Applying Structural Equation Model to develop A New Model of Happiness at the Workplace in Promoting Employee Happiness in Public Organization

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Abstract

Happiness at the workplace refers to how satisfied people are with their workplace and lives. Happy people are productive people while those people who are unhappy may not pay full attention to any task. Furthermore, employees in the public organizations in UAE are not well satisfied due to poor workplace conditions. In some ministries in UAE must equipment are not well maintained to ease the work of an employer. The main aim of this paper to develop a Model of happiness at the workplace in promoting employee happiness in public organization using structural equation Model. The data were obtained from the employee of Dubai Electricity and Water Authority in UAE. Since the population of this study is 11787 therefore, the sample size was 370. surveyed through the self-administered Google form and by posting. The data was screened, and out of the 370 questionnaires distributed, 260 were completed and were received. Analysis of Moment Structures (AMOS) in Structural Equation Modelling (SEM) confirmatory factor analysis (measurement and structural measurement models) were used to analyzed the data. Although this study has conceptualized the improving happiness at the workplace in promoting employee happiness in public organization. Additional research is needed among other states in UAE such Dubai. The motivational formulation of employee happiness, job involvement, work place climate and its impact on organizational performance is a point of future research.

Keywords: Structural equation model, moment structure, motivational performance

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1. Introduction

Happiness is essentially the degree to which you find and judge your existence as favorable (Veenhoven, 2013), in addition to an enduring, psychological feeling of contentment (Mishra, & Mohanty, 2014). From the hedonic point of view, happiness is pleasant feelings and favorable judgments, whereas the contrasting eudemonic view describes it as doing what is morally correct, what is just, which will enhance growth and all that is meaningful to an individual (Ryan and Deci, 2001). All of these views lead to the workers’ general satisfaction at the workplace. In turn, the degree of employee happiness was shown to have a substantial positive effect on staff engagement and organizational productivity, and overall job satisfaction (Boehm and Lyubomirsky 2008).

Specifically, employees who exhibit a general feeling of contentment and emotional satisfaction with their overall wellbeing are likely to be motivated to perform exceptionally well in the workplace setting (Fisher et al., 2010). The often-happy employees tend to synchronize and translate their emotional satisfaction towards the attainment of the organizational goals by exhibiting behaviors that result in greater productivity (Ryan and Deci, 2001). Organizational culture considers as central to the employee happiness which play important part in creating and sustaining the employee motivation in the organization (Eddington and Shuman, 2005). A supportive and accommodative organization culture tends to inspire the employees to feel part of the organization in facilitating the attainment of its mission (Bakker and Oerlemans, 2010). Flynn and Chatman’s research (2001) indicated that the workplace culture has a significant role in deciding employee behaviors and expectations by its component of mutual principles and interests, which in effect affect their overall degree of satisfaction.

Similarly, happy employees are shown to have higher job satisfaction levels and perform better in the workplace than their unhappy peers (Boehm and Lyubomirsky, 2008). In addition, employees that are happy are more likely to participate in favorable extra role behaviors and are less prone to engage in withdrawal actions (Boehm and Lyubomirsky, 2008). Subsequently, unhappy employees result in a lack of organizational commitment which reduces an organization’s efficiency, effectiveness and performance (MacIntosh and Alison, 2010).

Happiness at the workplace is important to both individuals and organizations (Simmons, 2014). Workers with positive emotions at work are more involved, relaxed and happy, while workers who usually have unwelcome feelings at work may encounter tiredness. However, the research promoting a happiness at workplace in public organizations is limited in UAE (Goby & David 2015). It should be investigated further in order to provide sufficient knowledge to academics, practitioners, and those who are interested in the notion of happier working environment. Therefore, this study intends to develop a new model of happiness at the workplace in promoting employee happiness in among all employees of Dubai Electricity and Water Authority, which are 11787 employees (Ukasha et al., 2017). Since the population of this study is 11787 therefore, the sample size will be determining sample size from a given (Krejcie & Morgan, 1970) which will be 370.

