



A Study On Effectiveness Of Training And Development Using Kirkpatrick Model

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ABSTRACT: This study explores the effectiveness of training and development programs using the Kirkpatrick Model, which assesses four levels: Reaction, Learning, Behavior, and Results. Employing a descriptive research design, the study aims to systematically describe how training influences employee performance and organizational outcomes. It includes 181 as sample size, selected using a convenient to ensure that respondents had direct experience with the training programs being evaluated. By gathering data through surveys, observation and combining both the quantitative and qualitative approach, the research measures how employees respond to training, what knowledge they gain, how their behavior changes on the job, and how these changes impact organizational outcomes. The findings reveal that while training programs often succeed in improving knowledge and skills, there is a gap in transferring these improvements to workplace performance and achieving measurable business results. The study offers recommendations for designing more impactful training programs that better align employee growth with organizational goals.

Keywords: Training Effectiveness, Kirkpatrick Model, Employee Development, Learning Outcomes, Behavioral Change, Organizational Performance

1. INTRODUCTION

Training refers to the teaching and learning activities carried on for the primary purpose of helping members of an organization acquire and apply the knowledge, skills, abilities, and attitudes needed by a particular job and organization. According to Edwin Flippo, 'training is the act of increasing the skills of an employee for doing a particular job'.

Training evaluation models are systematic frameworks designed to assess the effectiveness, efficiency, and outcomes of training program within organizations. Training evaluation models consist of various levels or stages that guide the evaluation process, ranging from assessing participant reactions and learning outcomes to measuring behavior change and business impact. They help organizations gather data, analyze results, and make informed decisions to optimize training strategies. The Kirkpatrick model of training evaluation

is a well-known L&D evaluation model for analyzing the effectiveness and results of employee training programs.

- Reaction: Understand learner satisfaction through feedback forms.
- Learning: Gauge the understanding of a topic and degree of skill development by taking pre and post-test measures and hands-on assignments. This helps understand if the training objectives were met.
- Behavior: Evaluate if employees apply their learnings from training to their everyday work.
- Results: Check if the business objectives (such as greater productivity and fewer errors) linked to corporate training are met.

2.NEED OF THE STUDY

- To identify the strengths and weaknesses of current training programs so that organizations can make informed decisions to enhance training effectiveness and overall employee performance.
- To assess whether employees perceive the training programs as relevant, valuable, and aligned with their roles and responsibilities, which directly influences their engagement and motivation.
- To analyse how well training programs are adapted to the evolving needs of the organization, market demands, and technological changes.
- To support the continuous improvement of training strategies by using feedback and performance data, enabling the organization to stay competitive and agile.

3.OBJECTIVES OF THE STUDY

- To evaluate employee engagement levels during the initial stage of training session.
- To evaluate the extent to which employees acquire new knowledge and skills from the training program.
- To analyse whether employees apply the learned skills in their job roles.
- To measure the overall impact of training ensuring that skill gaps are effectively reduced.

4.SCOPE OF THE STUDY

Supports talent management by identifying high-potential employees who need upskilling. Aids succession planning by ensuring employees develop necessary leadership and technical skills. The study is essential for organizations seeking to enhance employee's capabilities, improve training ROI and align workforce development with strategic goals. Helps HR teams design more effective training programs. Effective training program helps employees feel more confident and capable leads to stay with organization long-term, reducing turnover rates.

5.REVIEW OF LITERATURE

Andy smith (2023) This study assesses the efficacy of communication-based and challenging behavior training programs using the Kirkpatrick Model, highlighting its utility in evaluating training effectiveness. So, one who's going to use this model should originally assess the applicability of this model at that condition and apply it, so that the anticipated ideal of training evaluation can be achieved successfully and directly.

Wisal Ahmad (2023) This meta-analysis examines the impact of the Kirkpatrick Model on training effectiveness, providing insights into its application and effectiveness over the years. The purpose of

evaluation is to ensure that a given programme is effective, to control the expenditure or provision of training and development activity and more importantly to recognize the areas of intervention into organisational processes to improve them further.

Ravi kiran,anupuma sharma(2023) This research employs the Kirkpatrick Model to assess the efficacy of training programs for both managerial and non-managerial employees in the banking sector. Though there are many research that have been done in the field, there are limited numbers of studies that focus on evaluation of behavioural training and development programmes due to its methodological limitations.

6.RESEARCH METHODOLOGY

Descriptive design is used to study characteristics of the respondents. In this study, convenience sampling, a type of non-probability sampling, was employed to select participants. Both primary and secondary data was used for the research study. Both primary and secondary data was used for the research study. The sampling size of this study is 181, which is determined by Krejcie and Morgan Table. The Kolmogorov-Smirnov test for normality is conducted on the sample data, and it is found that the significance value (P value) is less than 0.05 i.e. $P < 0.05$. Therefore, the null hypothesis was rejected. The alternative hypothesis is accepted. The sample data deviates from the normal distribution. Hence non-parametric test is performed.

