SSOAR

Open Access Repository
www.ssoar.info

Employees' exit from manufacturing organizations: Investigating the consequences
Makhdoom, Tayyaba Rafique

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

gesis
Leibniz-Institut
für Sozialwissenschaften

Mitglied der
Leibniz-Gemeinschaft

Employees' exit from manufacturing organizations: Investigating the consequences

Tayyaba Rafique Makhdoom
Lecturer
Business Administration
Sindh University Laar Campus,
Badin, Pakistan
tmmakhdoom14@gmail.com

Abstract: This study explored and analyzed consequences of employees' turnover at manufacturing organizations of Site area Kotri. This is descriptive and cross-sectional research study using mixed-methods. Data was collected through semi-structured interviews followed by a survey using closed-ended questionnaire. Exploratory factor analysis and confirmatory factor analysis were applied for checking the reliability and validity. Sample consists of 342 employees working at 12 different—oil, flour, textile and paper—mills in site area Kotri were randomly selected. Data were analyzed in terms of Descriptive Statistics, ANOVA and Structural Equations Modeling. The results indicate that it will be detrimental to organizations if management remains oblivion to employees' concerns while assuming that employee turnover is not a problem for organization. Organizations in general and manufacturing organizations of Site Area Kotri in particular need to take a heed towards employees' turnover as its consequences can be mitigated.

Keywords: Effects, Employee Turnover, Manufacturing Concerns

1. Introduction

All forms of organization can expect some level of turnover. Indeed a certain level of turnover may be desirable (Advisory, Conciliation and Arbitration Services, 2006). Though, turnover generally has the tendency of causing disruption, it is not bad in all cases, when a poor performer leaves an organization, the exit can be quite beneficial as the organization may engage someone with a better output (Abelson & Baysinger, 1984). High levels of turnover pose a serious challenge for both small and large organization as it is inevitable (Iddrisu, 2013). Turnover weakens the competitive advantage of a business as the departing employee leaves with invaluable tacit knowledge (Nagadevara et al., 2008). Johnstrud and Rosser (2002) viewed turnover as both beneficial as well as detrimental for organizations. However, excessive levels of turnover can be detrimental to the firms' productivity as businesses and relationships are lost, and the firm's core objectives are threatened (Stovel&Bontis, 2002).

Employee turnover is one of two things: the ratio of the average number of full-time employees expressed as a percentage for a fixed time, which may be six or twelve months as the case may be; and/or presented as the measurement of the number of employees leaving a particular organization and their replacement (Turkson,1987). Nagadevara et al. (2008) refer to turnover simply as 'job hopping', and further describes it as a persistent problem for human resource practitioners.

Turnover is classified into functional turnover and dysfunctional turnover. Functional turnover is the departure of employees having poor performance, whose talents can replaced easily;

while dysfunctional turnover is the exit of high performers who are difficult to be replaced. Turnover is also classified into voluntary or involuntary turnover; the classification refers to the commencement of movement.

Industrial sector is the second largest sector of Pakistan economy that contributes 25 percent to GDP the large scale industries 4.4 percent to the real GDP growth rate while the small scale industries 7.5 percent (Jaleel, 2012). Cotton, textile production and apparel manufacturing are Pakistan's largest industries; other major industries are cement, fertilizer, edible oil, sugar, steel, tobacco, chemicals, machinery and food processing.

The present study aims to analyze the consequences of employees' turnover at manufacturing organizations functioning in site area Kotri, Jamshoro District, Pakistan.

2. Literature Review

The evolution of employee turnover can be traced to era of the Industrial Revolution, especially in the 1900s when industrial engineers and psychologists attempted an investigation into measuring the interest level of workers in various jobs (Iddrisu, 2013). Anantha and Arokiasamy (2013) emphasized the importance of employee turnover and its impact on the organizations. The management need to know the various existing ways to address critical problems associated with employee turnover. Long et al. (2012) opined that staff turnover is costly at all levels of an organization with respect to the nature, productivity, and quality of the products or services that are negatively affected. High levels of turnover may disrupt the stability of an organization through impacts on direct and indirect expenditure.

