Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 4, 1066-1074 2025 Publisher: Learning Gate DOI: 10.55214/25768484.v9i4.6172 © 2025 by the authors; licensee Learning Gate

# Impact of barriers to challenges in education faced by children in a development-induced displaced population resettled in Semmencherry

Mohanambigai<sup>1\*</sup>, Rajavel N.<sup>2</sup> <sup>1,2</sup>Department of Social Work, Bharathidasan University, Tiruchirapalli-23, India; fauna 19@gmail.com (M.) lifefacts093@gmail.com (R.N.).

**Abstract:** The studies on the impacts of development projects negatively affect the socioeconomic situations of families; it also leads to an imbalance in the educational system for children. The R&R packages have been given to the families; however, they are not maintained or administered in a reasonable manner. Internal displacement affects livelihoods, destroys family and community structures, impacts education, nutrition, and healthcare, and undermines traditional social norms, making children particularly vulnerable. The relocation of children may have a detrimental impact on their future, academic achievement, and health. This research aims to provide a thorough analysis of the consequences that forcibly removing children from their educational environment has on them. Many people were evacuated to make way for elevated express highway projects in Chennai, Tamil Nadu, and were rehabilitated in Semmencherry. The aim of this study is to find out the impact of barriers to challenges in education faced by children in a development-induced displaced population resettled in Semmencherry. In this study, data were collected from 119 children, of which 57 are males and 62 are females. The sampling method used for this study is the lottery method. The findings show that there is a significant impact on the barriers to challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

Keywords: Barriers, Challenges, Development induced, Displaced, Education.

## 1. Introduction

In the modern world, it is necessary to be familiar with the unpredictable nature, ambiguities, and paradoxes associated with the concept of development [1]. This task appears to be very difficult. Several academics have made an effort to comprehend the challenging issues surrounding development-related displacement, including the need for rehabilitation, relocation, and compensation. They have concentrated on the more significant problems associated with development initiatives, doing a comparative cost-benefit analysis of the development's effects on societal and individual welfare and their potential long-term effects [2]. They have planned an analysis of the displacement caused by development with a focus on physical forms of development, i.e., initiatives that demand land expropriation and compel displacement by proclamation. Such abhorrent development initiatives notably result in unrest and the relocation of populations [3].

Rehabilitation of those harmed by development is a national issue that is becoming more significant. Land acquisition for numerous development projects is now underway, with economic development taking priority. Large-scale industry development is site-specific, necessitating the acquisition of land [4]. Although the primary goal of mining enterprises is to benefit society as a whole, it inevitably has an influence on the individuals whose property is taken, as they become landless or houseless, which has devastating socio-cultural repercussions and ultimately upsets the fundamental structure of society [5]. Displacement has had a terrible effect on rural residents. Very often, development projects have just

© 2025 by the authors; licensee Learning Gate

\* Correspondence: fauna19@gmail.com

History: Received: 4 February 2025; Revised: 31 March 2025; Accepted: 4 April 2025; Published: 12 April 2025

made their poverty worse. For the sake of such initiatives, these impoverished people have been uprooted from their homes, lands, places of work, communities, and natural settings [6].

Simple compensation given in accordance with a set of rules will never be able to make up for the magnitude of suffering caused by the acquisition of their physical resources and religious and cultural assets. The problems and concerns of project affected people and their aspirations are crucial dynamics in project building [7]. Over 200 million individuals have been relocated or displaced during the past twenty years as a result of construction initiatives. The vast majority of the time, this relocation has been forced, meaning that the people who have been impacted have been forced to relocate, whether they wanted to or not, and, absent significant resistance, have essentially had no say in the matter [8].

In a number of nations and states during the past 20 years, resettlement standards and regulations have also been developed. In some cases, these developments have improved the results of programmes involving development-induced displacement and resettlement (DIDR). Resettled persons would appear to need to be in a better financial situation and live in communities that are socially stable and institutionally functional in a sustained way in order for resettlement to be successful. Nonetheless, the bulk of those relocated or displaced by development initiatives still find themselves in a worse situation than before and experience socioeconomic poverty [9].

In the common meaning, displacement refers to the forcible removal of individuals from their homes, frequently as a result of conflict, persecution, or a natural disaster. Yet in this case, we're interested in the idea of displacement caused by development. In light of this, the term "displacement" has to be understood. When nations transition from being developing to being developed, more and more people are being affected by development-induced displacement or forced migration [10]. The authority and rules of countries frequently render the individuals who are subject to such migration defenceless and oppressed. Because there are insufficient rehabilitation programmes for migrants, individuals frequently get simply monetary compensation without access to effective channels for resolving their complaints or political assistance to enhance their standard of living [11].

The early experiences of a kid have a big influence on their current and future wellbeing. When children are raised in a secure, safe, and happy environment, they have the best opportunity of realising their potential and making the most of their abilities [2]. Relocation, however, makes children more vulnerable because of how difficult it is for parents to maintain their families, cope with financial difficulties, negotiate compensation with project authorities over land ownership concerns, and deal with a debilitating sense of helplessness. Parents can fail to give their children the attention they require because they are so stressed out by having to deal with the unexpected upheaval. Instead, parents become more agitated and occasionally discipline their children as a way of letting off steam [12].

