RESEARCH ARTICLE

AGE AS MODERATOR OF RELATIONSHIP BETWEEN JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT.

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Abstract

This article examined the relationships and evaluates whether demographic characteristics such as; teachers’ age moderates the relationship between their job satisfaction and organizational commitment. The study was undertaken on 300 teachers employed in central university (AMU), India. Obtained data were analyzed by correlation and moderation analysis. Results of correlation analysis revealed that age was significantly and positively correlated with job satisfaction as well as organizational commitment. A significant positive correlation was also found between job satisfaction and organizational commitment. Moderation analyses confirm the significant interaction effect of age on the relationship between job satisfaction and organizational commitment. These findings substantiate the crucial role of senior university teachers’ in determining their job satisfaction and organizational commitment. Implication of research discussed and suggestions for future research proposed.

Introduction:

Job satisfaction and organizational commitment (OC) are different concepts, but several meta-analyses have concluded that there is a high correlation between the two variables (Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). It is difficult to separate the two concepts completely as the theory suggests that they share many factor, and it is therefore natural to wonder whether these terms actually are different. Several researches have shown a causal relationship between organizational commitment and job satisfaction, while others have shown that job satisfaction as a determinant of organizational commitment (Mathieu, 1991). Porter, Steers, Mowday, and Boulian (1974) conducted a study on organizational commitment, job satisfaction and turnover of psychiatric technicians. They pointed out that the change in job satisfaction was accounted more willingly as compared to the organizational commitment. Williams and Hazer (1986) assessed the commitment model to examine the cause and effect relationship between job satisfaction and organizational commitment and further to find out the determinants of these variables. The results indicated the relationship between personal/organizational determinants and job satisfaction. The relationship was also reported between job satisfaction and work commitment. Furthermore, commitment was intended as a significant facet of turnover. Loui (1995) reported that the commitment in public organization was significantly correlated with the trust for the organization, job involvement and job satisfaction. On the other hand, Fresko, Kfir, and Nasser (1997) explored the commitment...
among teaching staff. Their findings reported that the only teachers’ job satisfaction predicted their commitment. Irving, Coleman, and Cooper (1997) found the positive relationship of job satisfaction with affective and normative commitment. However, job satisfaction was negatively correlated with continuance commitment. Khan and Mishra (2002) made an attempt to estimate the canonical correlation between needs satisfaction and organizational commitment among rail engine drivers of Indian Railways. They found that needs of social attachment and esteem were significantly related with affective and normative commitment. Further, the canonical correlation between five needs (Set-I) of need satisfaction and three sub-components (Set-II) of organizational commitment was also found to be significant. Warsi, Fatima, and Sahibzada (2009) reported the significant positive relationship of work motivation, job satisfaction and organizational commitment. Further, influence of job satisfaction on organizational commitment was found more as compared to the employees’ work motivation. Hsu and Chen (2012) observed that those university faculty members who achieved a higher organizational commitment score while they held a higher degree of the job satisfaction. Nagar (2012) reported that the higher job satisfaction made greater contribution for organizational commitment. Suma and Lesha (2013) examined that satisfaction with work itself, the quality of supervision and pay satisfaction had significant positive impact on organizational commitment among municipality employees working in Shkoder. Further, they reported high degree of organizational commitment and satisfaction with work itself, supervision, salary, coworkers and opportunities for promotion. Srivastava (2013) found the significant positive relationship between job satisfaction and organizational commitment. Further, trust and locus of control significantly moderated the relationship between job satisfaction and organizational commitment. Nifadkar and Dongre (2014) revealed the significant positive correlation of job satisfaction and age with organizational commitment of teaching staff. Khan (2015b) revealed the direct effect of satisfaction of social needs, citizenship behavior and recognition at work and work relations on organizational commitment among loco pilots of Indian Railways. Ismail and Abd Razak (2016) conducted a study at Fire and Rescue Department of Malaysia and observed that job satisfaction was significantly related with organizational commitment, intrinsic satisfaction was significantly related with organizational commitment, and extrinsic satisfaction was significantly related with organizational commitment. Findings suggested that employees’ intrinsic as well as extrinsic satisfaction with the job lead towards the higher organizational commitment.

The literature provides significant evidence of a persistent positive relationship between job satisfaction and organizational commitment in diverse work setting. Considering the importance of proposed variables and research gap; the present study was undertaken to study the moderating effect of demographic characteristic such as age on the relationship between job satisfaction and organizational commitment of university teachers. Because teachers are an extremely important facet of any society for a number of reasons and their role in society is both significant and valuable. They play an extraordinary role in the lives of children in the formative years of their development and the importance of teachers is something that cannot be understated. They are also considered as the leader of the human capital, play a central role in societal development. They are considered pillars of society because they bear the responsibility of educating and training students upon whom our future trusted. In the university setting, teacher shoulders the different responsibilities such as teaching role, research role, service/administrative role, social role and political role etc. Hence, it was assumed that the teachers’ wide range of experience along the time will be significant impact on our societal development.

