Exploring the Relationship between Youth Leadership and Sustainability with Mediation Effects from an Indian Perspective using Path Way Analysis

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ABSTRACT

Youth are agents of upcoming changes who through their knowledge, intense observation and perpetual action can face challenges that would help build a sustainable India. The revolutions that stimulate true youth leadership are nourished by being absorbed in the values and practices of a more sustainable way of living. The purpose of the paper is to study the impact of youth leadership on sustainability and the mediation effect of youth association, youth environmentalism, youth activism and youth governance and the relation between youth leadership and sustainable India. The study is descriptive in nature and cross sectional in time dimension. Responses are gathered from NGO's that engage youth. A theoretical model linking youth association, youth environmentalism, youth activism and youth governance and the relation between youth leadership and sustainable India is empirically tested using path analysis. The results of path analysis have revealed that youth leadership has a positive impact on sustainability. Further, youth association, youth environmentalism, youth activism and youth governance are partial mediators of the relationship between youth leadership and sustainability. This paper contributes to the existing literature by proposing a framework of the interrelationships of the factors affecting good governance and sustainability of India by the involvement of youth.

Keywords: Youth leadership, sustainability, path analysis and governance.

INTRODUCTION:

Every third person in an Indian city today is a youth. In the coming decade India will be the youngest country in the world. Youth engagement is significant to attain positive youth development which can consequently add to sustainable development (Gambone et al., 2004). As per the statistical data more than 50% of the population of the Indian population is below the age of 25 years and more than 65% of the population is below the age of 35 years (2011 Census Data). The level of education of youth is a vital to both the smooth performance of democracy and socio-economic development of the country. Abraham Lincoln said, "Democracy is a government of the people, for the people, and by the people."

A democratic system is toughened if it sustains a progressive public opinion in its various ways. It is important for the youth to become a valuable member of society to enhance sustainable growth. Youngster's role is bigger in governance to promote positive youth development and effectiveness (Zeldin et al., 2007). As per United Nations Environment Programme (UNEP) youth comprise of nearly 30% of the total world's population. NYP-2014 provides a holistic Vision for the youth of India which is "to empower the youth of the country to achieve their full potential, and through them enable India to find its rightful place in the community of nations".

The existing literature highlights various factors affecting youth governance in the Indian economy. These factors and their association with the Indian democracy have been emphasized mainly in the paper. This paper contributes to the existing literature by proposing a framework of the interrelationships of the factors which have a role in improving the youth governance in India. Defining youth with age group is one of the easiest way in relation to education and employment. The United Nations, for statistical purposes, defines 'youth', as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States Almost 27.5% of the Indian population is comprised of Youth in the age group of 15-29 years.

About 34% of India's Gross National Income (GNI) is contributed by working youth, aged between 15-29 years. Hence, there exists a massive potential to enhance the contribution of youth by increasing participation. (NYP 2014).In several ways, young people are the backbone of the economy for resolving issues of the social ailments of society (Brannen et al, 2002); (Côté, 2002).The positioning of young people is critical and inevitable for today and the future. (Griffin, 2004).

Specifically, the objectives of this paper are:
O₁ To study the predictive relationship between youth leadership and sustainability by using path analysis.
O₂ To study the mediation effect of youth association, youth environmentalism, youth activism and youth governance on the relationship between youth leadership and sustainable India.

Hypotheses derived for the study are;
H1: Youth leadership is a positive predictor of sustainable India.
H2: Youth association, youth environmentalism, youth activism and youth governance has mediating relationship between youth leadership and sustainable India.

REVIEW OF LITERATURE:

Youth Environmentalism:
Youth involvement in environment related policies and development decision-making, implementation of programs is critical to the long-term success of nations. Environmentalism is the attitude of the youth towards the environment with a moral dimension. (Anderson, 1998).The green energy issues need to be addressed and executed in community events by the youth. (Birmingham and Barton, 2014); (Hess, 2010). As per the world youth report 2003, assessing and protecting the world's eco system is a must for human wellbeing. Engagement of youth is comprehensive and critical for positive development. (Gambone et al., 2004). Governance for stakeholders including youth will help address current environmental issues. (Hemmati, 2002). Youth leadership includes positive environmental attitudes, behaviour, initiative, and involvement. Leadership in the right direction will promote efforts of the youth to achieve the objectives of environmentalism. These initiatives would help to achieve the objectives of sustainability. Youth believe in altering and solving the environmental problems and they believe that they are the agents of change (Dublin).

