A PLS-SEM APPROACH TO FACTORS AFFECTING VOLUNTARY LABOUR TURNOVER INTENTION

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ABSTRACT

*This paper examines the attitudes of 122 hotel employees in Mauritius. It relates Herzberg's motivation-hygiene theory to voluntary labour turnover intention (LTI) along with age, prospects at rival hotels (OFRH), a moderating effect (age*OFRH) and a mediator (employees' attitudes towards work, ATW). The PLS-SEM approach is used. The model indicates good fit (SRMR<0.08). The predictors of LTI exhibit moderate predictive accuracy (R-squared = 0.42). The reflective construct exhibit high composite reliability (α=0.94), high convergent validity (AVE=0.83) and ensures discriminant validity (HTMT<0.85). Redundancy analyses for the formative constructs yield path coefficients close to 0.8. There is no evidence of multicollinearity. Motivating factors (MF) and hygiene factors (HF) have no significant bearing on LTI. Lack of hygiene factors causes more women than men to resign voluntarily. Age has the greatest influence (β=-0.635) on LTI, followed by attitudes towards work (β=0.428) and offers from rival hotels (β=0.308). ATW acts as a suppressor and considerably reduces employees' intentions to resign even if rival hotels offer better opportunities. MF, HF and OFRH have significant impacts on ATW with effect sizes ranging from weak (0.10) to medium (0.25). Employers should focus on influencing employees' attitudes towards work and reduce excessively and unjustified energy-draining tasks so as to retain effective performers.*

Keywords: *Provide Minimum 3 keywords separated by semicolon (Brand Loyalty; Customer Satisfaction; Switching Cost)*

1.0. INTRODUCTION:

Labour turnover would continue to be serious issue in hotels in Mauritius and this would continue to involve both direct and indirect costs. Labour turnover incurs direct costs in terms of selection, recruitment and training costs whereas indirect costs include the loss of customers, reduced productivity, low morale and extra work for remaining workers (Gima, Desaa, & Ramayah, 2015). This study postulates that Herzberg's Two-Factor theory may explain and improve job retention among employees in any organization especially the hotel industry.

This paper examines the attitudes of 122 employees within a particular department in a hotel in Mauritius. The effects of Herzberg's Two-Factor theory on employees' attitudes towards work and ultimately on their intention to resign were examined.

Prospects from rival hotels were also included in the proposed research framework. The PLS-SEM approach was deemed most appropriate for data analysis. Structural equation modelling (SEM) deals with latent variables that combine the logic of factor analysis and path modelling (Maruyama, 1997). These latent variables act as building blocks based on which the models are assessed and tested (Tipping & Bishop, 1999). However a serious limitation of SEM is that it cannot confirm a model but instead it can only not disconfirm the model.

Objectives of Study

This study proposes an innovative way to predict labour turnover intentions. It seeks to:

- Provide an innovative theoretical framework and research model that link up the Herzberg's Two-Factor theory and labour turnover intention.
- Examine the indirect impacts of Herzberg's two factor theory on labour turnover intention via employees' attitudes towards work.
- Contribute to existing theory on labour turnover intention through the inclusion of the latent variable 'offers from rival hotels'. This study uses this latent variable to capture those indicators that represent the perceived alternative job opportunities at other hotels.
- Examine whether attitudes towards work mediate the relationship between labour turnover intention and its predictors (hygiene factors, motivating factors, offer from rival hotels).
- Examine whether age (i) affects the relationship between job offers from rival hotels and labour turnover intention and (ii) whether age changes the relationship between these two factors.
- Examine whether the impacts of hygiene factors, motivating factors and perceived offers from rival hotels on labour turnover intentions differ by gender.
- Discuss resulting practical implications and inform policy making so as to halt exit of effective performers.
- Inform future researchers about the avenues to be explored.

2.0 Literature Review

Herzberg postulates that hygiene and motivation factors are important determinants of job satisfaction and dissatisfaction (Herzberg, 1959, 1966, 1968). Satisfaction and dissatisfaction are clearly defined by Locke (1976). Herzberg argues that the opposite of job satisfaction is not job dissatisfaction whereby the former is measured on a scale of no satisfaction to high satisfaction. Similarly job dissatisfaction operates separately within a scale of no dissatisfaction to high dissatisfaction. This two factor theory suggests that dissatisfaction is captured through hygiene factors (categorised as dissatisfiers) which are extrinsic to the job and satisfaction are captured through motivating factors (categorised as satisfiers) which are intrinsic to the job. Workers would be affected by hygiene factors such as inadequate salary, poor working conditions, job insecurity, unfair distribution of tasks, unfriendly supervisor, conflicts

