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A STUDY OF FACTORS AFFECTING TRAINEE REACTIONS AND SATISFACTION: AN EMPIRICAL STUDY

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ABSTRACT

Most organizations utilize reaction levels of evaluation to assess the learning programs of the organization to evaluate their training efforts. For this study, primary data source has been used to collect the data as it appears to be the most appropriate one as the strategy designed for the current research is based on the survey. Factors studied are Instructor satisfaction, Satisfaction with testing, Utility satisfaction, and Material and course structure satisfaction. Stratified sampling method has been used for the present study. the sample size considered for a study is 410. Trainee Reaction has been measured by adapted version of Morgan and Casper's trainee reaction questionnaire. Data was collected from the trainees doing the technical training like Agile, Six sigma, Talent DI, Cloud, AWS, and Java. Duration of the training was between 7 to 15 days. CFA measurement models were constructed and tested for Trainee Reaction. The questionnaire items (observed variables) are plotted to their hypothesized constructs- Instructor Satisfaction (IS), Satisfaction with Testing (TS), Utility of Training (US), and Material and Course Structure Satisfaction (MCSS).

Keywords: *Instructor Satisfaction, Satisfaction with Testing, Utility Satisfaction, Material and Course Structure Satisfaction.*

Introduction

Due to uprising trend the popularity of IT courses has increased tremendously. IT companies have started training their employees and even specific software training companies have cropped up that help IT companies train and evaluate their employees in specific software development, testing and other generic skills.

Evaluating training is extremely pivotal as organizations spend heavily on training programs. During the implementation and evaluation of training they face many problems. problems associated with the evaluation of learning are not always addressed accurately. Large sums of money are spent on it. However, there are a number of problems associated with the evaluation process which must be considered.

Analyzing the participants' reaction through surveying is one of the most convenient approaches (Kucherov &Manokhina, 2017; Harman et al. 2015; Giangreco et al. 2009; Morgan & Casper, 2000). It is mainly because it is considered a little easy to getresponses from participants. Furthermore, collecting

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reaction data from the trainees is fast and can be done just after the completion of the training. It is believed by some researchers that respondents' reactions to training is of no use and is not at all related to the success of learning. But it is suggested by many studies that not only the immediate data from the respondents is convenient but may also be related with learning and implementation of learned skills in the organization (Hughes et al., 2016; Madera et al. 2011; Vlosky and Aguilar 2009).

Literature Review

Most of the organizations still use reactions of the participants as the evaluation method of training (Giangreco et al 2009; Harman et al., 2015). Participants also perceive training evaluation as important and reaction measures provide participants an opportunity to present their view point on training. Thus, reactions can be considered as a reliable method of training evaluation. (Kucherov &Manokhina, 2017; Morgan & Casper, 2000). Some scholars believe that reaction measures are useful because they provide insights into trainee behavior and pattern. Certain perspectives as learning can best be described by the participant (Hughes et al., 2016; Madera et al., 2011). Participants' reactions are still considered an important and reliable way to study the effectiveness of a learning program.

Training test is conducted after the completion of training to identify if the training objectives have been achieved or not. Trainee satisfaction with the test needs to be studied to identify trainee reactions effectively (Morgan and Casper 2000).

Trainee's satisfaction towards the training program depends on the factors, for example, work advancement, perceived improvement in implementation of learned behavior, and opportunity for new tasks (Lee, 1999).

The concept of evaluation focuses more on employee knowledgerather than outcomes in terms of achievement (Cassidy et al., 2005; Leimbach, 2010). It has also been identified that trainee's affective responses regarding a learning program are not studied properly in most of the training assessments (Brown, 2005). It is thought to be a conservative concept (Guerci and Vinante, 2011). Generally,evaluation focuses on increasing organizational performance (Sanderson, 1995). As organizations judge the success of the trainee on the long-term training and achievement (Wang and Wilcox, 2006; Berge, 2008). Therefore, researchers have contradicting views on the utility of learners' reactions as a tool for assessment of training.

Content of the program, materials given in the training, activities performed by trainer, mode of delivery, training climate, training transfer expectation, suggestions for improvement administration and facilities given during training are identified as the major dimensions of good trainee reaction. (Lee and Pershing 2002).