Objectives of the Study:-
1. To examine the relationship between age and job satisfaction.
2. To examine the relationship between age and organizational commitment.
3. To examine the relationship between job satisfaction and organizational commitment.
4. To study the moderating effect of age on the relationship between job satisfaction and organizational commitment.

Hypotheses:-
H1: There will be positive relationship between age and job satisfaction.
H2: There will be positive relationship between age and organizational commitment.
H3: There will be positive relationship between job satisfaction and organizational commitment.
H4: Age will moderate the relationship between job satisfaction and organizational commitment.

Sample:-
A representative sample of teachers was selected ensuring the quality and characteristics of the target population. In the present study, faculty members teaching in an Indian Central University (Aligarh Muslim University) were the
target population. Based on the criterion developed by Carvalho (1984) a sample size of 200 respondents is sufficient for the research study. To ensure the true variance and minimizing the error variance, systematic and random errors; the sample size of the present study was 300 teachers (150 male and 150 female) selected from different faculties using stratified random sampling. In stratified random sampling, the strata were formed based on teachers’ working strength of the faculty. In the sample, the mean age of the teachers was 45.28 years ($SD = 10.01$) with 26 years as minimum and 64 years as the maximum. The mean teaching-experience of the teachers was 16.51 years ($SD = 10.33$) with 2 years as a minimum and 35 years as the maximum. In terms of educational qualification, they were 90 Post Graduates and 210 Ph.D. In academic rank they were 134 Assistant Professors, 89 Associate Professors and 77 Professors.

Measures:-
Two standardized psychometric measures were used to study the job satisfaction and organizational commitment of university teachers. The description of the measures used in the present study is discussed in the following paragraphs.

Job Satisfaction Scale:-
Job Satisfaction Scale developed by Singh (1990) was used. The scale comprises with 20 items on a 5-point Likert scale with anchors labeled (1=Highly Dissatisfied and 5=Highly Satisfied). The minimum and maximum score of the scale ranges from 20 to 100. The standardized Cronbach’s alpha was 0.96. The psychometric properties of the scale were re-visited on the target sample. The Cronbach’s alpha was found to be 0.91 and confirms an excellent reliability of the scale as suggested by George and Mallory (2003). The percent of variance of the scale explained 49.65% of the total variance.

Organizational Commitment Scale:-
Organizational commitment scale developed by Shah and Ansari (2000) was used. This scale composed of three components which are; affective, continuance and normative commitment. It was comprised of 15 items and each component includes 5 items. The responses were on a 7-point Likert scale with anchors labeled (1=Strongly Disagree and 7=Strongly Agree). The minimum and maximum score of the scale ranges from 15 to 105. The reliability coefficient of the scale was 0.80 and the congruent validity 0.76. The psychometric properties of the scale were re-visited on the target sample. The Cronbach’s alpha was found to be 0.88 and confirms the good reliability of the scale (George & Mallery, 2003). The percent of variance of the scale explained 46.46% of the total variance.

Data Collection Procedure:-
Teachers were contacted individually. They were explained about the utility of the study and requested with due respect to extend their cooperation for success of the study. Great care was taken to address any misunderstanding about the purpose of the study and they were told that it is to be used only for research. They were requested to discuss when they feel any doubt in understanding and resultant response of the items, but don’t leave any item un-attempted. They were assured of the confidentiality that their identity would not be disclosed at any stage. The order of the tools administration was job satisfaction scale, organization commitment scale and at last personal data sheet.

Data Analysis:-
Keeping in view the objectives and hypotheses of the present research, statistical analyses and discussion have been carried out in two stages. At the first stage, the Pearson Correlation Analysis (Zero order) was calculated in order to determine the relationship of proposed variables. At the second stage, Moderation Analysis was undertaken to examine the role of age as moderator on the relationship between job satisfaction and organizational commitment. The analyses were carried out using software SPSS ver. 22.