Youth Leadership:
India needs matured young leaders who can be the part of creativity, innovation and can lead a sustainable life (Akerlund, 2000); (Calsyn and Kenny, 1977); (Steckler and Goodman, 1989). Their natural progression is to become actively involved in building their family and community and themselves (Pittman, 1991).Leaders can be formal or informal. Getting education and acquiring leadership skills are two different aspects (Brungardt, 1998). It is a matured field (Hunt and Dodge, 2001) which helps youth to avoid bad

experiences as leaders. (Cogliser and Brigham, 2004). Youth is the voice of accountability collaborating together to demand a voice in the major decisions that influence their lives and the society .Thus, youth is responsible for the change in policy making (Ginwright and James, 2002). Youth are essential partners in community building. Young leaders if channelled will help promote the sense of responsibility towards the environment among the youth.

Youth Governance:
Youth needs to follow the ideal of Gandhiji -"be the change you wanted to see"- and thus take part in good governance of nation. Youth in decision-making is youth governance which focuses on the ways young people are involved in decision making efforts. It is inclusive of decision making responsibility. (Zeldin et al., 2007). Youth administration involves taking a lead in youth group, training volunteers and bringing about a change in the locality. (Zeldin et al., 2007). The decision making process for attaining positive outcomes through a project, programme for resolving issues can be done with the efforts and engagement of young people. (Justinianno & Scherer, 2001).

Youth in governance basically reflects a situation where young people and policy makers' coalition happens to set policy direction. It is the need of the hour that transformations in governance is done with respect to globalization. Youth governance includes the active participation in the decision making process, transparency in all dealings. The involvement of youth in decision making will help increase awareness about existing environmental issues. This awareness will result in a step forward towards a sustainable India. (Scholte, 2000). Mirela stated that human resource development is the key to sustainability because human resources is the valuable asset and wealth of a nation. (Šlaus and Jacobs, 2011).

Figure 1: Model on Youth leadership and sustainable India (Authors contribution)
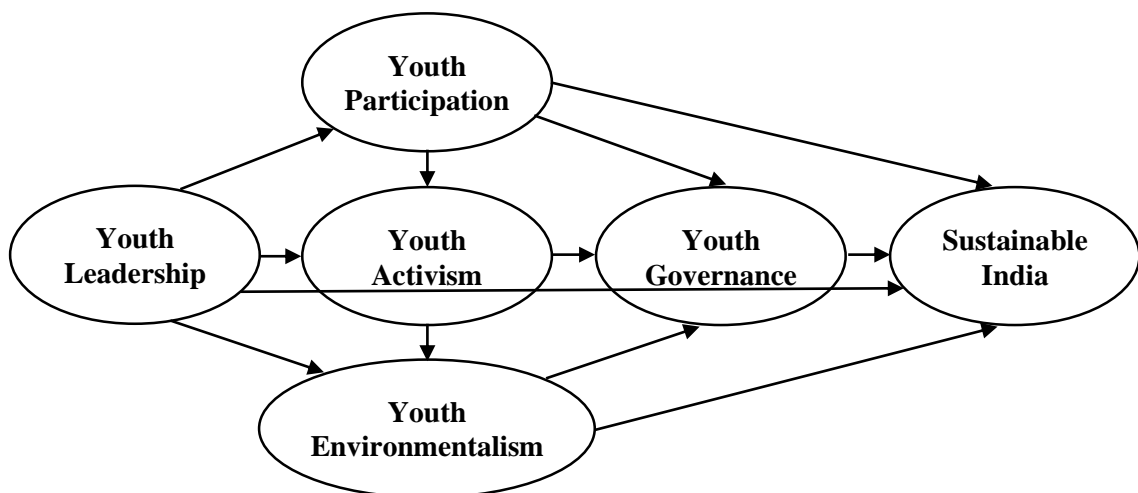
Youth Activism and Youth Associations:
International literature is focused on youth participation, democracy and citizenship. (Galston, 2004); (Print and Saha, 2007). India has the benefits of this dividend. Youth activism in Governance is referred as youth participation or involvement. (Wilson, 2000) believes that the participation of youth can be categorized as superficial and deep. Young people are in the best position to recognize and express their specific needs, challenges and skills. Youth participation leads to effective decision and policy making. Intensification of opportunities for young people to discover their rights and responsibilities, promoting their social, political, developmental and environmental participation is necessary through youth association. The versatility of youth engagement is necessary to attain sustainable objectives of an economy (Berardi, 2013) for which youth needs to be given special consideration (Frank, 2006). Globalization requires encouraging increased national, regional and international cooperation and exchange between youth organizations. Associations and active participation of youth in initiatives towards the environment is vital in achieving sustainability.