Most of the literature about effects/impact/consequences of employee turnover was theoretical; very few research studies were empirical. Though, six factors were identified as consequences of employee turnover from the review of relevant literature. Holtom et al. (2008) concluded that the increased research attention has been paid to the consequences of turnover. According to Mobley (1978), the negative outcomes of turnover are perhaps more frequently studied in the literature.

Shamsuzzoha and Shumon (2007) in industries of Bangladesh and Mabindisa (2013) in Department of Home Affairs in South Africa also described 'Waste of training' as one of the impacts of Turnover. Melaku (2014) opined that skilled and trained workers are lost in turnover, while analysing the employee turnover in the Ethiopian Evangelical Church Mekane Yesus. Ampomah & Cudjor (2015) opined that loss of skilled manpower is a one of the consequence of employee turnover. Odiro (2017) opined that turnover results in high cost of training and learning contextual skills.

Findings of Gialuisi (2012) indicate that voluntary employee turnover adversely impacts business productivity. Decline in productivity was concluded as costly effect of employee turnover by Catherine (2002). Tim and Bruce (2008) opined that higher rate of labor turnover has the tendency to bring about low productivity where employees are aware that their position is not secure. Pawar and Chakravarthy (2014) found Productivity drops as an effect of employee turnover in fusion healthcare organization of Hyderabad, India.

Davidson, Timo, and Wang (2010) concluded levels of service, and value may be impacted due to employee turnover Mabindisa (2013) concluded that staff Turnover affects the Quality of product/service. Ampomah & Cudjor (2015) concluded poor quality of work as a result of employee turnover. Odiro (2017) opined turnover results in loss of quality in output. Sousa-Poza and Henneberger (2002) posit that a high rate of labor turnover is counter-productive as it affects the product quality.

Pawar and Chakravarthy (2014) concluded that market image of the firm is one of the consequences of employee turnover in fusion healthcare organization of Hyderabad, India. Melaku (2014) high rates can bring about client's mistrust and discourage workers form remaining loyal to the organization or even those seeking to enter it. Ampomah & Cudjor

(2015) found that an organization with high turnover has difficulties in attracting new employees. Dee (2004) observed that that higher rate of turnover can be injurious to the reputation of an institution and the quality of instruction.

Knight, Edwards, and Flynn (2014) found that staff working in programs with lower turnover rates reported better communication and peer collaboration than those in programs with higher turnover rates. Butali, Wesang'ula, and Mamuli (2013) concluded that employees' turnover in organizations creates gaps in the social groupings. Iddrisu (2013) argued turnover of employees leads to loss in relationships and collaborations and consequently small groups cohesion. Shamsuzzoha and Shumon (2007) opined that new employees take time to be easy with the new system, with the co-worker, to be habituated with the new environment.

Glebbeek and Bax (2004) mentioned as leave of relative expensive employees as a beneficial effect. Garino and Martin (2007) assert reduction in wages because of turnover increases profit of organization. Similarly, Pawar and Chakravarthy (2014) argued cost of overtime payment to the existing employees as one of the consequences of employee turnover. Fay (2005) suggests that turnover can be beneficial if companies are allowed to hire younger staff at lower salaries to replace the quitters.