Results and Discussion:-
Pearson Correlation Analysis (Zero order):-
Table 1 showed that age is positively and significantly correlated with job satisfaction ($r=0.24$, $p<0.001$). Age is positively and significantly correlated with organizational commitment ($r=0.37$, $p<0.001$). Job satisfaction is positively and significantly correlated with organizational commitment ($r=0.47$, $p<0.001$). Therefore, $H_{a1}$, $H_{a2}$, and $H_{a3}$ are supported as probability to support the hypothesis was ($p<0.001$) level of significance. These results are in line with previous research findings (e.g., Affum-Osei, Acquaah, & Acheampong, 2015; Loui, 1995; Mathieu & Zajac, 1990; Meyer et al., 2002; Rhodes, 1983).
Table 1: Inter-correlations: Age, Job Satisfaction and Organizational Commitment

| Variable | D | X | Y |
|----------|---|---|---|
| D        | 1 |   |   |
| X        | 0.24 | 1 |   |
| Y        | 0.37 | 0.47 | 1 |

\[ r = 0.10 \ (p < .05), \ 0.15 \ (p < .01), \ 0.19 \ (p < .001), \ one-tailed \]

\( D = \) Age, \( X = \) Job Satisfaction, \( Y = \) Organizational Commitment.

Moderation Analysis:
Hierarchical multiple regression analysis outputs in following paragraphs shows the effects of moderating variable. Variables were standardized to make interpretations easier and to avoid multicollinearity. Table-2 shows hierarchical regression analysis outputs for the moderation effect of age on the relationship between job satisfaction and organizational commitment. In the analysis Model 1 (without the interaction) and Model 2 (with the interaction) was examined using the PROCESS procedure given by Andrew F. Hayes (http://www.afhayes.com). Moderation schema age as moderator on the relationship between job satisfaction and organizational commitment prepared and showed in Figure 1.

Table 2: Model Summary

| Model | R  | \( R^2 \) | Change Statistics | Sig. Change |
|-------|----|-----------|-------------------|-------------|
|       | R² Change | F Change | df1 | df2 | F |
| 1     | .536 | .287      | .287 | 59.738 | 2 | 297 | .000 |
| 2     | .567 | .321      | .034 | 14.904 | 1 | 296 | .000 |

Model 1: Predictors: Age, Job Satisfaction
Model 2: Predictors: Age, Job Satisfaction, Interaction between Age and Job Satisfaction

As shown in Table 2, Model 1 without the interaction accounted for a significant amount of variance in organizational commitment, \( R^2 = .287, F (2, 297) = 59.738, p < .001 \). It can be inferred that job satisfaction is a significant predictor of organizational commitment. Next, the interaction between age and job satisfaction was added to the regression model (Model 2) which accounted for a significant amount of variance in organizational commitment, \( \Delta R^2 = 0.034, \Delta F(1, 296) = 14.904, p < .001 \). On the basis of this quantitative analysis it can be inferred that there is a significant moderating effect of age on the relationship between job satisfaction and organizational commitment. Further, for visualizing the conditional effect of job satisfaction (X) on organizational commitment (Y) interaction plot prepared and shown as Figure 2.
Examination of the interaction plot showed an enhancing effect as age and job satisfaction increases, teachers’ organizational commitment also increases. At low job satisfaction, teachers’ organizational commitment was different for their low, average, and high age groups. Teachers with average and high job satisfaction with their low, average and high age groups had an enhancing pattern in organizational commitment and came closer to substantiate the interaction effect. Therefore, $H_{A4}$ is supported. The finding is in accordance with the findings of Yucel and Bektas (2012) who confirmed the significant moderating effect of age on the relationship between job satisfaction and organizational commitment.

Aforementioned, findings indicated that as the age of university teachers increases, their job satisfaction and commitment also increases. Further, the job satisfaction of teachers appeared as antecedent of organizational commitment. Thus, the results empirically confirmed that older teachers’ are highly satisfied and more committed in their academic profession as compared to the younger teachers. Probably, this result may be due to the fact that the older teachers show high levels of organizational commitment in that they only remain with the organization because it would be hard for them to leave due to fewer employment opportunities, shortage of available alternatives, or distraction of their life. Therefore, teachers in the older age group have more organizational commitment as compared to the younger age group.

**Implication of Study:**
The findings of the present piece of research work provide the conceptual implication in understanding the relationship of teachers’ age with their job satisfaction and organizational commitment. The higher academic body, university management and trainer (academic staff college) can plan an intervention to uphold an organizational commitment of very important workforce who carry on the responsibilities to integrate critical thoughts, examination of emotions and moral values to broaden the learning experience and make it more relevant to everyday life situations. Further, age emerged as significant moderator on the relationship between job satisfaction and organizational commitment which in turn to set on the eyes of university management that older teacher are invaluable assets in operational perspective of academic setting. Older teachers having massive working-experiences in different academic domains which can serve as input for the institution to employ them in decision making, in identifying organizations’ key issues in order to develop strategies to enhance the institutions’ rank.

