

Impact of Pradhan Mantri Kaushal Vikas Yojana on the Productivity of Youth in Gwalior Region, India



Mini Agrawal, K.S. Thakur

Abstract: Prime Minister Narendra Modi launched a Skill India campaign on 15 July, 2015. This campaign goal is to train over forty crore candidates in India in different-different skills by 2022. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is a unique initiative that aims to offer meaningful, industry relevant, and skill based training to youth. Under this initiative, the trainees were offered a government certification and monetary reward on successful completion of training, which will help them to earn money or securing. So, the PMKVY was developed as a key measure to impart skill-based training to youth, enabling them to earn and support the anti-poverty efforts of the nation. Subsequently the last two decades, India's government has implemented many large national programs for vocational education, training and skill development to improve youth employment and earnings prospects. Since four years to PMKVY came into existence, it is essential to evaluate the role and impact of PMKVY. This paper analyze the impact of on productivity of youth in Gwalior Region, India

Keywords: Pradhan Mantri Kaushal Vikas Yojana, Skill development, Productivity, Entrepreneurship, National Skill Development Mission, Unemployment Problem, Skill Development Policy, Skill Development Training.

I. INTRODUCTION

Recognizing demographic profile change the urgency of securing the benefits of these demographic dividends Ministry of Skill Development and Entrepreneurship was established with aims to achieve a ' skilled India ' all-encompassing vision with a large scale and speed along with high standards. India's government has launched a nationwide multi-skill program parade called the "Skill India Mission". The primary objective is to create a training, skill upliftment and job opportunities framework for India's. PMKVY is one of the schemes to be achieving this objective. These PMKVY effective training program would satisfy the domestic manpower requirements as well global labor demand of countries like USA, Russia, Germany, China, Japan and rest of West Asia.

The general focus of PMKVY is on generating job possibilities and entrepreneurship especially Grey collar (knowledge workers), Pink collar (waiters, retail clerks, salespersons) and Rust Belt workers (construction) beside white and blue collars.

Few percentages of India's workers previously had any formal skill training. Therefore, it is not surprising that several sectors of the country's economy face a shortage of skilled people and are engulfed by low levels of productivity due to poor workforce quality. At the same moment, big segments of youth in the country are looking for possibilities for economic and livelihood. Skill development has become a key priority for the country in this context. Not only is this essential for economic development, it would also help fulfill young people's aspirations for good quality, better paid jobs, and opportunities for self-employment. This would also allow the country to benefit from its favorable demographic profile. India has the chance to become a world-wide skill supplier with a big pool of qualified individuals, particularly the ageing developing world.

PMKVY is the outcome-based Skill training program by Ministry of Skill Development & Entrepreneurship (MSDE). The purpose of this skill certification and reward system is to allow and mobilize a big amount of Indian youth to take up skill training and become employable and earn a living. Under the system, the financial reward would be given to trainees who are effectively trained, evaluated, and certified by associated training providers in skill training. This will increase the productivity of the workers of the country by allowing them to obtain high-quality skill training across a variety of industries. It will also bring about a fundamental change from input-based to magnitude-based skill training in the country. It also aims to increase skill training operations in the nation considerably and to allow skill training to take place at a rapid rate without compromising quality. It is executed by the National Skills Development Corporation (NSDC).

II. LITERATURE REVIEW

Shrivastav & Jatav (2017) revealed how the different types of programs launched by Government of India can generate job opportunities in India with new Industrial skill requirement. The study concludes the overall status of Skill capacity available, requirement, gap and initiatives engaged by Government of India for Skill Development. There is an immediate need for therapy for the current skill development strategy in India.

Manuscript published on November 30, 2019.

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Kanchan & Varshney (2015), indicated in their research paper about impact of strategies and initiatives of skill development in India. Secondary data sources based study found that 80 percent of rural and urban Indian workforce has low marketable skills. Study reveal filling this gap with various skill development initiatives results skilled manpower to face global hub. Kedar (2015), Productivity of Indian labor is lower as compare to the Asian economies and need up-skilling of the labor to ensure the economic growth.

Chenoy (2012), Improving workers ' efficiency is a key task for many businesses and entities in India with economic opening and increasing exports. Furthermore, as the Indian economy expands, this growth will require a big amount of qualified people. According to Chenoy, "Vocational courses enrollment in India is around 5.5 million per year, while 90 million in China and 11.3 million in the US". Only 2 percent are Indian employees officially qualified. For this, joint initiative by government and their partner agencies is develop skill development.