Figure 1 Model of the Study
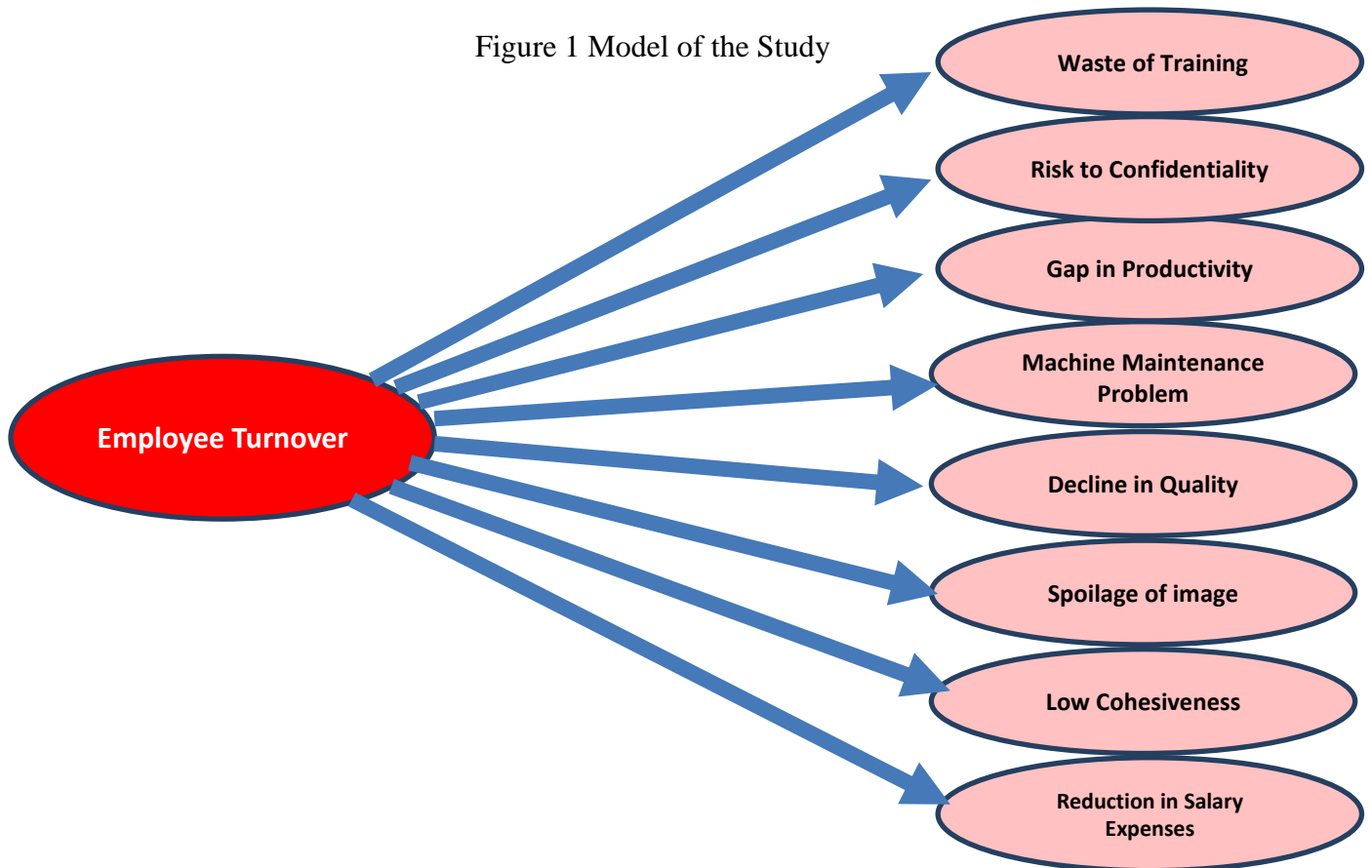
Following hypotheses are developed for the study:

H1: Waste of Training is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H2: Risk to Confidentiality is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H3: Low Productivity is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H4: Machine Maintenance Problem is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H5: Decline in Quality is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H6: Spoilage of image is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H7: Low cohesiveness among employees is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

H8: Reduction in Salary Expenses is a significant perceived consequence of Employees' Turnover at manufacturing organizations of Site Area Kotri.

3. Research Methodology

This is an applied, descriptive and cross-sectional research study, using mixed method. Sample consists of 342 employees working in 12 different mills of site area Kotri.

Initially for determining variables—consequences of employees' turnover, semi-structured and sequential interviews were conducted from line-managers and senior employees of mills until the saturation point was met. In this study saturation occurred around 11 participants. Latham (2013) reported the saturation around 11 participants. Convenient sampling technique was used for sample selection. The results of the themes developed from the interviewee responses seven factors were identified as consequences of employee turnover.