2. Happiness in UAE

Happiness for workers is accomplished by trustworthy society, confidence and pleasure of interacting with other workers (Alaarj & Mohamed, 2017). The foundation of the employee-employers bond of confidence derives from loyalty, equal care, and reputation (Abid & Barech, 2017; Alaarj et al., 2015). Researchers conclude that these causes, to a large degree, create a happier work atmosphere and a satisfied workplace (Fisher, 2010). Many recent study on the causes of satisfaction in organisations has shown the effect of workplace security on workers’ disposition towards their jobs.
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(Lowry & Gaskin, 2014). The feature of the job itself has thus been established as a significant indicator of satisfaction and may explain half the variation of happiness at work. It has been shown in a meta-analysis and typology of workplace happiness, which revealed that confidence, honesty, positive partnership with workers and their bosses, as well as easy and relaxed workplace and job are primary measures of employee satisfaction (Helliwell, Layard, & Sachs, 2012). Other research has shown that besides the characteristic of employment, there are other characteristics that involve wages, management, and job problems that may decide employee satisfaction (Awada, Johar, & Ismail, 2019). Employee satisfaction is operationalized in this study to involve career factors such as working climate, workload, performance evaluation, wages, peer and employer encouragement, and flexible work hours, and advancement, bonuses, and acknowledgement.

In addition, happiness is correlated with evidence of success in the workplace and can increase an employee’s effectiveness, performance and job satisfaction levels at work (Fisher, 2010). It is therefore, important for organizations to identify the factors which influence employee happiness to enhance its cultural value-offering for employees and, in turn, increase their levels of job satisfaction. Employee engagement is likely to occur when employees know what to do, and when they want to do it. In fact, the engagement process is a partnership, whereby employees and leaders must mutually engage to grow the organization. Organizations also ought to think past the bottom line, and communicate with workers to make the best of their efficiency. Employees will be viewed as every organization’s principal commodity (Kaye & Giulioni, 2019). Creating a good organization, needs a bit more than simply relying on income gain. Not getting workers regularly participating may have negative consequences on the organization. Therefore, organizations make engagement happen by fully aligning the business strategy with the talent strategy. Employees are also required to dedicate 120 per cent of their energy to their employment. It comes as no surprise when the opportunity for professional growth is lacking, that they become complacent and agitated (Underhill, 2012). At the end of the day, the recognition of professional development is a huge motivational factor.

Furthermore, employees in the public organizations in UAE are not well satisfied due to poor workplace conditions. In some ministries in UAE must equipment are not well maintained to ease the work of an employer (Sabban, 2004). Similarly, according to Davronov, Khalimova, & Uzbekistan, (2019), most of the staff in the government organizations are not happy with their work because of outdated working equipment, rigorous supervision and weak government services in their organizations. Which prompted other government workers to transfer to the private sectors. Such problems have a significant effect on staff satisfaction within the enterprise of the UAE Government. Employee desires for enjoyment resulting in work satisfaction from the cultural benefit offering of a company have also not been properly answered in the UAE. Besides that, UAE government has created a ministry of happiness as a means to promote public happiness, but study on measuring and modelling the happiness at public organization is still limited (Al Suwaidi, Akmal, & Alshami, 2020). It has to be more researched such that there can be enough knowledge for academics, experts and people interested with the concept of a more productive work environment. Most UAE public agencies also fail to evaluate their workers’ interests and insure that the company completely knows certain requirements and is willing to meet them or at least accommodate them. Understanding employee needs is crucial to the success of an organization. It is therefore important that an organization investigates the employee needs to be able to align them with the cultural-value-offering of the organization. Therefore, this study allows them to continuously improve the current human resource strategy and learn the barrier of happiness at public organization.
3. Research Methodology

The methodological framework that was used in attaining the stated aims and objectives of the study is bases on positivist paradigm quantitative research methodology. It shows how the research hypotheses postulated were empirically determined and examined through relevant methodological approaches adopted in the study (Al-Subari, & Zabri et al, 2020). AMOS-SEM software package for simulation and modelling procedure is used in locating the significant and dominant factors. For the purpose of questionnaire development of the research instrument, the use of five (5) point Likert scale was used. Likert scale is proposed because of the anticipated method of data analysis (that is, Structural Equation Modelling SEM) due to the fact that most of the questions have to do with attitudinal and perception opinions of people (unobserved data) which are usually prone to error. Purposive sampling techniques was used while structural equation modelling (SEM) was used to develop a new model of happiness at the workplace in promoting employee happiness in public organization. The data, having passed through various screening stages which included missing data, outlier, reliability test, multicollinearity, confirmatory factor analysis (CFA) and the structural model which was found to be fitted, revealed a significant P-Value.