Literature suggests that affective and cognitive reactions both are important for assessment of trainee reactions. Reaction evaluation should not only focus on valence but also on the utility aspect of training (Howardson and Behrend, 2016).

The evaluators of a training program shouldevaluate the length of a training forum orcomplete training program and use the results for scheduling changes. Overall training program can be considered for such alterations(Morgan and Casper 2000; Lee 1999; Ghosh et al. 2011).

Research Methodology

The present study is a descriptive type in nature. The question of who, what, where, when and sometimes how are trying to answer in a descriptive study (Cooper and Schindler, 2006).

Data collection can be done with the help of two methods- primary data collection and secondary data collection. Both types of data collection have been used for this study.

Primary data collection was done from the employees of software companies in NCR. Structured questionnaires were used for primary data collection.Adapted versions of Morgan and Casper's trainee reaction questionnaire is used for the study.The sample size has to be sufficient to allow a statistical investigation, hence here, the sample size considered for a study is 410.Employees with minimum 2 years of experience in IT sector were selected as a sample for the study.

Analysis and Interpretation

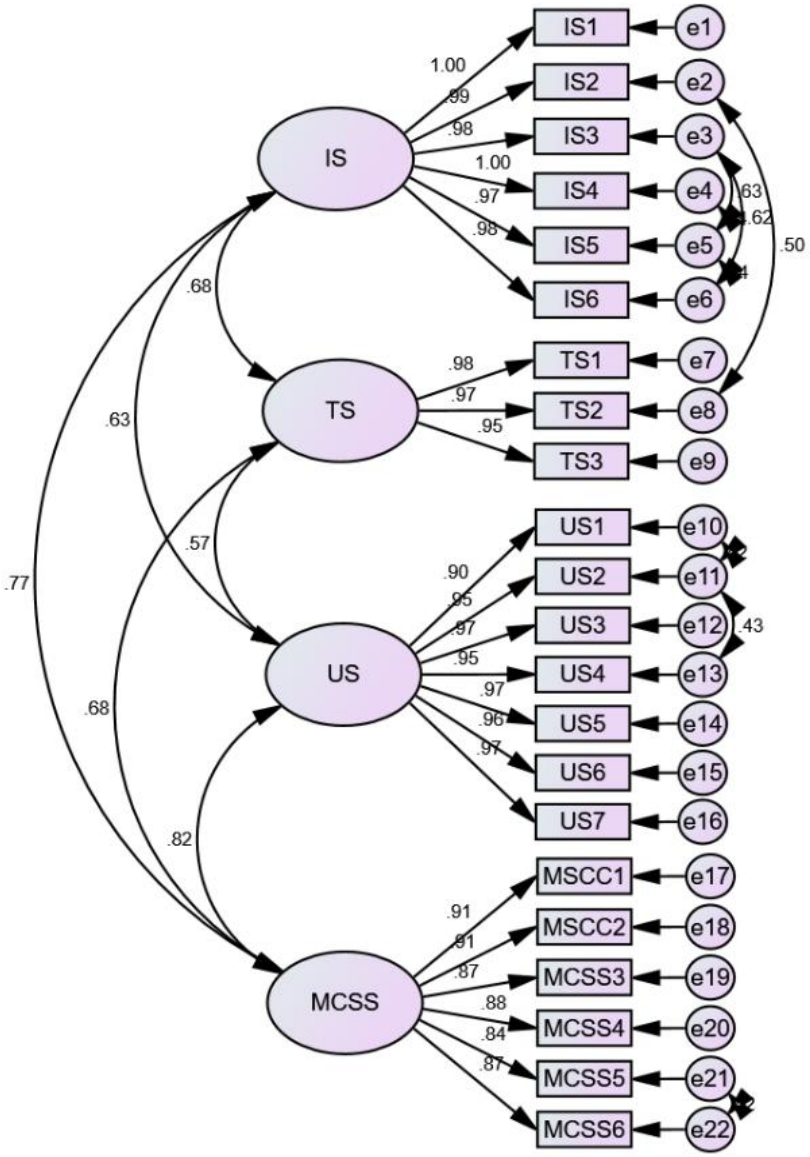
In this research Trainee Reaction is measured with the help of four factors: Instructor satisfaction, Satisfaction with testing, Satisfaction with utility, Material and course structure satisfaction.To empirically validate the questionnaire of Trainee Reaction, Structural Equation Modeling (SEM) was used and research hypotheses were tested through SEM using AMOS 24.

