  |

HRMPs: Human Resource Management Practices EWB: Eudaimonic Well-being OR: Odd ratio  
CI: Confidence Intervals) \*significant<0.001

**Discussion**

Main importance for effective utilization of human resource management practices (HRMPs) at nursing profession specially for ICUs and operating theater is that leads collectively and constructively to reach the desired organization' goals, patients outcomes, and objectives for increasing its innovative work behavior and/or eudaimonic well-being (Van et al., 2018). So, this study revealed that there were statistically

significant correlations between total HRMPs and eudaimonic well-being with total IWB at Tanta universal Teaching Hospital.

The current study results agreed with Hsu, (1999), Williams and Jennifer (2014) , and Amy et al., (2018) studies that found most of HR managers in these responding organizations reported that it is very important to have effective HRMPs including recruitment, selection, training, development, performance appraisal, and compensation and rewards practices main indicator for employee innovative behavior, autonomy, and self-growth. HR managers being present at board level involving in the development of corporate strategy to conduct the desired organization' goals and patients outcomes because these settings are a corner stone for success the reputation of any health care organization and improving innovations..

Also, this finding agreed with Aithal and PM, (2016) who studied human resource management. They demonstrated that human resource management is a challenging process for any organization, and this process involves getting the best innovative behavior and talents from employees within the organizational constraints. Optimizing human performance is used in all health organization functions to improve individual and group output, reliability, and productivity. Employee growth and development towards higher levels of competency, creativity and fulfillment are encouraged and supported because people are the central resource in any organization.

Regarding details of study correlations, the findings of current results revealed that there were statistically significant positive correlations between total HRMPs with total IWB and between total HRMPs with total eudaimonic well-being. Also, total IWB was significant positive correlation with EWB. From the

researchers point of view, this due to work design at ICUs and operating theaters plays a crucial part in supporting the staff nurses' human resource management perfect selection, training , and development process in achieving organizational innovative work behavior outcomes especially when they involved in their organization decision making process or in facing new challenges of their stressful work setting even at ICUs and/or operating theaters during corona virus era as a motivational mediator role for improving their innovative manner. So, it may directly or indirectly influence their behaviors and their eudaimonic well-being toward improving their responsibilities and tasks at work settings.

This results were consistent with the studies by Sanders and Lin (2016), Chowhan (2016), Xerri and Reid (2018), and Sanz-Valle and Jiménez-Jiménez (2018) confirmed that perceived human resource management practices of individuals had a direct effect on the innovative work behavior and on the role of innovative climate relationship. Also, there was a positive significant correlation between human resources management practices and innovative work behavior and creativity because employees' perceptions of HRM practices for a compensation system are positively related to innovative work behavior , plus that employee perceptions of sharing information and supportive supervision are positively related to eudaimonic well-being.

On the other hand, Frenkel et al., (2012) and Van et al.,(2018) didn't support the study results, and found that there were insignificant correlation between human resources management practices and innovative work behavior, due to the effect of employee perceptions of information sharing and training and development on innovative work behavior was at a weaker level even with an innovative climate.



In the current study, according to logistic regression analysis revealed that human resource management practices was highly significant predictor to innovative work behavior. Eudaimonic well-being was significant predictor to total innovative work behavior. These results may be because nurses' perceptions regarding human resource practices, eudaimonic well-being, and innovative work behavior were at moderate level. And nurses' perceptions about HRM practices for a compensation system from suitable salary and incentives are positively connected with innovative work behavior than reaching to high level of eudaimonic well-being in current days of epidemic corona virus outbreak than before it. Moreover, these findings may be occurred because nurses' perception and/or responses for allocation facts, supportive supervision, good training, and good leader member exchange are positively connected with innovative work behavior than eudaimonic well-being.

The study by Xerri and Reid (2018) didn't supported the study findings and found that, HR managers and the line managers responsible for the implementation of effective HRM practices in nursing workplaces need to pay more heed to nurses' psychological eudaimonic well-being in their work design, which led to successful innovative ideas implementation, and evaluation of those HRM practices pertaining to improve training, teamwork, and innovative work behavior.

Also, Rondeau and Wagar (2016) didn't supported the study findings and revealed that a quality-of-work life achieved by perfect HRM system which comprises employment practices favored by employees and their families. Examples of quality-of-work life HRM system include the adoption of employee- and family-friendly policies such as flexible work hours, self-scheduling, voluntary job-sharing, and an on-site child

care program. Kinship responsibilities involve home obligations for working nurses' spouses, children, and aging parents affect satisfaction, eudaimonic well-being, and innovative work behavior (and turnover intention) on the job.