Katole (2015) identified two main ways for developing skills that is through education & training and developmental experiences which is significant for the economic development of the country. Skill is the capability to do something good to arise from talent and training. Also Author state the skill development model and training methods for micro-entrepreneurs in India, Model fall into three categories that is general management, entrepreneurial and knowledge related skill. Unemployment problem is the major challenge to India, youth enter in jobmarket every year after completing their education but remail jobless due to lack of opporunities. Promoting self-employment entrepreneurial among the unemployed youth is good solution. With this constraint, the model was developed to provide training to unemployed youth to engage in wages employment to earn livelihood.

Divyaranjani & Rajasekar (2017) study evaluates the effectiveness of training in overall development of workforce and to identify the results of training programme provided. Primary data of 456 workers of automobile industry, Chennai were used for the study. The findings point out the importance of training and development efforts as training improves skills, capability, ability and finally worker performance and productivity. Singh & Mohanty (2012), clarified that training is a significant instrument in order to improve individual efficiency and eventually will boost the value of organizations but organizations should strike equilibrium between education and instruction. The final findings showed that the impact of training in various industries is varying.

Mbeki (2014), the research explored the factors and impacts of qualified craftsmen's surplus on contractor productivity. The study has been affected by countless worldwide and local studies demonstrating a lack of understanding of the impact of lack of skilled craftsmen on construction effectiveness and their impact on project time. In India and elsewhere in the globe, there are a number of similarities between results. The heterogeneity in effects based on respondents features, the advantage of training for females higher than males, and the beneficial impact of portion of industry-led practice are prevalent results in many programs around the world.

III. PROBLEM STATEMENT

India's government is striving hard to attain the goal set and also has a beneficial effect on youth. This system also presents certain problem and they need to be resolved. Trained in one role, but did not land a job or play another role. In the past, people have been assessed and certified in a specific job role and have ended up in a completely different job. Training is not aligned with demand, which means that we train a lot of people in some work positions, but there is no demand for these qualified individuals. Many people get trained and placed, but leave in a short time because the cost of living is too high in the location they are posted. This is because training is carried out on the grounds of student accessibility. The jobs are somewhere else, but trainee unable to afford to migrate. Without checks, training providers can franchise the entire training leads to sub-standard training which can lead to excessive assessment fraud or franchising disincentive. Much more emphasis will be placed on the quality of training at the PMKVY is based on auditors visiting the training site and any large-scale evaluation fraud is uncertain. The result is employment after training, but trainee cannot do any task because each job needs some distinctive characteristics and attitude. Pre-assessment is therefore needed prior to training that has not been prescribed in the guidelines of PMKVY. Moreover, public mobilization is more focused on youth aspirations than on fundamental equipment, leading in training provided to the incorrect applicants. The training partner should mobilize the applicant and pre-assess to absorb the course and excel in the trade for which the training is provided.

PMKVY is a new initiative in India. Since the last 40 years, the gigantic discrepancy between education, employability and productivity has been gazing at the nation. The nation had over 70 bizarre skill development programs run throughout the nation. Each program had its own standards and results, and the mechanism for monitoring them. The variety of these projects had scattered the effect Skill Development might have had on India's youth. There was no process and system rationalization and the training was never focused on the outcome. Limited emphasis was placed on mapping the skilled workers needed across industries. The research shows the procedure of the skill development program, assess the effectiveness of the skill development programs in terms of increase productivity and align the training of the existing workforce. Whether the youth are successfully enabled and mobilized to take up skills training and become employable and earn a living.

IV. OBJECTIVES

This study's core objective is to assess the Impact of the PMKVY in improving the productivity of youth in Gwalior region. Where individual is able to transfer his skill through learning. And the hypothesis is "There is significant impact of the PMKVY in improving the productivity of youth in Gwalior region".

V. RESEARCH METHOD

The evaluation of attitudes, opinions, demographic information, conditions and procedures is concerned with distinctive descriptive surveys. Data will be introduced and analyzed in order to gain indicators that will be assessed and interpreted in accordance with this kind of study, through the information used in this study in analytic and descriptive methodology. Present research generalizes result on group of PMKVY trainee who were trained at Training center of PMKVY of Gwalior region. Gwalior region is an administrative subdivision of Madhya Pradesh state in central India.