with co-workers and work overload whereas examples of motivation factors would include pride, the work itself, opportunity to learn new things, creative/challenging work, autonomy, generous holidays, achievements, personal growth, and recognition. This theory postulates that meeting the hygiene factors or lower-level needs of employees would only prevent them from being dissatisfied but would not motivate them to work harder. Better performance may be attained only if motivation factors or higher level needs are met. Thus no increase in productivity may be expected unless much effort is exerted in improving motivation factors. There is empirical evidence that supports Herzberg's two factor theory such that the sources of dissatisfaction at work are different from the sources of work satisfaction (Hur, 2018) although the classification of elements into hygiene factors and motivators may differ across cultures or countries (Andersson, 2017; Matei & Abrudana, 2016).

However the distinction between hygiene factors and motivation factors may not be so distinct in reality. Some factors which were originally categorised as hygiene factors may end up being classified as motivating factors and vice versa once the data collected is analysed such as welfare programs (vacation trips and banquets) and provision of accommodations. As reported in Tan (2013), some hygiene factors such as work group interactions, co-workers' support and relationships between co-workers, contribute to job satisfaction and the Herzberg's framework need to be updated to accommodate these. Alternatively he proposes a combination of the two groups (hygiene and motivation factors). Several other studies have also reported overlaps between hygiene and motivating factors (Abdullah et al., 2007; Kovach, 1987; Lin & Lin, 2011; Ruthankoon & Ogunlana, 2003; Savery, 1996; Spillane, 1973). Despite various criticisms, the two-factor theory remains a very popular approach for investigating into the core factors that bring out satisfaction and dissatisfaction in a job across various sectors (Andersson, 2017; Chu & Kuo, 2015; Holmberg, Caro, & Sobis, 2018; Thant & Chang, 2021), and these are important aspects to increase overall productivity and profitability. Also given that this Herzberg's theory aligns with the objectives of this study, the rest of this paper is based on this theoretical framework.

Voluntary turnover implies self-initiated terminations and not organization-initiated terminations (Mobley, Griffeth, Hand, & Meglino, 1979) and it has been categorized as follows: the thought of quitting the organization; the intention to search for a new job; and the intention to quit the current position within the organization. Also lower labour turnover intention does not imply that employees are satisfied. Perceived alternative job opportunities may also impact on an employee's intention to resign. The study conducted by Živković, Fosić, and Vorkapić (2023) argues that perceived job opportunities act as a moderator. They conclude that employees who believe that they either have no better opportunities or fewer better opportunities, tend to have lower intention to resign. Those with high turnover intentions were reported to have increased job opportunities outside their companies and some could be characterized as having severe deviant behaviours (Sender, Morf, & Feierabend, 2021; Wossen & Alemu, 2018). Similar findings were reported for example, by Alpar (2020) for Information Technology outsourcing in Vietnam and Zhou et al. (2022) among rontline nurses in China. Perceived alternative job availabilities may be gauged through the unemployment rate which describes the tightness of the labour market

(Ehrenberg & Smith, 1982). Labour turnover intention is low when many are being laid off and job opportunities are few whereas the intention to quit is high when job opportunities are higher compared to the number of job seekers. However Martin (2011) argues that an employee looks for alternatives a natural response to the dissatisfaction they experience at work. Data on 'offers from rival hotels' was collected in an attempt to measure perceived alternative job opportunities for the current study.

3.0 Methodology

In this study, the PLS-SEM approach of structural modelling is adopted instead of CB-SEM. PLS-SEM is preferred in few situations where analysis cannot be carried out in CB-SEM, for instance, for prediction, exploratory research, formatively measured constructs, continuous moderators and use of latent variables in subsequent analysis are to be used (J. Hair, Hollingsworth, Randolph, & Chong, 2017). The use of PLS-SEM with small sample sizes may generate greater statistical power which is suitable for prediction and theory development when compared to CBSEM. A small size of 100 is enough to achieve acceptable levels of statistical power in PLS analysis (Reinartz, Haenlein, & Henseler, 2009). Thus this completed research consists of 122 observations with no missing data and is deemed sufficient for the purpose of this study. Alternatively to determine the adequate sample size, one needs to specify the significance level, effect size and the desired power should be set at least at 0.80 (Cohen, 1992). Higher statistical power implies that PLS-SEM is more likely to detect a statistically significant relationship when it exists in the population (Hair, Matthews, Matthews and Sarstedt, 2017) and minimise both Type I and Type II errors. Hence in this paper, statistical power is computed before any conclusion is drawn.