7.DATA ANALYSIS AND INTERPRETATION

RANK CORRELATION

			reaction	behavior	learning	result
Spearman's rho	reaction	Correlation Coefficient	1.000	.289**	.270**	.087
		Sig. (2-tailed)	.	.000	.000	.245
		N	181	181	181	181
	behavior	Correlation Coefficient	.289**	1.000	.180*	.035
		Sig. (2-tailed)	.000	.	.015	.637
		N	181	181	181	181
	learning	Correlation Coefficient	.270**	.180*	1.000	.048
		Sig. (2-tailed)	.000	.015	.	.518
		N	181	181	181	181
	result	Correlation Coefficient	.087	.035	.048	1.000
		Sig. (2-tailed)	.245	.637	.518	.
		N	181	181	181	181

INFERENCE

Rank Correlation Coefficient between reaction and behaviour is 0.289 which indicate moderate positive relationships between reaction and behaviour is significant at 1% level.

Rank Correlation Coefficient between learning and reaction is 0.270 which indicate moderate positive relationships between learning and reaction is significant at 1% level.

Rank Correlation Coefficient between reaction and result is 0.087 which indicate less positive relationships between reaction and result is significant at 1% level.

Rank Correlation Coefficient between learning and behaviour is 0.180 which indicate moderate positive relationships between learning and behaviour is significant at 1% level.

KRUSKAL WALLIS TEST

	REACTION	LEARNING	BEHAVIOUR	RESULT
Chi-Square	.941	1.076	.190	1.661
df	2	2	2	2
Asymp. Sig.	.625	.584	.909	.436

INFERENCE

The p value (0.625), (0.584), (0.909), (0.436) > 0.05 , hence the null hypothesis is accepted. There is no significant difference between the age classification of employees with respect to the reaction, learning, behaviour, result level of respondents.

MANN WHITENEY U TEST

	REACTION	LEARNING	BEHAVIOUR	RESULT
Mann-Whitney U	2638.000	3238.000	3157.500	3.228E3
Wilcoxon W	11284.000	4513.000	4432.500	4.502E3
Z	-2.089	-.119	-.381	-.154
Asymp. Sig. (2-tailed)	.037	.905	.704	.878

INFERENCE

The p value (0.037) < 0.05 , hence the null hypothesis is rejected. There is significant difference between the mean rank of male & female with respect to reaction level of respondents.

The p value (0.905), (0.704), (0.878) > 0.05 , hence the null hypothesis is accepted. There is no significant difference between the mean rank of male & female with respect to learning, behaviour, result level of respondents.

CONFIRMATORY FACTOR ANALYSIS

Test Indices	Test Standard	Result	Model Fit Verification
CMIN (Chi square p value)	> 0.05	0.891	Good Fit
CMIN/df	< 5	1.796	Good Fit
RMSEA	< 0.08	0.025	Good Fit
CFI	> 0.9	0.995	Good Fit
GFI	> 0.9	0.965	Good Fit

AGFI	> 0.9	0.930	Good Fit
NFI	> 0.9	0.921	Good Fit
RFI	> 0.9	0.86	Close Fit

Inference

The Chi-square p-value (0.891) is greater than 0.05, indicating no significant difference between the observed and estimated covariance matrices, thus confirming a good model fit.

The CMIN/df value (1.796) is well below the recommended maximum of 5, further supporting the model's adequacy.

Indices like RMSEA (0.025), CFI (0.995), GFI (0.965), NFI (0.921), and AGFI (0.930) all meet commonly accepted benchmarks, which suggest a good model fit.

Although the RFI (0.86) is marginally below the ideal threshold (>0.90), it is close enough to still suggest a reasonably good fit.

Most fit indices meet the recommended thresholds, suggesting that the model has good fit to the data.

8. SUMMARY OF FINDINGS

- Mann-Whitney U test found that there is no significant difference between the mean rank of male & female with respect to learning, behaviour and Result level of respondents and there is significant difference between the mean rank of male & female with respect to Reaction level of respondents.
- Kruskal Wallis H test found that there is no significant difference between the age classification of employees with respect to reaction, learning, behaviour and result level of respondents.
- Rank Correlation Coefficient between reaction, learning and behaviour indicate moderate positive relationships between reaction, learning and behaviour is significant at 1% level and less positive relationship with result level of employees.

9. SUGGESTIONS

- This study would explore how each of these levels contributes to understanding the effectiveness of training, with an emphasis on practical applications in real-world organizational settings.
- By analyzing feedback from employees, managers, and training designers, the research would assess the validity and reliability of the Kirkpatrick Model in different contexts.
- It will also address the challenges of measuring behavioral change and organizational results which are often seen as the most difficult to quantify.
- The research will provide recommendations for refining the evaluation process, improving the application of the model, and ultimately ensuring that training and development programs lead to measurable and sustainable organizational improvements.

10.CONCLUSION

- The effectiveness of training and development programs, when assessed using Kirkpatrick's Four-Level Evaluation Model, provides a comprehensive and systematic approach to understanding the overall impact of these programs.
- The Kirkpatrick Model also helps in aligning training objectives with business outcomes, making the evaluation process both qualitative and quantitative.
- This can lead to enhanced employee performance, improved skills, higher job satisfaction, and overall organizational growth.