A self-administered, closed-ended questionnaire for consequences was prepared comprising 37 items — four for each nine variable, measuring response on five point Likert scale. One question for Annual Turnover Rate was also included. The questionnaire consists of all nine variables identified as consequences in literature and through pilot study namely; Employee turnover, Waste of Training, Risk to Confidentiality, Low Productivity, Machine Maintenance Problem, Decline in Quality, Spoilage of image, Low cohesiveness, Reduction in Salary Expenses.

The questionnaires were translated into Urdu for convenience of respondents. The questionnaires were also sometimes used as researcher-administered whenever respondents were less-educated or uneducated.

The questionnaire developed for this study was pilot tested on sample of 40 respondents. Cronbach's Alpha as a measure proved that in all the categories questions are strongly reliable in the questionnaire. Cronbach's α values of all constructs of instrument measuring employee turnover and its consequences was above 0.7, and are consistent with the suggested level of 0.7 by Hair et al. (1998).

Ampomah and Cudjor (2015) also used simple random sampling while evaluating the effect of employee turnover on organizations in the Electricity Company of Ghana. Lee et al. (2012) took 12 major hotels in southern Taiwan and distributed 30 to 40 copies of the questionnaire in each hotel, out of which 363 questionnaires were retrieved. Waititu (2013) selected 12 public secondary schools in Limuru district, Kenya, while analyzing teachers' turnover. Morrell et al. (2001) took sample of 352 for nurses' turnover. Lee (2008) took sample of 325 line probation officers from 4 agencies in Texas.

After knowing the estimated number of 27,000 to 30,000 employees working at 80 organizations in Site area Kotri (Assistant Director, Directorate of Labour Hyderabad) the sample size was calculated. 'Raosoft' the online sample size calculator was used to compute the sample size that gave result of 380 using confidence level 95, margin of error ±5% and response distribution 50%.

As the number of sample was determined 380 therefore both questionnaires total 420 in number were distributed in 12 mills three from each of the dominating industries, namely, Textile, oil/ghee, flour, and paper. Forty questionnaires were distributed in each of three textile mills and each of three Oil/Ghee mills, as they cater to higher number of employees as compared to other two industries, whereas 30 questionnaires were distributed in each of three flour mills and each of three paper mills.

For collection of data 420 questionnaires were distributed to be filled, out of which 361 questionnaires were received. Nineteen questionnaires were incomplete therefore discarded. Hence, the sample size of study came out to be 342, a response rate of 81 percent, a response rate of 80 percent was termed valid and good enough for a similar kind of study by Mohammed, et al. (2014).

4. Results and Discussion

Respondents were asked about the annual turnover rate (observed) in their organization. Pawar and Chakravarthy (2014) also asked the respondents about the annual turnover rate in a similar study. Mean score is showing that there is 14 percent annual turnover (observed) in organizations situated in Site Area Kotri.

Table 1: ANOVA of Annual Turnover Rate (Observed) with regard to industry (n = 342)

	N	Mean	Std. Deviation	Maximum	F	Sig.
Oil	102	13.284	8.1221	30.0	1.550	.201
Flour	57	15.912	9.9072	40.0		
Textile	105	13.238	6.3542	25.0		
Paper	78	14.603	10.8536	40.0		
Total	342	14.009	8.6947	40.0		

Table 1 exhibits that turnover annual turnover rate is not significantly different across industries selected for this study as F values are lower than 3 and p-value is not significant as p>0.05. By analysing mean score it is identified that flour mills operating in site area Kotri has highest turnover rates which is 15.91 percent followed by paper industry having 14.6 percent. Oil mills and textile mill have comparatively low 13.28 percent and 13.23 percent respectively.

Exploratory factor analysis was used to investigate and confirm its factor structure in the context of the population and validate each scale of the instrument as done by Tanchi (2015), Shaw, Delery, and Gupta (1998). Original structure and dimensionality of all the factors in the instruments were confirmed via exploratory factor analysis. Factors were extracted through Principal component analysis factoring method and Varimax rotation.