Cronbach Alpha for all Constructs

Construct	Cronbach Alpha
Instructor Satisfaction	.763
Satisfaction with testing	.683
Utility Satisfaction	.785
Material and Course Structure satisfaction	.781

In the first order measurement model, the questionnaire items (observed variables) are plotted and attached by arrows to their hypothesized constructs (latent variables); four constructs are plotted: Instructor Satisfaction (IS), Satisfaction with Testing (TS), Utility of Training (US), and Material and Course Structure Satisfaction (MCSS). With regard to AVE, in this study, the AVE values ranged from 0.796 to 0.972. Therefore, the convergent validity of TR constructs and items is established.

All constructs had square roots of AVE larger than the relevant constructs squared correlation coefficients, indicating that discriminant validity is established.



Model Fit Indices for CFA Measurement Model of Trainee Reaction

Model Fit Indices	Acceptable levels	Obtained Fit Statistics	
		1st Order	2nd Order
χ^2	Low χ^2 relative to df	674.800	634.223
df	-	195	194
p	> .05	< 0.001	< 0.001
χ^2/df	< 5 (Bentler, 1989)	3.461	3.269
CFI	≥ .90 (Hu and Bentler 1999)	0.974	0.976
RMSEA	< .08 (Awang, 2012)	0.079	0.075
SRMR	< .08 (Hu and Bentler, 1999)	0.018	0.018
TLI	.90 to .95 (Tucker and Lewis, 1973)	0.970	0.972

χ^2: (CMIN), χ^2/df: Minimum Discrepancy, CFI: Comparative Fit Index, RMSEA: Root-mean-square error of approximation, SRMR: Standardized Root Mean Square Residual, TLI: Tucker Lewis Index

Findings and Conclusion

It was found that if the trainee is satisfied with the instructor overall training satisfaction was high. The previous research also supports the relationship between trainee reaction and training effectiveness (Tan 2003). It can be said that an instructor's presentation and explanation play a major role in training effectiveness. If the Instructor could relate to the trainees individually it helps the students to understand better. A trainer's ability to keep the class interesting is important for the overall success of training. According to a study by Lee and Pershing 2002 presentation, leadership and overall effectiveness of the facilitator are very important for training to be effective.

Testing for training was found to be positively correlated to the training effectiveness. Fairness of course exam is an important parameter for test of training. Fairness of course exam is also a factor to identify trainee reactions which is directly correlated with training effectiveness. If organisations are fair with the tests which are conducted after the training it increases the morale of the employees.

In the study it was observed that utility of training is positively related to training effectiveness. The objectives of the training or the workshop should match with the trainee's idea of training objectives as it will lead to increased trainee satisfaction. Content of training is considered as a powerful dimension for trainee reactions. Content of the training determines the utility of training from the perspective of the trainer. It was found that the training was effective if the trainee is happy with the content of training. Relevance of the course workshop for the future career of the trainee also has a relevant role in training effectiveness. The appropriateness and practicality of training content is found to be important. Training effectiveness will also be high if the trainee feels that the training is preparing him to do the future tasks in a better manner. A positive correlation between the employee's ability to do the current tasks better and training effectiveness was observed. Overall quality of the training workshop has been found to have an influential role in training effectiveness. Previous researches also suggests that procedures, content and methods play an important role for a training to be successful (Lee and Pershing 1999).

There exists a positive relationship between material and course structure satisfaction and training effectiveness. The study suggests that the quality of course materials is positively related to training effectiveness. The learning environment is a persistent dimension for the effectiveness of training. It can be said that ergonomics is an important aspect of training effectiveness. It was identified that the learning environment, classroom and furniture also plays an important role in classroom training. The audio-visual aids used during the training were observed to be positively correlated with the training effectiveness. It is observed that for the quality training programs length of the training program is an important dimension. If the training is too long or too short it can negatively affect the effectiveness of training. The learners who are satisfied with the length of the training program were found to perform better i.e.; training was observed to be more effective in such cases. Pace at which the training course is conducted also plays an important role. It can be suggested that the trainees who are satisfied with the pace of training tend to give better performances afterwards leading to better training effectiveness.