The hypothesis proposed in this study is as follows:

H1: There is a relationship between transformational leadership and happiness
H2: There is a relationship between transformational leadership and organizational culture
H3: There is a relationship between transformational leadership and employee satisfaction
H4: There is a relationship between transformational leadership and employee empowerment
H5: Organizational culture mediates the relationship between transformational leadership and employee satisfaction
H6: There is a relationship between employee empowerment and employee satisfaction
H7: Organizational culture mediates the relationship between transformational leadership and happiness
H8: Employee satisfaction has significant effects on the happiness
H9: Employee empowerment mediates the relationship between transformational leadership and happiness

This study examined the assumptions of normality at univariate level, and at multivariate level. Pallant (2011) recommended that the values of skew and kurtosis of -1 to + 1 be considered as a symmetry distribution suitable for parametric testing and assume normal distribution. In this regard, the absolute value of skewness and kurtosis for all constructs was presented in the following sections (see Sections 4.5 to 4.10) and was within the recommended ranges. This meant that the distribution of data met univariate normality for this research. Therefore, there was no need for further data modification. Multicollinearity was measured by variance inflation factors (VIF) and tolerance. However, Hair et.al. (2012) stated that cut-off points for determining the existence of multicollinearity in a set of variables are that if tolerance is less than 0.20 and VIF value is not more than 4.0. The outcomes demonstrated that all VIF values stood at 1.012, and tolerance values were found to be 0.988, which showed that multicollinearity was not problematic in this data. Therefore, preliminary analyses concluded and result showed that no violation of the assumptions of normality,
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linearity, multicollinearity and homoscedasticity and entire variables in this research assessment model satisfied all assumptions. Confirmatory Factor Analysis (CFA) is to confirm happiness at the workplace in promoting employee in public organization with a view to happiness values within the Abu Dhabi in UAE. Inferably, CFA is to test association that may exist between the observed variables under each hypothesized construct in order to quantitatively assess the quality of the factor structure which would provide further evidence of the construct validity of the new measurement.

4. Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis is a more dependable method of factor analysis which is engaged to examine whether the measures of a construct are in agreement with the researcher’s perspective of the nature of that construct (Awang, 2014). In fact, Awang (2015) stated that CFA procedure has relieved the older methods such as EFA to establish construct validity.

The proposed assessment happiness at the workplace in promoting employee happiness in public organization, was based on the previous validated empirical studies with comprehensive theoretical literature. Confirmatory Factor Analysis (CFA) is to confirm happiness at the workplace in promoting employee in public organization with a view to happiness values within the Abu Dhabi in UAE. Inferably, CFA is to test association that may exist between the observed variables under each hypothesized construct in order to quantitatively assess the quality of the factor structure which would provide further evidence of the construct validity of the new measurement.

Basically, the application of SEM with the combination of CFA for this research is in consonance with the standard steps as recommended by prominent scholars (Awang, 2015; Hair et al., 2012) such as: (1) model specification; (2) model identification; (3) estimation of parameter; (4) measure of goodness-of-fit; and (5) model re-specification.

To be exact, in this research analysis process, the preliminary measure is to test the validity of the measurement model before considering the structural model. Hence, both measurement and structural models were evaluated by model fitting through Maximum Likelihood (ML) estimation. The goodness-of-fit indices and level of acceptance used as guide in the assessment of the construct measurement models and structural equation models’ fitness was presented in Table 1.

<table>
<thead>
<tr>
<th>Name of category</th>
<th>Goodness-of-fit indices</th>
<th>Acceptance level</th>
<th>Comments</th>
<th>Literature support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute fit</td>
<td>Chisq</td>
<td>P &gt; 0.05</td>
<td>Sensitive to sample size greater than 200</td>
<td>Wheaton et al., (1977)</td>
</tr>
<tr>
<td>Absolute fit</td>
<td>RMSEA</td>
<td>RMSEA &lt; 0.08</td>
<td>Range 0.05 to 1.00 is acceptable</td>
<td>Brownne &amp; Cudeck (1993)</td>
</tr>
<tr>
<td>Absolute fit</td>
<td>GFI</td>
<td>GFI &gt; 0.90</td>
<td>GFI = 0.95 is a good fit</td>
<td>Jorekog &amp; Sorbom (1984)</td>
</tr>
<tr>
<td>Incremental</td>
<td>AGFI</td>
<td>AGFI &gt; 0.90</td>
<td>AGFI = 0.95 is a good fit</td>
<td>Tanaka &amp; Huba (1985)</td>
</tr>
<tr>
<td>Incremental fit</td>
<td>CFI</td>
<td>CFI &gt; 0.90</td>
<td>CFI = 0.95 is a good fit</td>
<td>Bentler (1990)</td>
</tr>
<tr>
<td>Parsimonious fit</td>
<td>Chisq/df</td>
<td>Chisq/df &lt; 5.0</td>
<td>The value should be less than 5.0</td>
<td>Marsh &amp; Hocevar (1985)</td>
</tr>
</tbody>
</table>