The user-friendly Smart PLS version 3 was used for all analyses. Three formative constructs, one reflective construct, a single item endogenous construct and three overall reflective indicators were measured by 16 indicators which were derived after reviewing extensively the existing literature on labour turnover. These are displayed in Table 1. With a scale from 1 to 5, respondents had to assess each statement on the questionnaire [(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree) or (1 = very unlikely, 2 = quite unlikely, 3 = I do not know, 4 = quite likely and 5 = very likely)]. Single item construct can be used by PLS-SEM. This study abides by the ten times rule (Joseph F. Hair, Hult, Ringle, & Sarstedt, 2017). The sample size is more than ten times bigger than the largest number of formative indicators within a single latent variable in the measurement model. Also the sample size is more than ten times the largest number of structural paths aimed at a specific latent variable in the structural model.

Linear combinations of formative indicators form the formative constructs and a change in the value of the indicator cause a change in the value of the construct (Sarstedt, Hair, Ringle, Thiele, & Gudergan, 2016). Content validity for formative indicators are examined through content specification where the researcher clearly defines the domain of the content that formative indicators intend to measure and the questionnaire must contain all items that capture at least the major aspects of the formatively measured construct (Bollen & Lennox, 1991). Quality of such constructs may be assessed through 3 steps. The first step is convergence validity examined

through redundancy analysis, the second step is examining collinearity among formative indicators and the third step is examining statistical significance and relevance of those indicators.

In structural equation modeling, internal consistency reliability is more appropriately measured by composite reliability instead of Cronbach alpha because the former accounts for the indicators' differential weights (Dijkstra & Henseler, 2015). Convergent validity is measured through the average variance extracted (AVE) for each reflectively measured construct. Outer loadings for each indicator forming each latent variable are used to calculate AVE. Convergence validity is achieved when AVE exceeds 0.5 (Fornell & Larcker, 1981). It implies that more than 50% of the indicator's variance is captured by the latent variable (Joseph F. Hair et al., 2017). Discriminant validity refers to the extent to which constructs differ from one another. The standard measures are the Fornell-Larcker criterion, cross-loadings and the Heterotrait Monotrait ratio (HTMT). These apply to reflectively measured latent variables and cannot be applied to formatively measured latent variables (Jorg Henseler, Ringle, & Sarstedt, 2015). However Klein and Rai (2009) suggest examining the cross loadings of formative indicators.

Table 1: Latent variables and corresponding items on questionnaires

Latent Variables		Indicator	Item on questionnaire
Formatively masured contruct	Hygiene factors	HF1	I do not face **conflicts** at work
		HF2	I have no **job security**
		HF3	**Pay** rise depends on performance at work
	Attitudes towards work	ATW1	I can satisfy my **basic needs** with my pay
		ATW2	My job given me a sense of **pride**
		ATW3	My chance of being promoted is **fair**
	Job offer from rival hotels	OFRH1	Rival hotels offers **higher pay** to their employees
		OFRH2	Possible of being **promoted** is higher at rival hotels
		OFRH3	Rival hotels offers **higher training** opportunity to their employees
Reflectively masured contruct	Motivating factors	FM1	**Promotion** depands on tenure
		FM2	**Promotion** is determined through recognition from superiors
		FM3	**Promotion** depends on feedback from superviors
Overall reflective indicator	Hygiene factors	FH4	I have good working conditions
	Attitudes towards work	ATW4	I am satisfy with my current job
	Job offer from rival hotels	OFRH4	Rival hotels offers better monetary and non-monetary packages
Ultimate endogenous variable	Labour turnover intention	LT1	How likely are you to quit your current job?

Convergent Validity in the case of formative constructs may be assessed through redundancy analysis (Wong 2013). It refers to the extent to which a formative construct correlates with a reflective construct whereby both capture the same concept. The reflectively measured construct may be measured through a single item although Sarstedt et al (2016) recommends the use of multi-item scales to prevent low levels of predictive validity. In formative constructs, the relevance of indicator weights and their statistical significance must be assessed. All indicator weights above 0.1 with the 'correct' sign (proposed by theory or empirical evidence) which are

statistically significant are retained within the formative constructs (Andreev et al 2009). If the confidence interval of a weight includes zero, this implies that the weight is statistically insignificant and hence may be removed from the measurement model (Sarstedt & Ringle 2017). However there are some exceptions where a nonsignificant weight is retained, for instance, if the indicator's loading is at least equal to 0.5 (Hair et al 2017) as its absolute contribution to the construct may be substantial (Cenfetelli & Bassellier 2009).