Sustainable India:
"Mere good governance is not enough; it has to be pro-people and pro-active. Good governance is putting people at the centre of development process." Shri. Narendra Modi. Youth participation and governance ensures that youth makes the right sustainability decisions (Pittman, 1991). It is a must to ensure that youth plays a social role at the global level to attain sustainable development (Kreps et al., 1999).Youth can contribute and make positive changes by fighting against corruption, bribes and every social evil by applying their education for the good and advancement of the country. Youth need to be the activist. The actions of youth should practice their sense of purpose, worth and achievement. (Noor et al. 2015) state sustainability can be promoted by educating and university plays a vital role in acting as a medium to do so. Encouraging innovative ideas in college campuses promotes sustainability (Sadusky, 2014). (Riemer et al., 2014) advocates sustainability through youth civic engagement and initiating sustaining factors. Assigning roles and responsibilities to youth to ensure India's sustainable development by enhancing their capacity is one of the best ways to promote sustainable development (Hart, 2013).

Hypothesized model on youth leadership and sustainable India:
The research proposes a model to study the impact of youth leadership on sustainability and the mediation effect of youth association, youth environmentalism, youth activism and youth governance and the relation between youth leadership and sustainable India. Following is the hypothesized model

METHODOLOGY:

The study population comprises of youths working for NGOs in Pune. These youths were between the age group of 17 to 21. Respondents were interviewed using a structured questionnaire comprising of 30 questions. Information related to youth governance, youth participation, youth leadership, youth activism, youth environmentalism and youth participations was collected through person administered survey. Respondents were interviewed for 30 to 45 minutes, questions were explained wherever needed to gain cooperation from the participants. Sample size was determined using a scientific methods – Sample Size Determination By Mean Methods, there components were used to determine the sample size: level of confidence (95%), possible variability in the data determined using a crude method of dividing range (5-1 = 4, since the scaled used in the study is a 5-point scale) by 6 standard deviations, hence variability = 4/6 = 0.66, and tolerable error. Error is kept to the minimum of 9%. These details plugged into the formula resulted in a sample size of 206.

$n = \frac{1.96^2 * 0.66^2}{0.09^2} = 206$, Questionnaires were distributed to 206 respondents, however, 4 questionnaires were dropped for incomplete information. Hence the final sample size is freeze at 202. Sampling method selected is convenience sampling, approximately 20 respondents were interviewed from 10 NGOs in Pune city.

The research study is quantitative in nature. Researchers have undertaken descriptive/empirical type of research. Statistical analysis is done after collecting primary data through survey by using structured questionnaire. A sample size of 202 was collected from youth engaged with NGO's in Pune city. In total 202 usable pairs of questionnaires were used.