Source: Adapted from Awang (2014; 2012)
Subsequently, re-specified models in this research were tested before using the models for further analysis and Modification Indices (MI) were used as a guide to detect specification error during the process of model re-specification. Therefore, confirmatory factor analyses of the measurement model of the entire latent constructs in the research assessment framework evaluated and presented in the subsequent sections accordingly. In addition, initial measurement models; fitness indexes; modification indices and; final measurement models were presented sequentially for each latent construct. The purpose of this was for the readers to understand every step of evaluating each of the measurement model fitness in the research assessment model.

5. Analysis for structural equation modeling

After the unidimensionality, reliability and validity of the research constructs were ascertained, the next stage of analysis model is the entire constructs into a single structural equation model using Analysis of Moment Structure (AMOS). The reason for the pull out is to display the causal effects between one construct and the other in line with the set hypotheses.

The exogenous and endogenous variables in the research assessment framework were arranged. The arrangement stated with the exogenous variables intervening variable and the endogenous variable at the end. The connection between each construct is linked with arrow in the hypotheses’ direction as presented in Figure 1. However, the model was used to analyses the multidirectional relationships within the entire research constructs.

![Initial structural measurement model for the entire research constructs and goodness-of-fitness for structural model](image)

As shown in Figure 1, certain fitness indices for the structural measurement model do not reach acceptable levels for goodness-of-fitness (Awang, 2014). The observed factor loadings for all were above 0.5, although fitness indexes were sometimes below the recommended level. Therefore, modification indices were examined in order to identify redundant items and they were correlated with improvement of the model’s goodness-of-fitness indices.
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<table>
<thead>
<tr>
<th>Name of Index</th>
<th>Level of Acceptance</th>
<th>Index Value</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chisq/df</td>
<td>Chisq/df ≤ 3</td>
<td>1.436</td>
<td>The required level is achieved</td>
</tr>
<tr>
<td>TLI</td>
<td>TLI ≥ 0.9 means satisfactory</td>
<td>0.934</td>
<td>The required level is achieved</td>
</tr>
<tr>
<td>CFI</td>
<td>CFI ≥ 0.9 means satisfactory fit.</td>
<td>0.939</td>
<td>The required level is achieved</td>
</tr>
<tr>
<td>NFI</td>
<td>NFI ≥ 0.8 suggests a good fit.</td>
<td>0.824</td>
<td>The required level is achieved</td>
</tr>
<tr>
<td>GFI</td>
<td>GFI ≥ 0.8 suggests a good fit.</td>
<td>0.801</td>
<td>The required level is achieved</td>
</tr>
<tr>
<td>RMSEA</td>
<td>RMSEA ≤ 0.08 mediocre fit.</td>
<td>0.040</td>
<td>The required level is accepted</td>
</tr>
</tbody>
</table>

Table 2: The Fitness Indices of the structural model

In summary, the goodness-of-fit for the structural measurement models presented in the figure show progressive improvement until an acceptable level is realized. The final structural measurement model provided analysis of the causal effect (impact) for the multiple constructs in the path diagram. First and foremost, the fitness indices for the structural model reflect how fit is the hypothesized model; it was observed to be satisfactory within the established acceptable level (Awang, 2015). The standard regression weights indicate the estimated beta coefficient which measures the impacts of the main constructs: exogenous variables on the intervening variable and endogenous variable (MTUN performance).

(AMOS) produced two types of textual output: standardized regression weights and unstandardized regression weights for the path analysis. The former is adopted to explain the relationships among all the constructs in the theoretical framework, and subsequently to test the hypotheses in the research, as it is easier to interpret (Awang, 2015).