Assessing indicator collinearity implies computing the variance inflation factor (VIF) of each item in the formative constructs. Although a VIF value below the value of 3.3 implies that multicollinearity among the indicators is not an issue (Diamantopoulos & Siguaw 2006), a VIF value below 5 is generally accepted. High collinearity results in high standard errors which hinder the possibility of finding statistically significant weights and incorrect weights with reversed signs (Joe F Hair, Ringle, & Sarstedt, 2011).

Path coefficients are similar to the standardised beta coefficients of OLS regressions and may be interpreted accordingly (J. Hair et al., 2017; Joseph F Hair, Black, Babin, & Anderson, 2010). A larger path coefficient relative to another indicates a bigger effect on the endogenous construct. These were taken into consideration before analyses and interpretations were done for this paper.

Predictive abilities of the model are also examined in this paper. The coefficient of determination, R2 explains and predicts endogenous latent constructs in the structural model. The pseudo f-test, f 2 evaluates the predictor's incremental explanation of the endogenous construct where small, medium and large effect sizes are denoted by 0.02, 0.15 and 0.35, respectively (Cohen, 1988, 1992). Predictive relevance is assessed through the cross-validated redundancy (Q2) proposed by Stone (1974) and Geisser (1975) as it includes the structural model during its prediction of eliminated data points (Joseph F Hair et al., 2017). It measures how well the path model can predict observed original values. Also q2 is used to assess the relative effect of the structural model for forecasting the observed measures of the endogenous latent variable (Ringle, Sarstedt & Straub 2012). These are obtained through the Blindfolding procedure with an omission distance of 7 as recommended by most researchers (Hair et al 2012). It should be noted that the blindfolding procedure applies usually to reflective endogenous constructs or to single item constructs (Joe F Hair et al., 2011) but may be used for formatively endogenous constructs. Also the standardised root mean square residual (SRMR) was developed to identify model misspecification which occurs when SRMR exceeds 0.08 (Joe F Hair et al., 2011).

4.0 Analysis

The model includes a mediator, 'attitudes towards work' (ATW) which receives inputs from three constructs: hygiene (HF), motivating factors (MF) and offers from rival hotel (OFRH) and converts these into outputs represented by the endogenous variable, labour turnover intention (LTI). The aim is to explain how current employment in terms of the Herzberg's two factor theory along with OFRH translates into employees' willingness to resign. A continuous moderator, age is also used to create an interaction term with OFRH such that age affects the strength of relationship between an

employee's intention to resign and job prospects at rival hotels. Finally a categorical moderating effect, gender is used through the multi-group analysis to evaluate whether the effects of the constructs on labour turnover intention differ significantly between men and women.

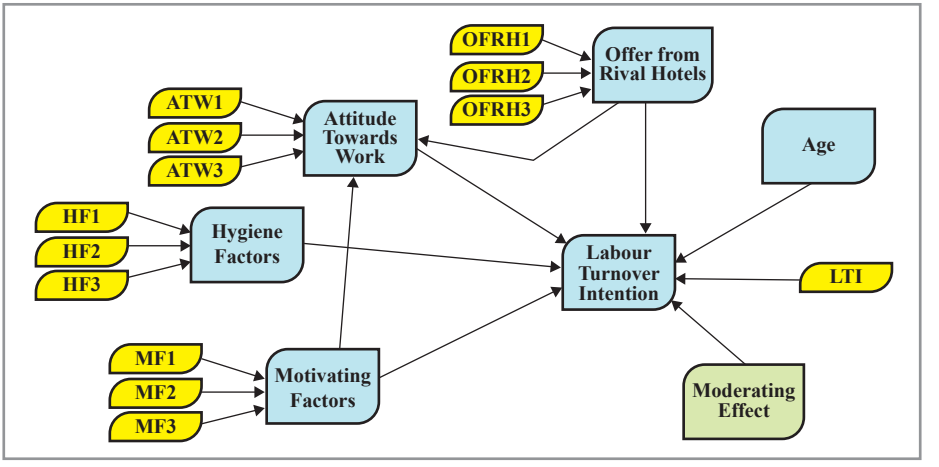


Figure 1. Hypothesized path analysis model of the relationships among Herzberg's two factor theory, attitudes towards work, offers at rival hotels and labour turnover intention.