An opportunity, non-probability sampling was used in this research. Data for this study was collected by survey conducted at training center of PMKVY, Gwalior, India. The sample size for this study consist of 1197 trainee who were trained at Training center of PMKVY, Gwalior region, India. While determining the sample size generalization was extracted from the sample studied; the analysis was performed at the 5 percent error and 95 percent confidence level. This level of confidence represents the population. The research was academic purpose and subject to budgetary limitation. In this research both primary and secondary data was collected. Primary data is collected through self-structured questionnaire which was circulated through e-mail. WhatsApp and personally distributed to respondent and secondary data have been collected from various Journal, Books, Articles, Reports, Government record, Thesis of various scholars, etc. Apart from this different website were also referred.

In this study, the modified scale was used to collect final data. The study emphasized here that the self-constructed questionnaire based on a five-point scale was used to collect data. The data collected through the questionnaire survey is relevant. A closed ended restricted questionnaire is used to collect related information and data. All of the scale items represent in Part B of the survey on Likert five point's categorical rating scale.

For confirming the face validity of the questionnaire and its items, a meaningful understanding of the variable by these experts helped. The questionnaire was displayed and discussed with the training center's trainer and counselor. These people first expressed their views on the questionnaire and proposed the relevant amendment. The pilot study's core purpose is to validate the measuring tool to be used throughout the research. Before conducting the research, the researcher used a pilot study. To verify reliability and required changes made in the final questionnaire, a small sample size of 60 trainees was used for pilot testing.

Data collection process is the process of preparing a data for analysis. Basically it is concerned with reducing the bulk of gathered data transform into a manageable size. It involves the editing & coding. The data is coded in MS-excel.

A. Reliability Measurements

Reliability is measuring the consistency and stability of the scale. Reliability has been checked with the help of Cronbach Alpha. Using Cronbach's internal consistency test alpha, the reliability of the measurement items used in the questionnaire was evaluated. This is a test of the respondent's consistent response to all the

measurement items. A value above 0.70 is considered acceptable for Cronbach's alpha (Nunnally, 1978). The value obtained of this research is Cronbach's alpha 0.931, which is higher than the prescribed limit and shows excellent consistency and is considered good and acceptable for research.

B. Tools Used for Data Analysis

Further the coded data was decoded in Statistical Package for the Social Sciences (SPSS Version 24) to analyze several statistical techniques and analysis of a moment structures (AMOS Version 24) for Structural Equation Modeling. The diagrammatic presentation is used to make effective presentation of the results of the study.

VI. DATA ANALYSIS

Analysis and interpretation of data is the process of transforming data collection into reliable evidence. To visualization of the data demographic characteristics of the trainee of PMKVY have been gathered for determining trainee's opinion regarding PMKVY Training. Table 1 present demographic characteristic includes gender, qualification and working status or experience of PMKVY trainee in Gwalior region.

Table 1
Demographic Characteristics of PMKVY Trainee

Demographic Characteristics	Classification	Frequency	Percentage
Gender	Male	777	64.91
	Female	420	35.09
Qualification	Primary Education	18	1.50
	Matriculation	234	19.55
	Senior Secondary	806	67.34
	Graduation or more	139	11.61
Work Status	Self-employed / Business	217	18.13
	Paid Employment	206	17.21
	Student	774	64.66

Source: Author's Calculation

The result shows majority of the respondents are male 64.91 percent and female are 35.09 percent. It is clear that out of total 1197 respondents male respondents were more in comparison of female respondents. Thus, the sample is dominated by male respondents. This propensity is normally because mobility is major issue for female trainee, she usually not comfortable to join training if training center is far from there stay or homes. In adding to that, the area culture and traditions not allow female to work in harsh working conditions.

Qualification of PMKVY trainee is classified into four groups (Primary Education, Matriculation, Senior Secondary, Graduation or more) with the consideration of minimum eligibility criteria of PMKVY training. The findings give clear indication that large sections of this region are standing at the edge of looking career for economic and livelihood opportunities.

Current working status or experience of trainee is significant to determine respondent's opinion regarding PMKVY Training. In respect of work status or experience, this study constitutes a sample of self-employed or business, paid employment and student.