The same scales were subjected to confirmatory factor analysis using AMOS 20 version. Confirmatory Factor Analysis (CFA) was run on measurement model of consequences of employee turnover. Three items MMP1(0.464) and DQ1 (0.411) and LC4 (0.343) were detected with low factor loading which is below the recommended value of 0.5 by Hair et al. (1998) and the recommended value of 0.7 by Fornell (1982). The items were deleted and model was again run. Most of the Fitness Indexes were improved in the new measurement model. Overall results reveal that variables contained in this study demonstrate good construct validity, convergent and discriminate validity.

The normality assessment for the data at hand was examined before proceeding to the structural model. The normality assessment is made by measuring the skewness and kurtosis for all the items of final measurement model. The values of Kurtosis and Skewness lie

between the acceptable range i.e. ±1 thus demonstrating that there is no major issue regarding the non-normality of data.

This study aimed at identifying the effect of employee turnover on various factors termed as consequences. To achieve this objective, the SEM was employed to test the effects of all the research constructs and to compare the modeled relationships with the observed scores. The proposed structural equation model is shown in Figure 2, along with the variables' standardized regression weights/Beta coefficients.

Working on turnover Currivan (1999), Rajapaksha (2015) performed Structural equation models for ascertaining Model fit and Reliability of the Data.
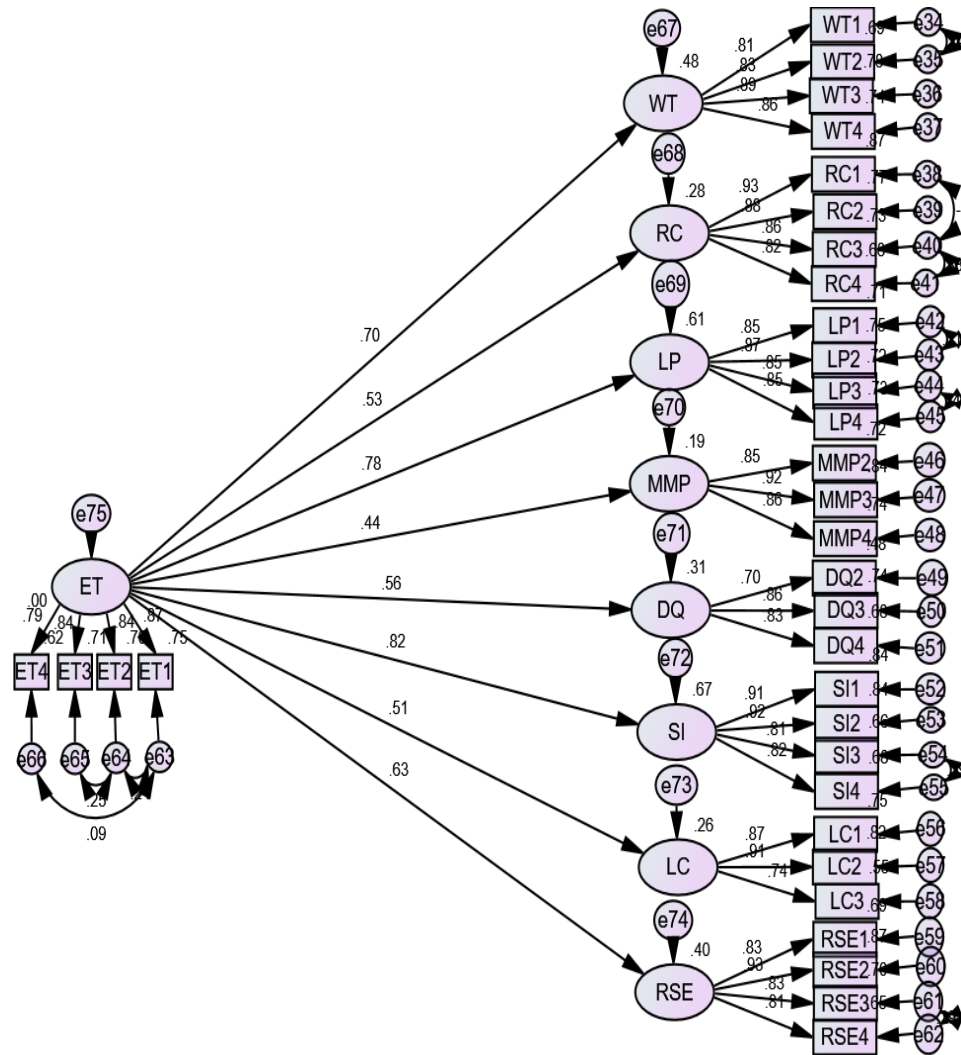