4.1 The Measurement Model

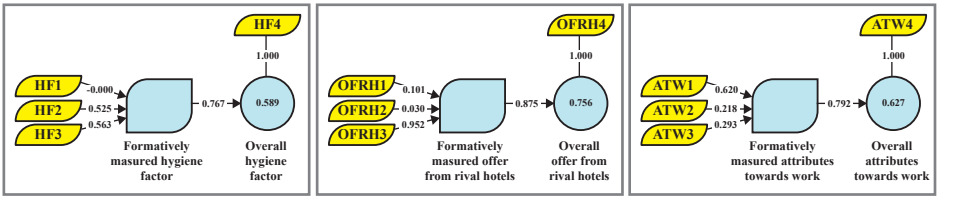
4.1.1 Model Specification

The standardised root mean square residual (SRMR) is used as an absolute goodness of fit measure and is equal to 0.051 which is less than the value of 0.08 as recommended by some researchers (Jorg Henseler et al., 2015; Hu & Bentler, 1998). The model is stable and stops after 3 iterations only. Usually PLS-SEM does not suffer from convergence problems. The data is normal and hence the bootstrap procedure does not produce inflated standard errors. Nevertheless it should be noted that PLS-SEM is very robust even with highly skewed data.

4.1.2 Formative Constructs

As depicted in Figure 1, convergent validity for each formative construct is ensured with path coefficients exceeding the ideal magnitude of 0.8 (Hair et al 2013) with the exception of the path coefficient for hygiene factor and attitudes towards work which are slightly below 0.8 but still exhibiting the desired strength of the path coefficient linking both reflectively and formatively measured constructs that should be at a minimum of 0.7 (Joe F Hair et al., 2011). These overall single-item reflective indicators were specified during the research design stage and included in the questionnaire. Single items were used to avoid discouraging voluntary participants and increasing their fatigues through lengthy and time consuming questionnaires which would have eventually resulted in lower response, increased missing values or at most refusal of participation in the survey.

Figure 2. Redundancy analysis



The relevance and statistical significance of each indicator weight were examined. All weights carry the correct sign, none of them are below 0.1 and none of their confidence intervals contains zero (Table 2), implying that all indicators may be retained for further analysis. The highest VIF value of the items on the questionnaire does not exceed 3.3 and thus, there is no critical collinearity issue among indicators.

Table 2: Examining collinearity, relevance and significance of weights of formative constructs

Latent Factor	Indicators	VIF	Weights	Confidence Intervals
Attributes towards work	ATW1	2.108	0.5	{0.317, 0.674}
	ATW2	1.761	0.442	{0.311, 0.568}
	ATW3	1.937	0.024	{0.057, 0.379}
Hygiene factor	HF1	1.285	0.371	{0.185, 0.557}
	HF2	1.595	0.543	{0.376, 0.706}
	HF3	1.569	0.319	{0.144, 0.506}
Offers from rival hotels	OFRH1	1.549	0.290	{0.163, 0.414}
	OFRH2	1.355	0.232	{0.11, 0.372}
	OFRH3	1.843	0.658	{0.49, 0.806}

Similarly there is no evidence of severe collinearity of the constructs HF, MF and OFRH as predictors of ATW. The same applies for the constructs ATW, NF, MF, OFRH, age and moderating effect as predictors of LTI. As displayed in Table 3, all VIF values are below the critical value of 5. It may therefore be stated that formatively measured constructs in this research are not highly correlated.

Table 3: VIF values in the structural model

	Attributes towards work	Confidence intervals	Labour turnover intention	Confidence Intervals
Age			1.1568	
Attributes towards work			4.9409	
Hygiene factor	3.2012		3.6972	
Moderating Effect			1.2039	
Motivating factors	3.7402		4.6636	
Offers from rival hotels	4.2034		4.9711	

4.1.3 Reflective construct

All indicator reliability values are above the minimum requirement of 0.4 (Wong 2013). The composite reliability value is higher than 0.7 and hence shows high level of internal consistency reliability. Convergent validity is attained as the latent variable's average variance extracted (AVE) exceeds the minimum threshold of 0.5.