Descriptive information on youth leadership (nationalism, citizenship and contribution to society), another parameter used for collecting descriptive information was youth activism (NGO association and social work). Subsequently parameter used for collecting descriptive information was Youth environmentalism (environmental concern and environmental protection). Next parameter used for collecting descriptive information was Youth association (involvement in youth association), next parameter for collecting descriptive information was youth governance (participation in Government initiatives). The last parameter used for collecting descriptive information was Sustainable India (knowledge sharing and good governance of nation)[.1]

The hypothetical model included six latent constructs: youth association, sustainable India, youth leadership, youth environmentalism, youth participation, and youth governance. The CFA model was assessed using IBM SPSS Amos 21. Fit indices used to assess mode fit are CMIN/DF (minimum

discrepancy as indexed chi-square) = 3.161, CFI (Comparative fit index) = 0.977, GFI (goodness of fit index) = 0.984 and RMR (Root mean residual) = 0.015. All the indices suggest an acceptable fit between the sample data and the hypothesized model.

Validity test:
Validity is the ability of the instrument to produce accurate results. It is the extent to which the scale / instrument measures what it is supposed to measure. Validity is quality assessment of a measurement instrument. If a scale is not validated or is not valid the results are doubtful and incorrect. In the current study, convent validity ratio and content validity Index suggested by (C. H. Lawshe 1975) is used to compute validity index and confirm validity. It is an essential method for gauging agreement among experts regarding how essential a particular item is. (Lawshe 1975) proposed that each expert will respond to each item using a 3-point scale: 'essential,' 'useful, but not essential,' or 'not necessary'. According to [29] who recalculated the critical values of Lawshe's Content Validity Ratio, a CVR value of 0.741 and above (for α = 0.05 and a two-tailed test, and 7 experts) is an indication of validity of an instrument. Following table shows responses from seven experts to 6 variables related to youth leadership youth association, youth environmentalism, youth activism and youth governance and sustainable India. All experts perceived the content of the question and response options to each question of the variable Essential (hence CVR is 1) accept for one variable, wherein, one expert found the contents NOT Necessary, hence the CVR was 0.71, however the overall Content validity Index is 0.951, which is above the required threshold (0.741) and validity of the instrument/ questionnaire is supported.

Table 1: List of identified variables

VARIABLES
Youth leadership
Youth participation
Youth Activism
Youth Environmentalism
Youth Governance
Sustainable India

Table 2: Content validity ratio and content validity Index (Authors contribution)

Variable Code	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7	CVR
V1	X	X	x	x	X	X	x	1
V2	X	X	x	x	X	X	x	1
V3	X	X	x	x	X	X	x	1
V4	X	X	x	x	X	X	x	1
V5	X		x	x	X	X	x	0.71
V6	X	X	x	x	X	X	x	1
							CVI	**0.951**