Figure 2: Structural Model

Table 2: Fit indexes of Structural Model (n = 342)

Factors	Values	Factors	Values
CMIN/DF	1.694	P-Value	0.000
AGFI	0.852	GFI	0.874
NFI	0.919	TLI	0.961
CFI	0.965	RMSEA	0.045

The overall model fit is assessed to ensure that the model adequately represents the entire set of causal relationships before evaluating the structural models in Table 2. An excellent fit for CMIN/DF = 1.694 was obtained, in keeping with the suggested value of ≤3 (Carmines & McIver, 1981). The Goodness of Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI) are 0.874 and 0.852 respectively, which are below the required value of ≥0.90 but are somehow satisfactory ≥ 0.80 (Scott, 1994). Comparative Fit Index (CFI) = 0.965, Normalized Fit Index (NFI) = 0.919 and Tucker-Lewis Index (TLI) = 0.961 are excellent, as required value is≥ 0.90 (Bentler & Bonett, 1980; Bollen, 1989; Hu & Bentler, 1999). Finally, Root Mean Square Error of Approximation (RMSEA) = 0.045 has also achieved the acceptable level of 0.06 – 0.08 (Byrne, 1998).

The required indexes of model fit have been achieved. Therefore, it is encouraged to further identify the magnitude and significance of the path structural coefficients of the structural model. The values of standardized regression weights are presented in Table 3.

Table 3: Summary of hypotheses

Hypotheses	Structural Path			Standardized coefficient	p-Value	
H1	WT	<---	ET	.696	***	Supported
H2	RC	<---	ET	.531	***	Supported
H3	LP	<---	ET	.782	***	Supported
H4	MMP	<---	ET	.440	***	Supported
H5	DQ	<---	ET	.560	***	Supported
H6	SI	<---	ET	.819	***	Supported
H7	LC	<---	ET	.507	***	Supported
H8	RSE	<---	ET	.635	***	Supported
*** p ≤.001						

The beta weights represent the coefficients and indicate the relative strength of relationship between all variables in the analysis.

Table 3 indicates that all the dependent variables that are identified as consequences of employee turnover are also found to have significant and positive effect of employee turnover: employee turnover has significant and positive effect on waste of training (β=.696; p<.01), risk to confidentiality (β=.531, p<.01), Low Productivity (β=.782, p<.01), machine maintenance problem (β=.440, p<.01), decline in quality (β=.560, p<.01), spoilage of image (β=.819, p<.01), low cohesiveness (β=.507, p<.01) and reduction in salary expenses (β=.635, p<.01).

The structural model is satisfactory in terms of fit indexes, and Beta coefficients of all the paths are significant and positive. Employee turnover has significant effects on waste of training, risk to confidentiality, Low Productivity, machine maintenance problem, decline in quality, spoilage of image, low cohesiveness and reduction in salary expenses under 99 percent confident interval.

5. Conclusion

This study analyzed consequences of employee turnover with empirical evidence. Except two hypotheses all fifteen hypotheses were supported and a comprehensive model of consequences of employees' turnover has been proposed. Site area Kotri an aggregation of industries and an avenue of employment; which caters to residents of several districts and contribute to GDP of the country. Being oblivion to employees' concerns while assuming that

employee turnover is not a problem for organization will result in detrimental outcomes. Organizations in general and manufacturing organizations of Site Area Kotri in particular need to take a heed towards the causes of employee turnover in order to mitigate the consequences of turnover.

The study is not without limitations. The foremost limitation of the study is the low cooperation from the respondent industries and inadequate responses due to respondents' lower understanding of terms and conditions. Secondly, the sample is drawn from only one industrial area and thus may lack generalizability. Due to confidentiality of organizations in providing their record, no factor of financial performance was taken that affects the variables of the study. Due to lack of empirical evidence about positive consequences—except 'reduction in salary expenses'—only negative consequences of turnover are emphasized.