Table 4: Results summary for reflective construct

Latent variable	Indicators	Loadings	Indicators reliability	Composite reliability	AVE
Motivating Factors	MF1	0.919	0.845	0.934	0.835
	MF2	0.907	0.823		
	MF3	0.899	0.808		

Discriminant validity was computed where 'motivating factors' is the sole reflectively measured construct in the model. Following J. Hair et al. (2017), the HTMT criterion is reported here instead of cross loadings and the Fornell-Larcker criterion because these two measures considerably overstate the presence of discriminant validity. As shown in Table 4, the HTMT values are below the required threshold of 0.85. Also all the Fornell-Larcker values are below the square of the AVE for 'motivating factors' and all items have the highest loadings within their respective constructs.

Table 5: Discriminant analysis: HTMT criterion

	Age	Moderating Effect	Motivating factors	Labour turnover intention
Age	--	--	--	--
Moderating Effect	0.014	--	--	--
Motivating factors	0.295	0.333	--	--
Labour turnover intention	0.586	0.163	0.147	--

The assessment of the reflective and formative measurement models shows that all constructs exhibit good levels of reliability and validity and hence the structural model may be assessed next.

4.2 Predictive Capabilities

The bootstrapping procedure was conducted with 5000 bootstrap samples as recommended by Joseph F Hair et al. (2017). The predictive capabilities of the theoretical structural model are assessed through the coefficient of determination R^2, Cohen's effect size f^2, cross-validated redundancy (Q^2) and path coefficients.

Table 6: Structural model assessment, hypothesis testing and predictive accuracy

		Path coefficients	t-values	p-values	f^2	q^2
H1	Hygiene factor ⟶ Attitude towards work	0.232	2.619	0.009	0.10	0.015
H2	Motivating factors ⟶ Attitude towards work	0.394	4.633	0.000	0.25	0.072
H3	Offers from rival hotels ⟶ Attitude towards work	-0.347	3.747	0.000	0.17	0.048
H4	Hygiene factors ⟶ Labour turnover intention	0.121	0.771	0.441	0.007	-0.005
H5	Motivating factors ⟶ Labour turnover intention	-0.107	0.750	0.453	0.004	-0.007
H6	Offers from rival hotels ⟶ Labour turnover intention	0.308	2.009	0.045	0.033	0.056
H7	Age ⟶ Labour turnover intention	-0.635	8.926	0.000	0.60	0.543
H8	Age*OFRH ⟶ Labour turnover intention	0.204	2.630	0.009	0.056	0.03
H9	Attitudes towards work ⟶ Labour turnover intention	0.428	2.678	0.007	0.053	0.10

When motivating factors and offers from rival hotels were included into the model to explain employees' attitudes towards work, their q^2 were small. However the inclusion of hygiene factors had a medium impact on ATW.

4.2.1 R-Squared

Together the three predictors (hygiene factors, motivating factors and offer from rival hotels) explain around 83% of the variations in employees' attitudes towards work which according to Jorg Henseler, Ringle, and Sinkovics (2009) demonstrates substantial predictive accuracy. However hygiene factors, motivating factors, offers from rival hotels, attitudes towards work, age and the moderating effect explain only around 42% of the variations in labour turnover intention. According to Chin (1998), it may be argued that the whole model seems to have moderate predictive accuracy and provides a satisfactory level of explanation of the factors behind an employee's intention to resign.

4.2.2 F-Squared Effect Sizes

The f^2 effect size gauges the extent to a predictor matters at the structural level (Chin, 1998). The f^2 values for both endogenous variables (ATW and LTI) are given in Table 3. Motivating factors have a medium effect size of 0.25 whereas offers from rival hotels and hygiene factors have small effects (0.17 and 0.10, respectively) on attitudes towards work. Age has a large effect size (0.60) but offers from rival hotels and attitudes towards work have small effect sizes (0.033 and 0.053, respectively). Motivating and hygiene factors have no effect (0.004 and 0.007, respectively) on labour turnover intention. According to the criteria for interaction terms provided by Kenny (2016), it may be argued that the moderating effect has a large effect (0.056) on the labour turnover intention. Thus it may be deduced that age has a substantive impact on labour turnover intention. Herzberg's two factor theory has no impact on labour turnover intention but instead its components have small and medium effects on ATW.

4.2.3 Cross-Validated Redundancy and Q-Squared

Q^2 measures the extent to which observed values are recreated by the model and $Q>0$ indicates predictive relevance (Chin, 1998). The cross-validated redundancy Q^2 for the endogenous construct, ATW is 0.567 and that of LTI is 0.349. These are above zero, thus upholding the proposed research model's predictive accuracy.