While, the study by Syed, Xiaoyan, Ajmal, and Shaukat (2014) showed that, all HRM practices are significantly and positively correlated with firm innovative performance. In particular, training and development practices are seen to be significantly related with capacity to deliver quality service and on firm sale growth as perceived by managers surveyed

Conversely, Li and Hsu, (2016) and Knobloch et al.,(2017) didn't support the study findings regarding eudaimonic well-being. It revealed that eudaimonic well-being had high direct effect on employee innovative work behavior because it fully mediates the relationship between creative performance, which suggests more beneficial for both employees and employers. Also, Wiklund et al., (2019) disagree with the current results and found that eudaimonic well-being had huge effect on decreasing work-family conflict and work-stress only. This has implications for nurse managers because if roles are vague; managerial communication and leadership become much more difficult.

Moreover, Zhang and Begley, (2011) provided evidence for this positive effect by showing that, when organizations used compensation systems to signal to their employees extra-role behaviors, such as innovative work behavior, were recognized and valued, the employees concerned perceived their engagement in innovative work behavior as of a value.

These positive findings may be due to the total levels of nurses' perceptions about all six human resource management practices were at moderate level.

Also, nurse manager considered nurses' needs, professional expectations moderately thereby; a positive complete learning climate could be maintained at Tanta Universal Teaching Hospital.

Additionally, fair incentives; promotions, commissioned functions, rewards, bonuses were provided to all employees with moderately satisfied level which reflects better awareness of ICUs and operating theaters nurses to relate between HRMPs and innovative work behavior. Also, to relate innovative work behavior with eudaimonic well-being that fulfill nursing needs of autonomy, competence, relatedness, self-acceptance, personal growth, environmental mastery, self-discovery, and improve the relation between nurses and their supervisors as an innovative behavior. Bysted and Jespersen (2014) argued that employees need a clear signal before they will engage in innovative work behavior because they consider IWB to be risky behavior that thus 'has to be ordered and paid for by HRM system'. Thus, HRM practices that offer financial rewards are expected to encourage employees to be innovative ones.

The future subheadings might be needed for the organization human resource management; a well-planned innovation work behavior guideline to be applied throughout the organization. Effective assessment of staff nurses needs through the organization should be made on periodical bases. Fair distribution of incentives and benefits for nurses is indeed accelerating innovative work behavior. An increase in the nurses' intellectual capital is valued by the people and patients as it is appreciated by the management and it can be transformed into more interesting innovative tasks. The current results suggested that HRMPs can stimulate nurses' innovative work behavior and eudaimonic well-being, showing their relevance to organizations. So, creating value

culture for access more interesting and challenging innovative ideas and ticks at work place through developmental programs in which nurses are engaged in the organizations' shared improvement decisions.

### **Conclusion**

There were statistically significant positive correlations between total HRMPs with total IWB and between total HRMPs with total eudaimonic well-being. Also, there was a statistically significant positive correlation between total IWB and EWB. According to logistic regression analysis revealed those HRMPs was highly significant predictor to innovative work behavior. Eudaimonic well-being was significant predictor to total innovative work behavior.

### **Recommendations**

Educational intervention for unit nurse managers about HRMPs for achieving innovative work behavior and eudaimonic well-being which reflects on quality of health care.

Health organizations have to make their unit nurse managers more understandable, fit with each other and train their direct line managers to show developing behavior towards nurses if they implement them.

Supporting workshops regarding innovative work behavior and eudaimonic well-being guidelines for staff nurses to improve their efficiency and effectiveness was recommended.

Develop and support high performance experience culture that is consequential for nurses and tend to derive more eudaimonic well-being and innovativeness from their work.

Developing unit nurse managers' skills regarding identification of the potential demands and resources in each nurses' job and realize their independent and interactive effects on their eudaimonic well-being, and subsequently on innovativeness.

Developing programs for nurses and their managers to use strengths-based feedback technique which has a positive impact on eudaimonic well-being, innovation, strengthens hope and spurs further efforts to achieve the goal.

Promoting a work environment that provides effective application of HRMBs to meets nurses' professional needs and ambitions and eliminates potential stressors instead of reengineering work processes.

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