References

1. Hughes, A. M., Gregory, M. E., Joseph, D. L., Sonesh, S. C., Marlow, S. L., Lacerenza, C. N., ... & Salas, E. (2016). Saving lives: A meta-analysis of team training in healthcare. Journal of Applied Psychology, 101(9), 1266.
2. Madera, J. M., Steele, S. T., &Beier, M. (2011). The temporal effect of training utility perceptions on adopting a trained method: The role of perceived organizational support. Human Resource Development Quarterly, 22(1), 69-86

3. Morgan, R.B. and Casper, W.J. (2000), "Examining the factor structure of participant reactions to training: a multidimensional approach", Human Resource Development Quarterly, Vol. 11 No. 3, pp. 301-17
4. Sitzmann, T., Ely, K., & Wisher, R. (2008). Designing web-based training courses to maximize learning. In *Computer-supported collaborative learning: Best practices and principles for instructors* (pp. 1-19). IGI Global.
5. Tascaorge Eduardo. Leonardo Ensslin Sandra RolimEnsslin. Maria Bernardete Martins Alves (2010). An approach for selecting a theoretical framework for the evaluation of training programs. Journal of European Industrial Training. 34(7). 631 – 655
6. Vlosky, R. P., & Aguilar, F. X. (2009). A model of employee satisfaction: Gender differences in cooperative extension. Journal of Extension, 47(2), 1-15.
7. Wang, G. G., & Wilcox, D. (2006). Training Evaluation: Knowing More Than Is Practiced. Advances in Developing Human Resources, 8(4), 528–539.
8. Michalski, G. V., & Cousins, J. B. (2001). Multiple perspectives on training evaluation: Probing stakeholder perceptions in a global network development firm. American Journal of Evaluation, 22(1), 37-53
9. Berge, Z. L. (2008). Why it is so hard to evaluate training in the workplace. *Industrial and Commercial Training*.
10. Bersin, J. (2008). The training measurement book: Best practices, proven methodologies, and practical approaches. John Wiley & Sons.
11. Kirkpatrick, D. L. (1998). The four levels of evaluation. In Evaluating corporate training: Models and issues (pp. 95-112). Springer, Dordrecht.
12. Kraiger, K. (2002). Creating, implementing, and managing effective training and development: State-of-the-art lessons for practice. Jossey-Bass.
13. Kumpikaitė, V. (2007). Human resource training evaluation. Engineering economics, (5 (55)), 29-36.
14. Brown, K. G. (2005). An examination of the structure and nomological network of trainee reactions: a closer look at" smile sheets". Journal of Applied Psychology, 90(5), 991.
15. Hook, K., & Bunce, D. (2001). Immediate learning in organisational computer training as a function of training intervention affective reaction, and session impact measures. *Applied Psychology*, *50*(3), 436-454.
16. Blume BD, Ford JK, Baldwin TT, Huang JL(2009) Transfer of Training: A Meta-Analytic Review. Journal of Management. 2010;36(4):1
17. Giangreco, A., Carugati, A., Sebastiano, A., & Della Bella, D. (2010). Trainees' reactions to training: shaping groups and courses for happier trainees. The International Journal of Human Resource Management, 21(13), 2468-2487.
18. Harman, R. P., Ellington, J. K., Surface, E. A., & Thompson, L. F. (2015). Exploring qualitative training reactions: Individual and contextual influences on trainee commenting. Journal of Applied Psychology, 100(3), 894.
19. Orvis, K. A., Fisher, S. L., & Wasserman, M. E. (2009). Power to the people: Using learner control to improve trainee reactions and learning in web-based instructional environments. Journal of Applied Psychology, 94(4), 960.
20. Leimbach Michael. (2010). Learning transfer model: A research-driven approach to enhancing learning effectiveness. Industrial and Commercial Training. 42. 81-86.
21. Guerci, M., &Vinante, M. (2011). Training evaluation: an analysis of the stakeholders' evaluation needs. *Journal of European Industrial Training*.
22. Kim, S., Park, S., Lavelle, J., Kim, M., & Chaudhuri, S. (2020). Revisiting trainee reactions: A multilevel analysis of the nomological network. Human Resource Development Quarterly, 31(2), 173-191.
23. Lee, S. H., & Pershing, J. A. (2002). Dimensions and design criteria for developing training reaction evaluations. Human Resource Development International, 5(2), 175-197.

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