Self-employed is a trainee who has their own business and paid employment means a trainee who is working under another person or organization. And rest, student respondents mean trainee who are still learning and jobless. Data represent the sample is dominated by male student respondents.

A. Factor Analysis

Factor analysis was carried out before hypothesis testing. Data reduction is the main purpose of using this analysis. In this study total number of useable response is 1197 which is ample for factor analysis as factor analysis method is constructed on the variables correlation matrix and usually correlations prerequisite a huge sample size before they become constant. In this data analysis first exploratory factor analysis is done with principle component method, secondly structure equation modeling (SEM) approach is used to confirm observed factor and structure.

B. Exploratory Factor Analysis (EFA)

Exploratory factor analysis exploring the data and provides information about number of required factors to best characterize the data. The core aim of exploratory factor analysis is to recognize and explain the significance of that factor in analysis (Hair et al., 1995). Principal Component Analysis is one of the very common methods used for factor extraction with promax rotation to reduce the small loadings. Analysis is based on eigenvalue to determine number of extracted factor.

To identify underlying structure among variable data adequacy is measured by Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. KMO range is between zero to one and nearer to 1 is considered suitable for factor analysis. Kaiser & Rice (1974) suggest the acceptable limit of KMO is .06. The KMO value indicates in Table 2 is 0.908, which is higher than the prescribe limit and sample is adequate for analysis of factor.

Table 2
KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.908
Bartlett's Test of Sphericity	Approx. Chi-Square	18775.253
	df	78
	Sig.	.000

Source: Author's Calculation

Bartlett's test of sphericity is used to test correlation matrix of the variable with identity matrix.

Significance value less the 0.05 ($p < .05$) indicate significant relationship between variable. Significant value of Bartlett's test of sphericity in table 2 is 0.000, which is higher than the cut-off limit and shows that the factors extracted from the variable are correlated. Both tests KMO and Bartlett's test of sphericity value shows that the data is appropriate for factor analysis

C. Total Variance Explained

Three significant factors were extracted in this analysis whose eigenvalue is more than one. Eigenvalue represent the squared factor loading, in which factor loading are the linear coefficient of the variable. Table 3 shows three factors represent the 87.097 percent of the total variance. According to Hair et al., 2010 Total Variance Explained should be greater than 60 percent.

Table: 3
Total Variance Explained

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.041	46.469	46.469
2	3.131	24.088	70.557
3	2.150	16.540	87.097

Source: Author's Calculation

D. Factor Extraction

After extracting three factors from 13 variables each factor assigned a name or label to characterize. Pattern matrix of factor loading with associated factor label is shown in Table 4. Factor 1 consist four variables is associated with PMKVY acquisition. Factor 2 has four variables name Training. Factor 3 is related to trainee/youth productivity having five variables. All analyzed variables having a good loading. Factor loading 0.3 is the bare minimum condition for inclusion of variables and preferably 0.7 or higher is good for analysis recommended by Hair et al. (2010).

Table 4
Factor Extraction summary

	Component			Factor Label
	1	2	3	
Optimum achievement	.963			Prod (Trainee or youth productivity)
Working efficiency improve	.959			
Eliminate wastage	.957			
Improve weaknesses	.953			
Realizing career goal	.752			



Innovative Idea		.949	
Practical exposure		.944	
Transformation		.943	Skilling
Work methodology		.941	
Curriculum			.958
Psychological abilities			.944
Participation			.938
Trainer			.894

Source: Author's Calculation

E. Structural equation modeling (SEM)

In this research AMOS.24 software were used for structural equation modeling. Structural equation modeling is a technique that examined the relationship suggested between independent and dependent variables. As per Anderson & Gerbing (1988) structural equation modeling is a two-step process. Step one includes construction of model then examines validity concerns. The step two includes projected model testing. In other word after validity check of measurement model, modification takes place on the basis of the recommendation by software modification Indices (MI) after that developed modified model.