Figure 2: Path Model
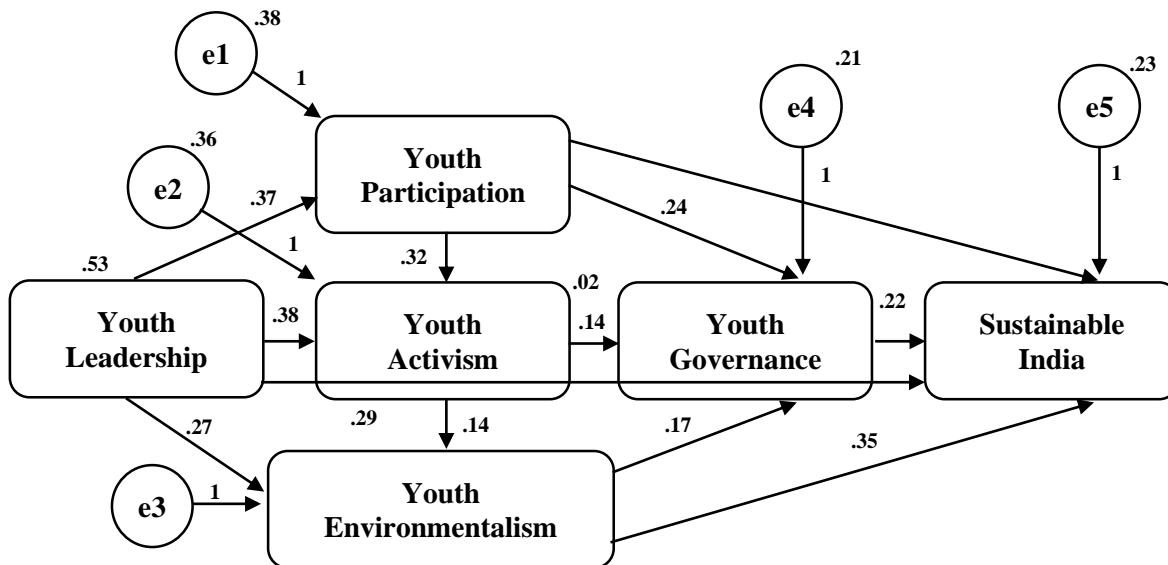
X = ESSENTIAL

Construct Validity and Reliability:

Construct validity is the extent to which a set of measured items actually reflect the theoretical latent construct they are designed to measure. Validity is assessed using Average Variance extracted (AVE) Average variance extracted is an important indicator of construct validity. As a rule of thumb AVE of 0.5 or higher suggest adequate convergence. Average variance extracted for all construct show good construct validity. Reliability is assessed using Cronbach's alpha. Cronbach's is one of the most widely used measure of internal consistency. If items correlate well they are said to be measuring the same construct. Alpha value between 0.6 and 0.7 indicates borderline acceptable reliability and values above 0.7 indicates acceptable reliability. Table 1 shows all constructs have reliability scores above the threshold, hence reliability is supported.

In the current paper Path Analysis is used to study relationship between Youth related parameters and sustainability. Path analysis is simple and minor version of SEM used to study complex relationship between multiple variables simultaneously. It is a family of equations and examines the interrelationship between multiple independent and dependent variables simultaneously. It employs maximum likelihood to calculate the path coefficients. Figure 2 shows direct and indirect effects. Direct effect includes relationship between Youth Leadership and Sustainability. Whereas indirect effect included four mediating variables Youth Participation, Youth Activism, Youth environmentalism and youth governance. e1, e2, e3, e4, and e5 are error terms.

RESULTS AND DISCUSSION:

Statistical analysis (path analysis) has revealed that Youth leadership is a significant predictor of Youth Activism, Youth Participation, Youth Environmentalism ($p < 0.05$); Youth Participation and Youth Environmentalism are significant predictors of Youth Governance ($p < 0.05$); Youth Leadership is a significant predictor of sustainable India ($p < 0.05$); Youth participation is not a significant predictor of sustainable India ($p > 0.05$); Youth Activism is a significant predictor of Youth Environmentalism ($p < 0.05$); Youth Activism is a significant predictor of Youth Governance ($p > 0.05$)Youth governance is a significant predictor of Sustainable India ($p < 0.05$). Youth participation is a significant predictor of Youth Activism ($p < 0.05$) and Youth Activism is a significant predictor of Youth Environmentalism ($p < 0.05$)

All the fit indices showed a good fit between sample data and hypothesized model confirming that the hypothesized paths are a true explaining of relationship between variables under the study.

CMIN/DF:
CMIN/DF is a measure of absolute fit. A value of less than 2 would suggest a good fit and a value between 2 and 5 could be considered an acceptable fit. For the current model the CMIN/DF value is below 5

The Goodness-of-fit index (GFI):
The GFI is the amount of variance in the sample correlation/covariance accounted for by the predicted model. The GFI values range from 0 (no) and 1 (a perfect fit). By convention GFI should be equal to or greater than 0.90 as acceptable model, value close to one is better.

The root mean square residual (RMSR):
This is a measure of bad fit between theoretical model and sample data. The root mean square residual (RMSR) is the square root of mean of these squared residuals: It indicates a badness of fit. Hence high RMSR values are bad. The smaller the RMSR, the better the fit, target value = 0.05 or less.

Comparative Fit Index (CFI):
CFI is a measure of relative fit index. Value more than 0.9 indicates a good fit and between 0.9 to 0.8 for borderline fit.
Table no 4 is a fit summary for fit indices. All fit indices suggest a good fit between the hypothetical model and sample data.