For future researchers it is recommended that a larger sample size encompassing more industrial areas from different regions be incorporated to gather meaningful results. The study can be further extended by including financial performance variables. Furthermore, positive effects of turnover can also be identified and analyzed, since functional turnover may also occur in organizations.

Biographical Note: Tayyaba Makhdoom is a Lecturer in Business Administration Department of Sindh University. Her research interests include Organizational Behavior, Communication and Management.

References

Abelson, M. A. (1984). Optimal and dysfunctional turnover: Towards an organizational level model. *The Academy of Management Review, 9*(2), 331-341.

Advisory, Conciliation and Arbitration Services (2006). Advisory Booklet-Managing Attendance and Employee Turnover.

Ampomah, P., & Cudjor, S. K. (2015). The Effect of Employee Turnover on Organizations (Case Study of Electricity Company of Ghana, Cape Coast). *Asian Journal of Social Sciences and Management Studies, 2*(1), 21-24.

Anantha, R., & Arokiasamy, A. (2013). A Qualitative Study on Causes and Effects of Employee Turnover in the Private Sector in Malaysia. *Middle-East Journal of Scientific Research, 16*(11), 1532-1541.

Butali, N. D., Wesang'ula, P. M., & Mamuli, L. C. (2013). Effects of Staff Turnover on the Employee Performance of Work at Masinde Muliro University of Science and Technology. *International Journal of Human Resource Studies, 3*(1), 1-8.

Catherine M. Gustafson (2002). Staff turnover: Retention. *International Journal of Contemporary Hospitality Management, 14* (3), 106-110.

Currivan, D. B. (1999). The Causal Order of Job Satisfaction and Organizational Commitment in Models of Employee Turnover. *Human Resource Management Review, 9*(4), 495-52.

Davidson, M. C., Timo, N., & Wang, Y. (2010). How much does labour turnover cost? A case study of Australian four-and five-star hotels. *International Journal of Contemporary Hospitality Management, 22*(4), 451-466.

Dee, J. R. (2004). Turnover intent in an urban community college: Strategies for faculty retention. *Community College Journal of Research and Practice, 28*(7), 593-607.

Fay, H. (2005). *The Turnover Myth*. Retrieved from Workforce: http://www.workforce.com/2005/06/02/the-turnover-myth/

Fornell, C. (1982). *A second generation of multivariate analysis* (Vol. 1: Methods). New York: Praeger Special Studies.

Garino, G. (2007). *The Impact of Labour Turnover: Theory and Evidence from UK Micro-Data*. Leicester.

Gialuisi, O. (2012). *An Exploratory Investigation into Voluntary Employee Turnover and Retention Practices in the Small Business Sector (Masters Dissertation).* Edith Cowan University.

Glebbeek, A. C., & Bax, E. H. (2004). Is High Employee Turnover Really Harmful? An Empirical Test Using Company Records. *Academy of Management Journal, 47*(2), 277-286.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, New Jersey: Prentice Hall.

Holmes-Smith, P., Coote, L., & Cunningham, E. (2006). *Structural Equation Modeling: from the fundamentals to advanced topics.* Melbourne: School Research, Evaluation and Measurement Services.

Holtom, B. C., Mitchell, T. R., Lee, T. W., & Eberly, M. B. (2008). Turnover and Retention Research: A Glance at the Past, a Closer Review of the Present, and a Venture into the Future. *The Academy of Management Annals, 2*(1), 231–274.

Iddrisu, S. (2013). *The Contribution of Ghana's Development of Polytechnics to National Prosperity and Challenges to their Sustainability - Focusing on Staff Turnover (Doctoral Dissertation).* University of Edinburgh.

Jaleel, S. (2012). *Pakistan Industrial Growth.* Rawalpindi: Research & Development Department, The Rawalpindi Chamber Of Commerce & Industry.

Johnsrud, L. K., & Rosser, V. J. (2002). Faculty members' morale and their intention to leave: A multilevel explanation. *Journal of Higher Education, 73*(4), 518 - 542.