**Suggestion for Future Research:**
Research is not the end it open new ways for further research. Since, the present study was undertaken in a sample of teachers selected from a central university viz., Aligarh Muslim University, Aligarh. Therefore, further research is needed in other central universities located in different regions of India and other universities (e.g., state universities and private universities) to validate and generalize the present findings. Future studies required to examine the
moderating effect of other demographic variables such as gender, designation, qualification, academic discipline, type of family and marital status on the relationship between job satisfaction and organizational commitment. Future studies should incorporate longitudinal studies on organizational commitment to show how commitment may progress or change over time.

References:-
1. Affum-Osei, E., Acquaah, E., & Acheampong, P. (2015). Relationship between organisational commitment and demographic variables: Evidence from a commercial bank in Ghana. American Journal of Industrial and Business Management, 5, 769-778.
2. Carvalho, J. (1984). Archival application of mathematical sampling techniques. Records Management Quarterly, 18, 60-63.
3. Fresko, B., Kfir, D., & Nasser, F. (1997). Predicting teacher commitment. Teaching and Teacher Education, 13(4), 429-438.
4. George, D., & Mallery, P. (2003). SPSS for windows step by step: A simple guide and reference (4th ed.). Boston: Allyn & Bacon.
5. Hsu, M. C., & Chen, K. M. (2012). A study on the relationship among self-motivation, organizational commitment and job satisfaction of university faculty members in Taiwan. International Journal on New Trends in Education and Their Implications, 3(3), 74-81.
6. Irving, P., Coleman, D., & Cooper, C. (1997). Further assessments of a three-component model of occupational commitment: Generalizability and differences across occupations. Journal of Applied Psychology, 82(3), 444-452.
7. Ismail, A., & Abd Razak, M. R. (2016). Effect of job satisfaction on organizational commitment. Management & Marketing, 14(1), 25-40.
8. Khan, S. M. (2015b). A causal paradigm of the antecedents of organizational commitment – Case of loco pilots of Indian railways. International Journal of Social Sciences & Management, 2(1), 102-107.
9. Khan, S. M., & Mishra, P. C. (2002). Need satisfaction and organizational commitment-Canonical correlation analysis. Journal of Community and Research, 19(2), 199-208.
10. Kumar, P., & Giri, V. (2009). Effect of age and experience on job satisfaction and organizational commitment: The ICFAI University. Journal of Organizational Behaviour, 8(1), 28-36.
11. Loui, K. (1995). Understanding employee commitment in the public organization: A study of the juvenile detention center. International Journal of Public Administration, 18(8), 1269-1295.
12. Mathieu, J. E. (1991). A cross-level no recursive model of the antecedents of organizational commitment and satisfaction. Journal of Applied Psychology, 76(5), 607-618.
13. Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. Psychological Bulletin, 108(2), 171-194.
14. Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. Journal of Vocational Behavior, 61, 20-52.
15. Nagar, K. (2012). Organizational commitment and job satisfaction among teachers during times of burnout. VIKALPA, 37(2), 43-60.
16. Nifadkar, R. S., & Dongre, A. P. (2014). To study the impact of job satisfaction and demographic factors on organizational commitment among girls' college, Pune, India. Journal of Business Management & Social Sciences Research, 3(1), 1-8.
17. Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 59, 603-609.
18. Rhodes, S. (1983) Age-related differences in work attitudes and behaviour: A review and conceptual analysis. Psychological Bulletin, 2, 328-367.
19. Shah, S. A., & Ansari, S. A. (2000). Influence of HRD activities and perceived upward mobility on employees' organizational commitment and QWL. Aligarh Muslim University, Aligarh: PhD Thesis.
20. Singh, S. (1990). Organizational stress and executive behaviour. New Delhi: Shri Ram Centre for Industrial Relations and Human Resources.
21. Srivastava, S. (2013). Job satisfaction and organizational commitment relationship: Effect of personality variables. Vision-Journal of Business Perspective-MDI, 17(2), 21-30.
22. Suma, S., & Lesha, J. (2013). Job satisfaction and organizational commitment: The case of Shkodra municipality. European Scientific Journal, 9(17), 41-51.
23. Warsi, S., Fatima, N., & Sahibzada, S. A. (2009). Study on relationship between organizational commitment and its determinants among private sector employees of Pakistan. *International Review of Business Research Papers, 5*(3), 399-410.

24. Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structure equation models. *Journal of Applied Psychology, 71*(2), 219-231.

25. Yucel, I, & Bektas, C. (2012). Job satisfaction, organizational commitment and demographic characteristics among teachers in Turkey: Younger is better? *Procedia - Social and Behavioral Sciences, 46*, 1598 – 1608.