Mediation Effect:
Following table shows mediation effect between Youth leadership and Sustainable India.
Table 6 reveals that the Indirect effect (B = 0.232, P = 0.001) between Youth leadership is stronger compared to Direct effect (B = 0.174, P = 0.049), however both the paths are significant, hence it is concluded that Youth Activism, Youth Participation and youth Environmentalism partially mediate relationship between Youth Leadership and Sustainable India.

LIMITATIONS:

The selection of convenience sampling procedure makes generalization difficult. The data is collected at a point of time and the research does not show the results at a microscopic level. It is inclusive factors at Macro Level. Despite these limitations the findings of the study have vital implications and scope for further investigation.

FUTURE RESEARCH:

This research is maybe one of its kinds in trying to explore the relationships between various factors that may define the role of youth in future India. Future research may define the tools in more detail and precision. A study of a larger sample may be used to further validate this model.

REFERENCES:

Akerlund, K.M. (2000). Prevention program sustainability: the state's perspective, *Journal of Community Psychology*, pp.353–362

Anderson, A.R. (1998). Cultivating the Garden of Eden: environmental entrepreneuring, *Journal of Organizational Change Management*, pp.135–144 [online]

Berardi, U. (2013). Sustainability assessment of urban communities through rating systems, *Environment, Development and Sustainability*, pp.1573–1591

Birmingham, D. and Barton, C.A. (2014). Putting on a green carnival: youth taking educated action on socio scientific issues, *Journal of Research in Science Teaching*, pp. 286–314, doi: 10.1002/tea.21127.

Brannen, J., & Nilsen, A. (2002). Young people's time perspectives: from youth to adulthood. *Sociology*, 36(3), 513-537.

Brungardt, C.L. (1998). The new face of leadership: implications for higher education, *Leadership*

Studies, Fort Hays State University

Calsyn, R.J. and Kenny, D.A. (1977). Self-concept of ability and perceived evaluation of others: cause or effect of academic achievement? *Journal of Educational Psychology*, Vol. 69, No. 2, p.136.

Cogliser, C. C., & Brigham, K. H. (2004). The intersection of leadership and entrepreneurship: Mutual lessons to be learned. *The Leadership Quarterly*, 15(6), 771-799.

Côté, J. E. (2002). The role of identity capital in the transition to adulthood: The individualization thesis examined. *Journal of youth studies*, 5(2), 117-134.

Frank, K. I. (2006). The potential of youth participation in planning. *Journal of Planning Literature*, 20(4), 351-371.

Galston, W. A. (2004). Civic education and political participation. *Political Science and Politics*, 37(02), 263-266.

Gambone, M.A., Yu, H.C., Sipe, C.L. and Lacoe, J. (2004). *A Comparative Analysis of Community Youth Development Strategies*.

Ginwright, S., & James, T. (2002). From assets to agents of change: Social justice, organizing, and youth development. *New directions for youth development*, 2002(96), 27-46.

Griffin, C. (2004). *Good girls, bad girls: Anglocentrism and diversity in the constitution of contemporary girlhood.* All about the girl: Culture, power and identity, 29-44.

Hart, R.A. (2013). *Children's Participation: The Theory and Practice of Involving Young Citizensin Community Development and Environmental Care*, Routledge

Hemmati, M. (2002). *Multi-Stakeholder Processes for Governance and Sustainability: Beyond Deadlock and Conflict*.

Hess, P. (2010). A sustainable development metric based on youth, *Journal of Sustainable Development & World Ecology*, pp.542–551

Hunt, J. G., & Dodge, G. E. (2001). Leadership déjà vu all over again. *The Leadership Quarterly*, 11(4), 435-458.

Justinianno, J., & Scherer, C. (2001). *Youth voice: A guide for engaging youth in leadership and decision – making in service-learning programs*. Washington, DC: Points of Light Foundation.

Kreps, S.E., Mariéthoz, E., Bakonyi, M. and Polla, B.S. (1999). Effects of ageing populations on individual and global sustainable development: A bio-demographical perspective, *The International Journal of Sustainable Development & World Ecology*, pp.122–134

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology, 28*, 563–575

Noor, M.F.M., Persekutuan, W. and Hassan, N. (2015). Beliefs, knowledge, values and youth's engagement towards campus sustainability.