4.2.4 Path Coefficients

The path coefficients are displayed in Table 4. When assessing the relative importance of the exogenous constructs on the endogenous construct ATW, it may be deduced that motivating factors (β=0.394) are most important, followed by offers from rival hotels (β=-0.347) and hygiene factors (β=0.232). It must be noted that offers from rival hotels exert a negative impact on employees' attitudes towards their current employment. All these results are significant at 1% level. On the other hand, Herzberg's two factor theory, that is, motivating factors (β = -0.107) and hygiene factors (β = 0.121) have no bearing on labour turnover intention as they are statistically insignificant. Instead age has the greatest influence (β = -0.635) on an employee's intention to resign, followed by attitudes towards work (β = 0.428), offer from rival hotels (β = 0.308) and the moderating effect (β = 0.204). These results are statistically significant at 1% level except for OFRH which is significant at 5% level. Given the path coefficients and the guidelines provided by Reinartz et al. (2009) and Cohen (1988), it may be concluded that both motivating factors and offer from rival hotels exert medium effects on ATW whereas hygiene factors exert a weak effect on ATW. Age has a strong but negative effect on labour turnover intention. Mobley et al. (1979) had also reported an inverse relationship between age and labour turnover in their study. Medium effects on LTI are exerted by ATW and OFRH whereas the moderating effect on LTI is weak.

4.3 Moderating Effect

Better offer from rival hotels has a positive influence on labour turnover intention and this effect is strengthened by age. The red line in Figure 4 represents the relationship for an average age level between OFRH and LTI. The high age value (green line) has a sharper slope than the low age value (blue line) with a shallower slope. All three lines indicate a positive relationship between OFRH and LTI. Better offers from rival hotels are associated with higher labour turnover intention. However older workers are relatively more willing to resign if better prospects are available at rival hotels. This may be due to attractive packages offered elsewhere to experienced workers. Here age may be acting as a proxy for experience.

Figure 4. Moderating effect

Figure 4. Moderating effect

4.4 Mediating Analysis

Both the direct and indirect effects of HF on LTI are statistically insignificant. Thus employees' attitudes towards work do not function as a mediator in the relationship between hygiene factors and labour turnover intention. This is a case of no effect nonmediation which suggests that the proposed theoretical framework is unsound and implies that some other unobserved variable may translate lack of hygiene factors into voluntary resignation.

Table 7: Mediating analysis

Indirect Path	Indirect effect coefficient	t-values	p-values	Confidence interval	Direct Path	Remark
HF⟶ATW⟶LTI	0.099	1.655	0.098	[0.01, 0.236]	HF⟶LTI	No mediation
MF⟶ATW⟶LTI	0.169	2.446	0.015	[0.044, 0.316]	MF⟶LTI	Full mediation
OFRH⟶ATW⟶LTI	-0.149	2.183	0.029	[-0.292, -0.033]	OFRH⟶LTI*	Partial mediation

*Significant at 5% level

The direct effect of MF on LTI is statistically insignificant whereas its indirect effect is significant at 5% level. Hence employees' attitudes towards work fully mediate the relationship between motivating factors and labour turnover intention. This is a case of indirect-only mediation which implies that ATW fully conforms with the hypothesized theoretical framework. This case may be termed as the best-case scenario.

Both the direct and indirect effects of OFRH on LTI are significant at 5% level. Here employees' attitudes towards work partially mediate the relationship between offers from rival hotels and labour turnover intention. Since the coefficients of the direct and indirect paths have opposite signs, here employees' attitudes towards work act as a suppressor and considerably reduces the magnitude of total effect of OFRH on LTI. This is a case of competitive mediation.

4.7 Multi-Group Analysis

A multi-group analysis was conducted to identify any difference in PLS path coefficients across gender. According to Henseler (2007), p-values below 0.05 and above 0.95 indicate a statistically significant difference between group specific path coefficients for the relationship under study. Table 8 displays all results. The results were not significant except for the relationship between hygiene factors and labour turnover intention (p = 0.991). Male employees (-0.182) had lower path coefficient relative to that of women (0.645). vHence it may be concluded that lack of hygiene factors may strongly encourage more women than men to resign. Similar findings were reported by Marsh and Mannari (1977) for Japanese manufacturing workers.