Knight, D. K., Edwards, J. R., & Flynn, P. M. (2014). Organizational Consequences of Staff Turnover in Outpatient Substance Abuse Treatment Programs. *Journal of Substance Abuse Treatment, 42*(2), 143–150.

Latham, J. R. (2013). A framework for leading the transformation to performance excellence part I: CEO perspectives on forces, facilitators, and strategic leadership systems. *Quality Management Journal, 20*(2), 12-33.

Lee, C. C., Huang, S. H., & Zhao, C. Y. (2012). A Study on Factors Affecting Turnover Intention of Hotel Employees. *Asian Economic and Financial Review, 2*(7), 866-875.

Lee, W. J. (2008). *A Pilot Survey of Turnover Intention and Its Determinants among Adult Probation Line Officers in Texas.* Texas.

Long, C. S., Perumal, P., &Ajagbe, A. M. (2012). The impact of human resource management practices on employees' turnover intention: A conceptual model. *Interdisciplinary Journal of Contemporary Research in Business, 4*(2), 629-641.

Mabindisa, V. (2013). *Impact of Staff Turnover on Organizational Effectiveness and Employee Performance at the Department of Home Affairs in the Eastern Cape Province (Masters Dissertation).* Durban.

Melaku, Y. (2014). *Factors Affecting Employee Turnover and its Impact on Ethiopian Evangelical Church Mekane Yesus (Masters Dissertation).* Addis Ababa, Ethiopia: Addis Ababa University.

Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology, 63*(4), 408-414.

Mohammed, U. D., Yusuf, M. O., Sanni, I. M., Ifeyinwa, T. N., Bature, N. U., & Kazeem, A. O. (2014). The Relationship between Leadership Styles and Employees' Performance in Organizations: A Study of Selected Business Organizations in Federal Capital Territory, Abuja Nigeria. *European Journal of Business and Management, 6*(22), 1-11.

Morrell, K., Loan-Clarke, J., & Wilkinson. (2001). Unweaving Leaving: The Use of Models in the Management of Employee Turnover. *Business School Research Series*, *10*.

Nagadevara, V., Srinivasan, V., &Valk, R. (2008). Establishing a Link between Employee Turnover and Withdrawal Behaviours: Application of Data Mining Techniques. *Research and Practice in Human Resource* Management, 16(2), 81-99.

Odiro, T. T. (2017). Assessment of Employee Turnover and Its Impact on Three Selected Government TVET Colleges in Addis Ababa. *International Journal of African and Asian Studies, 29*, 47-61.

Pawar, I. A., & Chakravarthy, V. (2014). Factors Influencing Employee Turnover in Fusion Healthcare Organization . *International Journal of Management Research & Review, 4*(9), 834-846.

Rajapaksha, U. (2015). Analysis of Factors affecting to Employee Turnover in Medium Scaled Apparel Industry in Sri Lanka. *6th International Conference on Business & Information ICBI – 2015* (pp. 177-197). Kelaniya: University of Kelaniya.

Shamsuzzoha, A. H., & Shumon, M. R. (2007). Employee Turnover-a Study of its Causes and Effects to Different Industries in Bangladesh. *Manufacturing Engineering/ Vyrobne Inzinierstvo, 6*(3), 64-68.

Sousa-Poza, A., & Henneberger, F. (2002). Analyzing Job Mobility with Job Turnover Intentions: An International Comparative Study. *Research Institute for Labour Economics and Labour Law, 82*, 1-28.

Stovel, M., &Bontis, N. (2002). Voluntary Turnover: knowledge management- friend or foe? *Journal of Intellectual Capital, 3*(3), 303-322.

Tim, H., & Bruce, T. (2008). Development use of a web-based tool to measure the cost of employee turnover: *CHR reports, 6*, p. 8.

Turkson, J. K. (1987). *Principles of Management.* Kumasi: KNUST Press

Waititu, G. M. (2013). *An Analysis of Factors Influencing Turnover of Teachers in Public High Schools in Limuru District, Kenya.* Kenyatta University, Nairobi, Kenya.