6. Testing of research hypotheses

The comprehensive review of literature facilitated the earlier presented hypothesized research model in the Figure 1. The hypothesized result in the Table 4.17 outlined the outcome of every respected path in the structural measurement model.

<table>
<thead>
<tr>
<th>The main hypothesis statement in the research</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 There is a relationship between transformational leadership and happiness.</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 There is a relationship between transformational leadership and organizational culture.</td>
<td>0.49</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 There is a relationship between transformational leadership and employee’s satisfaction.</td>
<td>0.205</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4 There is a relationship between transformational leadership and employee’s empowerment.</td>
<td>0.577</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5 There is a mediating effect of organizational culture on employee satisfaction.</td>
<td>0.18</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 There is a significant effect of employee’s empowerment on employee satisfaction.</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Key: *** represents P-value is less than 0.001
There is a significant effect of organizational culture on happiness. 

| Hypothesis (H7) | There is a significant effect of organizational culture on happiness. | 0.16 | Supported |
| Hypothesis (H8) | There is a relationship between employee’s satisfaction on happiness. | 0.311 | Not Supported |
| Hypothesis (H9) | There is a relationship between employee’s empowerment on happiness. | *** | Supported |

Therefore, every path’s hypothesis in this research is presented accordingly in the next paragraphs.

Hypothesis (H1): There is a relationship between transformational leadership and happiness. Therefore, hypothesis H1 is supported and held true. The research outcome confirms that transformational leadership was to be significant in controlling, checking and even happiness. This implies that from the respondent’s perspective if government of UAE could channel a proportion of its spending to improve the skills of transformational leadership.

Therefore, UAE government needs to do much more in carrying out more learn and training with a view to provide happiness within the UAE Abu Dhabi estate in particular and UAE area in general. Webster Kingston (2014) also found that any capital sum spent by any government on transformational leadership is a right step taken towards achieving a high level of happiness.

Hypothesis (H2): There is a relationship between transformational leadership and organizational culture. Therefore, the hypothesis is true and empirically supported by this research.

The summary of the result of the analysis relating to the relationship between transformational leadership and organizational culture is that a purposeful and careful implementation of the elements of achieving a high degree of happiness.

Hypothesis (H3): There is a relationship between transformational leadership and employee’s satisfaction. The outcome of this research showed a strong support for hypothesis H3 as demonstrated in the final structural measurement model.

Hypothesis (H4): There is a relationship between transformational leadership and employee’s empowerment. The outcome of this research showed a strong support for hypothesis H4 as demonstrated in the final structural measurement model.

Hypothesis (H5): There is a mediating effect of organizational culture on employee satisfaction. The outcome of this research showed a strong support for hypothesis H5 as demonstrated in the final structural measurement model.

Hypothesis (H6): There is a significant effect of employee’s empowerment on employee satisfaction. The outcome of this research showed a strong support for hypothesis H6 as demonstrated in the final structural measurement model.

Hypothesis (H7): There is a significant effect of organizational culture on happiness. The outcome of this research showed a strong support for hypothesis H7 as demonstrated in the final structural measurement model.

Hypothesis (H8): There is a relationship between employee’s satisfaction on happiness. The outcome of this research showed a strong support for hypothesis H8 as demonstrated in the final structural measurement model.

Hypothesis (H9): There is a relationship between employee’s empowerment on happiness. The outcome of this research showed a strong support for hypothesis H9 as demonstrated in the final structural measurement model.
7. Conclusion

A new model of happiness at the workplace in promoting employee happiness in public organization was to propose a framework for effective privilege approach thereby provided significant insight into how to improve the environment of work to achieve a high degree of happiness. The findings of this research contribution to the UAE government towards promoting happiness at work. With this new model, it is believed that the government can improve the employee productivity and performance of public organizations. The research is therefore expected to have direct impact on the effectiveness of the operations in the Abu Dhabi since the findings will provide a feedback on whether the happiness framework adopted by the AD has contributed towards achievement of its vision towards achieving a high degree of happiness among employee in organizations. Conducting this study is therefore expected to be significant to various stakeholders in the organizations. There are two areas that this study is expected to be quite significant, and these include in academic realms, and practical spheres.

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