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# Path Analysis of Performance for SHG Members with Respect to Individual Changes

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#### **ABSTRACT**

To know Direct and indirect effect of different variables in individual changes of SHG members, the path analysis has been applied. For this purpose the data have been collected from Dharwad district, Karnataka state. It is evident that variable can have only direct effect, only indirect effect on a dependent variable or variables. To archive this, the path analysis was applied. Which reveals that the four independent variables are found to be statistically significant and Direct effect on Individual changes of SHG members.

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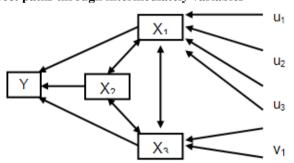
#### Introduction

Self Help Groups (SHGs) are fast emerging as powerful tool of socio-economic empowerment of the poor. An SHG is a self governed peer controlled informal group of people with similar socio-economic background and having a desire to collectively perform common purpose. National Bank for Agriculture and Rural Development (NABARD) (2004-05) has defined SHG as a group of people having common goal of socio-economic sustainable development discussing and resolving it through appropriate participatory decision making. The SHG concept here is focused on local level organization with specific objectives and the goal of socio-economic sustainable development. Self help group (SHG) is perceived differently by Ojha (2001), when he observed that when individuals act a thematic level in a conglomo ration on their own initiatives in an attempt to meet their individual and common needs with primary focus on self reliance the organization is a Self Help Group. Naila Kabeer (2005) in her paper, "Is Micro-Finance a Magic Bullet for Women's Empowerment? Analysis of Findings from South Asia", has emphatically asserted that while access to financial services can and does make vital contributions to the economic productivity and social well being of poor women and their households, it does not automatically empower women just as with other interventions such as education, political quotas, etc. that seek to bring about a radical structural transformation that due empowerment entails.

Added advantage of path analysis over multiple linear regression analysis is that of finding the direct and indirect effects of the independent variables on the corresponding dependent variable. In general, a variable can have its effect being revealed by the magnitude and the direction of the path coefficient of the independent variable. It can also have an effect on the dependent variable by the virtue of its relation with another independent variable. Thus, the effect of an independent variable on a dependent variable as received by the path coefficient of the independent variable is known as direct effect

of the independent variable. On the other hand, the effect of an independent variable through another variable is termed as indirect effect of the independent variable on the dependent variable.

### Indirect paths through intermediately variables



In the above figure  $X_1$ ,  $X_2$ , and  $X_3$  are the independent variables each having direct effect as well as indirect effect on the dependent variables Y. The variables  $u_1$ ,  $u_2$ ,  $u_3$ ,  $v_1$ , and  $v_2$  are also the independent variables with only indirect effect on Y through some or all of the independent variables  $X_1$ ,  $X_2$ , and  $X_3$  as indicated in the figure 2. In such situations the variables  $X_1$ ,  $X_2$ , and  $X_3$  are called the intermediately variables between Y and  $u_1$ ,  $u_2$ ,  $u_3$ ,  $v_1$  and  $v_2$ .

From the above narration it is evident that a variable can have only direct effect, only indirect effect and both direct and indirect effects on a dependent variable or variables.

#### Methodology:

In this study SHG members are taken into consideration in order to collect 300 samples from the Dharwad district. The survey has conducted over one year period and collected information using multistage cluster sampling.

**Hypothesis:** There is no significant direct and indirect effect of age, religion, educational qualifications, marital status, nature of family, child size, members income, family income, no of participation and training taken on Individual changes of SHG members.

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Table. Direct and multer effect of different variables on individual changes of SHG members						
Independent variables	Direct effect	Indirect effect through				
		<b>X6</b>	X7	X8	X9	X10
Members income (X6)	0.3939	-	0.1340*	0.1211*	-0.0263	-0.1096*
Family income (X7)	4.9102*	7.7650*	-	-6.7550	1.3822*	7.0555*
No of participation(X8)	0.5234*	0.1476*	-0.1421*	-	0.0328	-0.0774
Training taken (X9)	0.6443*	-0.0920	0.0834*	0.0941	-	-0.0149
Educational qualifications (X10)	0.5607*	-0.0446*	0.0495*	-0.0258	-0.0017	-
Age (X1)	-	-0.4181*	-0.3256*	0.3145*	-0.0639*	-0.5292*
Religion (X2)	-	-0.0856*	-0.0121*	-0.0402	-0.0088	0.1207
Marital status (X3)	-	-0.1997*	-0.1524	0.1952*	0.0600	-0.1606
Nature of family (X4)	-	-0.0433	-0.0864*	0.0435	-0.0011	-0.1909

Table. Direct and indirect effect of different variables on Individual changes of SHG members

\*p<0.05

-0.0274

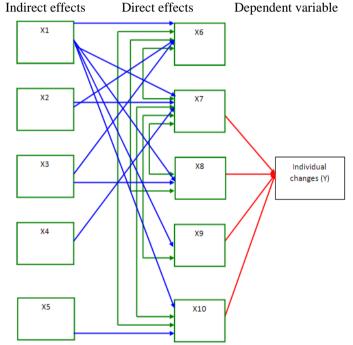
-0.0092

0.0077

To achieve this, the path procedure was applied and the results are presented in the following table and figure.

Child size (X5)

Figure-: Significant direct and indirect effects of on Individual changes of SHG members



#### **Results and Discussion**

- The direct effect of family income (X7), no of participation(X8), training taken (X9) educational qualifications (X10) of SHG members are found to be positive and significant on individual changes at 5% level of significance. It means that, the family income (X7), no of participation(X8), training taken (X9) educational qualifications (X10) of SHG members have significant direct effect on their individual changes.
- The indirect effect of members income (X6) through no of participation(X8) and educational qualifications (X10) of SHG members on individual changes is found to significant at 5% level of significance.
- The indirect effect of family income (X7) through training taken (X9) and educational qualifications (X10) of SHG members on individual changes at 5% level of significance.
- The indirect effect of no of participation(X8) through members income (X6) and family income (X7) of SHG members on individual changes is found to significant at 5% level of significance.

The indirect effect of training taken (X9) through training taken (X9) of SHG members on individual changes is found to significant at 5% level of significance.

0.0059

0.2271\*

- The indirect effect of educational qualifications (X10) through members income (X6) and family income (X7) of SHG members on individual changes is found to significant at 5% level of significance.
- ➤ The indirect effect of age (X1) through members income (X6), family income (X7), no of participation(X8), training taken (X9) and educational qualifications (X10) of SHG members on individual changes is found to significant at 5% level of significance.
- The indirect effect of religion (X2) through members income (X6) and family income (X7) of SHG members on individual changes is found to significant at 5% level of significance.
- The indirect effect of marital status (X3) through members income (X6) and no of participation(X8) of SHG members on individual changes is found to significant at 5% level of significance.
- The indirect effect of nature of family (X4) through family income (X7) of SHG members on individual changes is found to significant at 5% level of significance.
- The indirect effect of child size (X5) through educational qualifications (X10) of SHG members on individual changes is found to significant at 5% level of significance.

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