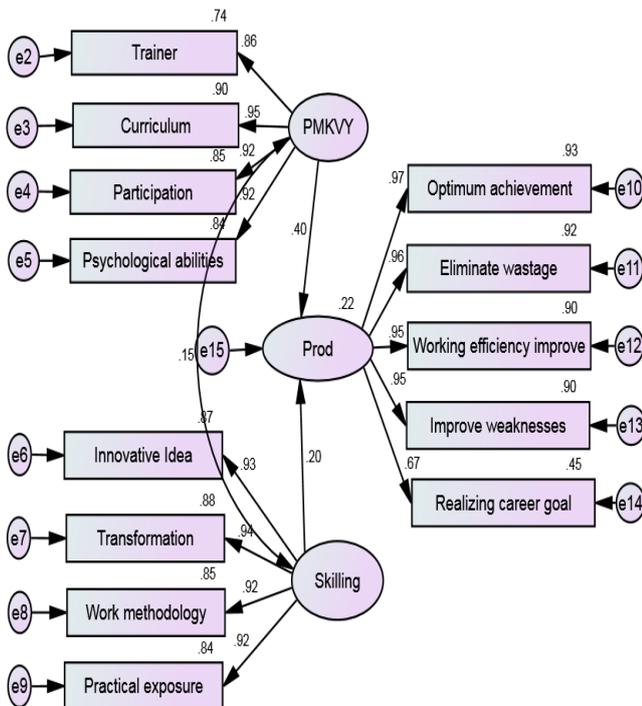


Figure1. Relationship Structured Modified Model
Note: Prod Mean Trainee or youth productivity

After evaluating (Figure 1) Modified Model Relationship Structured, the fitness of model was analyzed. The maximum Likelihood Estimation is used to fit the measures of model. The acceptability criteria for model fit from Hu and Bentler (1999) along with thresholds.

Table: 5
Indices of Model Fit

Level of acceptance	Actual Index Value	
P-value >0.05 (Not Applicable for large sample size (>200))	0.000	Not Applicable as sample size for this research is 1197
Chi-Square/ df < 3.0 and should be less than < 5.0	2.245	Accepted
RMR <.05	0.009	Accepted
GFI >0.90	0.983	Accepted
AGFI > 0.90	0.975	Accepted
NFI > 0.90	0.993	Accepted
TLI > 0.90	0.995	Accepted
CFI > 0.90	0.996	Accepted
RMSEA <0.08	0.032	Accepted
PCLOSE > 0.05	1.000	Accepted

Source: Author's Calculation

Table 5 shows the Indices of Model Fit All relationship result is significant and hypothesis is accepted. Therefore independent variables PMKVY training acquisition and skilling is directly influence the dependent variable trainee/youth productivity

Hypothesis: There is significant impact of the PMKVY in improving the productivity of youth in Gwalior region

Result: Accepted

VII. FINDINGS AND CONCLUSION

The general objective of this research was to assess the role and impact of PMKVY training on productivity and performance of trainee in Gwalior region. Most of the respondents through their answers confirmed impact of the PMKVY in improving the productivity. According to responses training methods and activities brought new potentials for trainee when performing task and resulted in increased productivity. Inferential analysis generated tabulated statistics that shows the results of factor analysis and multiple regressions in form of path analysis on the data collected from 1197 respondents through questionnaires. After implementing the regression on the information gathered to verify the cause and effect of the training (independent variable) and productivity and performance (dependent variables) the research result has been drawn. F-statistical probability indicates the amount of importance of the studies that depends on the norm if the p-value < 0.05 relationship is significant

The findings of this study are supporting to other research on training and skill development. Training produces advantages for the understanding, abilities, capacity, abilities and conduct of the youth.

From the results most respondents highly agreed that training builds abilities and abilities to enhance performance, it is helpful to earn livelihood and Promot them for self-employment entrepreneurship and solve their unemployed problem.

The Developed countries evidence that investment in skill development leads to improve economy and break low wages. To improve productivity skill development is the only way and it should be an essential measure of the development policies. As compared to other countries, India has a unique demographic advantage which could be transformed into the dividend through contribute productively to economic growth .The linking of skills and productivity facilitate various population segments mainly the relegated sections of the society and acquire the benefits of the economic growth through skill development. The National Skill Policy provides outline to various target groups for integration of skill development in form of developing infrastructure and decent work agenda to realize their potential productivity and contribute in social and economic development. This relationship improves availability of skilled manpower and increase employability.

VIII. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The results of the research are useful insights into PMKVY. However this study has some limitation. Firstly, this research is has budgetary limitation. Secondly, length of questionnaire and time availability was another hindrance and cause of sample size compromised. As a research is led was just restricted to Gwalior region so result may fluctuate if research is in directed in different part of India. Furthermore a comparative study with different locale, or states to find likenesses and contrasts.

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