Pittman, K. (1991). Promoting youth development: strengthening the role of youth serving and community organizations, Paper prepared for *USDA, Extension Service, National Youth at Risk Initiative Task Force*.

Print, M. (2007). Citizenship education and youth participation in democracy. *British journal of educational studies*, 55(3), 325-345.

Riemer, M., Lynes, J. and Hickman, G. (2014). A model for developing and accessing youth-based environmental engagement programmes, *Environmental Education Research*, Vol. 20, No. 4, doi: 10.1080/13504622.2013.812721, Routledge

Sadusky, H. (2014). *College Student Perception & Behavior towards Sustainability: Results of a Campus Survey*

Scholte, J. A. (2000). Cautionary reflections on Seattle. *Millennium-Journal of International Studies*, 29(1), 115-121.

Šlaus, I., & Jacobs, G. (2011). Human capital and sustainability. *Sustainability*, 3(1), 97-154.

Steckler, A. and Goodman, R.M. (1989). How to institutionalize health promotion programs, *American Journal of Health Promotion*, Vol. 3, No. 4, pp. 34–43.

Wilson, S. J., & Lipsey, M. W. (2000). Wilderness challenge programs for delinquent youth: A meta-analysis of outcome evaluations. *Evaluation and program planning*, 23(1), 1-12.

Zeldin, S., Camino, L. and Calvert, M. (2007). Toward an understanding of youth in community governance: policy priorities and research directions, *Análise Psicológica*, pp.77–95

Table 3: Validity and Reliability assessment table
(Authors Contribution)

Construct	Construct Code	No. Items	Cronbach's Alfa (construct reliability)	Average Variance Extracted (construct validity)
Youth association	F1	4	0.720	0.631
Sustainable India	F2	4	0.685	0.595
Youth leadership	F3	4	0.701	0.610
Youth environmentalism	F4	4	0.626	0.578
Youth activism	F5	5	0.781	0.692
Youth governance	F6	6	0.779	0.674

Table 4: Significance of Paths (Authors contribution)

Dependent		Predictor	Standardized regression weights	P value
Youth Participation	<---	Youth Leadership	0.399***	<0.001
Youth Activism	<---	Youth Leadership	0.378***	<0.001
Youth Activism	<---	Youth Participation	0.292***	<0.001
Youth Environmentalism	<---	Youth Leadership	0.36***	<0.001
Youth Environmentalism	<---	Youth Activism	0.176*	0.014
Youth Governance	<---	Youth Participation	0.314***	<0.001
Youth Governance	<---	Youth Environmentalism	0.196**	0.004
Youth Governance	<---	Youth Activism	0.022^{ns}	0.767
Sustainable India	<---	Youth Governance	0.19**	0.003
Sustainable India	<---	Youth Leadership	0.176*	0.01
Sustainable India	<---	Youth Environmentalism	0.353***	<0.001
Sustainable India	<---	Youth Participation	0.083^{ns}	0.207

*** = significant at 0.1% level of significance, ** = significant at 1% level of significance, * = significant at 5% level of significance, NS = not significant

Table 5: Model fit summary (Authors contribution)

Fit indices	Observed	Criteria for acceptable fit	Result
CMIN/DF (Minimum discrepancy as indexed chi-square)	3.161	Less than 5	Acceptable fit
CFI (Comparative fit index)	0.977	More than 0.9 for good fit, between 0.9 to 0.8 for borderline fit	Acceptable fit
GFI (Goodness of fit index)	0.984	More than 0.9	Marginally missed
RMR (Root Mean Residual)	0.015	Less than 0.08 for adequate fit, between 0.08 and less than 0.1 for borderline fit	Acceptable fit

Table 6: Mediation effect between Youth leadership and sustainable India (Authors contribution)

Path	Direct Effect	Indirect Effect	Total Effect	Result
Youth Leadership Sustainable India	B = 0.174 P = 0.049	B = 0.232 P = 0.001	B = 0.411 P = 0.001	Partial Mediation

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