Table 8: Multi-group analysis

	Path Coefficients-diff (male - female)	p-Value (male vs female)	Path Coefficients Original (female)	Path Coefficients Original (male)
Age -> LTI	0.1162	0.2088	-0.691	-0.575
Moderating effect -> LTI	0.1182	0.2408	0.119	0.238
ATW -> LTI	0.2194	0.2667	0.205	0.424
HF -> ATW	0.1441	0.7671	0.334	0.190
HF -> LTI	0.8267	0.9914	0.645	-0.182
MF -> LTI	0.1488	0.2047	0.311	0.460
MF -> LTI	0.5459	0.0401	-0.421	0.125
OFRH -> LTI	0.0565	0.6165	-0.291	-0.347
OFRH -> LTI	0.0437	0.5624	0.314	0.270

5. Conclusion

This paper aims to examine whether the Herzberg's Two-Factor theory combined with offers from rival hotels (OFRH) affects an employee's intention to resign through a mediator 'attitudes towards work' (ATW). It also investigates whether there is an interaction between age and OFRH such that age would change the relationship between labour turnover intention and offers from rival hotels. A multi-group analysis was done to capture multi-group effects across gender.

The use of PLS-SEM is justified as it addresses the main concern of social and business research which is about combining prediction and explanation to model estimation (Joseph F Hair, Matthews, Matthews, & Sarstedt, 2017). Human resource managers want to avoid the mistake of not identifying a good employee and subsequently not retaining him/her (Type I error). Also human resource managers want to prevent wrongful classification of poor performers as effective performers and subsequently overspending in retaining the former (Type II error). False positives (Type I errors) are considered to be more problematic than false negatives (Type II errors) in business and social research (Cohen, 1988). This explains why researchers use a minimum of 95% confidence interval and a statistical power of 80 percent (Goodhue, Lewis, & Thompson, 2012) while conducting analysis.

The model used in this study (SRMR<0.08) indicates good fit. Given that the effect size f^2 assesses the contribution of an exogenous latent variable to the R^2 of an endogenous latent variable, it may be concluded that hygiene factors exert a medium effect on attitudes towards work whereas motivating factors and offers from rival hotels exert small effects on attitude towards work. Attitudes towards work fully mediate the relationships between the three predictors (hygiene factor, motivating factor and offer from rival hotels) and labour turnover intention. An employee's age has a large effect on labour turnover intention while the moderating effect of age on offer from rival hotels has a small effect on labour turnover intention. All other endogenous constructs have no effect on this endogenous construct.

In short with a statistical power level of 100%, it may be concluded that neither motivation factors nor hygiene factors affect labour turnover intention directly. However unlike motivation factors, hygiene factors have no indirect impact on labour turnover intention. Age is the main factor that influences an individual's decision to

resign voluntarily and this effect is accentuated in the case of older employees with better job prospects at rival hotels. The impacts of better job offers from rival hotels and attitudes towards work on labour turnover intention are however small. Women have a greater tendency than men to exhibit high intention to quit when hygiene factors are inadequate.

Employers should investigate into the most frequent sources of dissatisfaction and satisfaction to enable employees to work to their full potential. They should strive to provide their effective performers an employment environment that improves their attitudes towards work and lowers their job search. Unnecessary workloads and stress should be avoided and relatively attractive salaries should be offered to high performers and experienced workers. These measures will add to job satisfaction and reduce job dissatisfaction.

6. Limitations of Study

Future research is required to identify the determinants of voluntary labour turnover because other variables that were excluded from this study (such as organisational commitment and organisational justice) may predict labour turnover better. Also similar to the study conducted by (Kmieciak (2021)), this research was based on a cross-sectional data with a small sample size whereby data were collected among a homogenous group of workers. However it may be argued that the results may be generalised to other employees in other hotels with similar working environments.

7. Suggestions for Future Studies

Lack of co-worker support deteriorates the well-being of employees and increases stress with significant role overload (Chiaburu & Harrison, 2008) which may eventually stimulate voluntary labour turnover. The conservation of resources theory states that employees would tend to reduce activities which are unjustified and excessively energy-draining. Without adequate co-worker support, the employee has to put in more effort to perform his/her tasks and becomes less satisfied. Similarly psychological withdrawal behaviours such as horizontal and vertical knowledge withholding could explain the reasons behind resignations. Also employee burnout reduces job satisfaction, increases negative attitude towards the job and adds to labour turnover (Yu, Ariza-Montes, Hernández-Perlines, Vega-Muñoz, & Han, 2020). Thus future studies may examine the impacts of these factors on voluntary labour turnover. In order to avoid misinterpreting correlational data as causal data, future studies may compare competing models that have not been falsified instead of just testing a model (Hox & Bechger, 1998).

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