Internal displacement affects livelihood, destroys family and community structures, has an effect on education, nutrition, and health care, and undermines traditional social norms, making children particularly vulnerable. Relocation of children may have a detrimental impact on their future, academic achievement, and health. Children are occasionally physically abused, exploited, or abducted as a result of this forced move. Despite their apparent sensitivity, children are among the most affected by development-induced displacement because stressful life experiences have a severe influence on both mental and physical health [13]. Displacement not only damages economical structures, but also physical ones. For instance, losing lifetime savings, having an insecure present, and an unclear future are usually consequences of uprooting a house or being forcibly evicted. Children go through stress when they relocate and adjust to a new environment. Children face more challenges when new communities lack an adequate quantity of schools, infrastructure, and transportation options. Those who prefer to continue attending school outside of the resettlement zone face obstacles due to the distance, the lack of transportation, and safety during the protracted trip. Children who are required to change schools as a result of the move could find it difficult to adapt and this could have a negative effect on their academic achievement. Many young people occasionally have to give up their education [14]. Due to safety worries and the challenge of getting to schools, girls are more likely than boys to drop out of school. Due to the continued undervaluation of girls' education in many communities, girl students are frequently the first to drop out of school when there is a financial difficulty. Parents want their daughters to stay at home and help out around the house when domestic labour increases dramatically as a result of the loss of common property resources and when adults spend more time away at work [15]. There have also been claims of young girls being sexually exploited in the aforementioned situation. Because the child lacks the skills to handle new demands, is weak in many respects, and is particularly vulnerable to mental health concerns, the displacement-related experience creates a situation of danger and hazardous stimuli. The protection and assistance of the child's family and other systems are necessary for the child who has been internally displaced to cope with their situation effectively [16].

Studies show that forced relocation is bad for kids' futures because it disrupts the social and economic structure of the displaced households. Due to financial constraints, pupils are occasionally forced to transfer to public school, which affects their educational experience. Several studies show that young people are compelled to give up their dreams of pursuing higher education or an international education as a result of the altered family status [17]. This forced adjustment dashes their dreams, and eligible young people are under pressure to work in the private sector in order to support their families. In the worst case scenario, because there is no social or parental supervision over them, this weaker section of society participates in drinking, smoking, gambling, lying, and stealing. Children who experience internal displacement have a number of challenges because they are forced to deal with trauma, a lack of finances, household responsibilities, and an overwhelming sense of powerlessness. There is certain barriers that negatively affect the education faced by children in a development-induced displaced population [18]. Therefore, this paper focused to significant impact on barriers to challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

## 2. Literature Review

In villages, productive land is a collective source of livelihood and agricultural labourers and village servants indirectly depend on this land [19]. Loss of land led to loss of food security and transformed their self-sufficient life in to a life dependent on supply of labouring jobs Padel and Das [20]. Lobo [21] observes that in a caste-based society, the self-esteem of the farmers is determined by ownership of land. He expresses that most cultural and social characteristics of the villages are being affected by the loss of land. His study found that loss of land adversely affected the economic conditions of villagers and migration to cities and towns is higher in the tribal dominated districts. The study also highlights that land deprivation among Dalits is higher than other castes and they are forced to work in the fields of upper castes.

In Polavaram Dam displacement, livelihood of the resettlers were affected due to distance of forest land from resettlement area and after resettlement, agriculture has become very risky and nonprofitable. Polavaram Resettlement and Rehabilitation Package (PRRP) failed to provide employment opportunities outside agriculture and it was not designed to take in to account the agrarian and labour market conditions [22]. The decline in the employment generated by forest department in sanctuary leads to the continuation of seasonal migration for agricultural labour but the pattern and motive has changed and some have engaged in activities of digging well and house construction instead of migration [23]. In case of Sariska Wildlife Sanctuary, marble mining continues to operate after the Supreme Court order near to the forest area and every year, nearly 2-3 lakh tourists are visiting the Sanctuary, and people from outside are also trespassing to collect forest woods, non-forest products and for cattle grazing. The author observes that the Wild life Protection Act is used against the marginalized groups while more powerful players are excluded from the ambit of the Act Shahabuddin, et al. [24]. Lasgorceix and Kothari [25] examine that provisions of land and agricultural land schemes in rehabilitation packages in case of displacement by conservation projects has improved livelihood of DPs. The authors also pin points that in some case of relocation, displaced communities are changing their occupation due to circumstantial forces, for example, pastoralists become agriculturalists and they

are forced to learn new skills and job to find livelihood. When the relocation is forced or induced, DPs will not be able to get accustomed to their new situation ,so naturally they will try to come back to their old living area and go back to their old economic activities. Urban induced displacement is much larger in intensity than the infrastructural developmentor industrial development. But "voluntary " sale of land by the people due to the pressure from land mafia is an unnoticeable factor [19]. The loss or transformation of space of jhuggidars (slum dwellers) by the state in the making of metropolitan Delhi. She observes that building of New Delhi had invoked displacement of untouchable who had lived south Shahjenabad to western periphery of new city. She argues that the creation of capital city displaced scheduled castes, acquired land of many villages surrounded. In contemporary, Delhi Development Authority (DDA) has also transformed village land by using monopoly of transforming these spaces in to the zones appropriate to modern capital like commercial centers, sports complex, green areas etc. She argues that planned development, like any other development mode of state, attempts to transform the relations between space and population. This process of transformation of village spaces in to new modern capital led to the displacement and related impoverishment of major sections of people.

While analysing the impact on Common Property Resources (CPR), a study conducted in Gujarat among the DPs explores that development projects leads to decline of CPR and change in the nature of utilization of resources. In resettlement area, modern amenities such as access to health care, education and transportation are minimal and even non-existent in tribal area [21]. The common community resources get depleted or lost if the village structures are to be demolished Sharma [19]. Srinivasan [26] also suggests that the loss they suffer in the form of common community resources and cultural and social cohesion should consider as their investment in the development process.

Children are especially susceptible as a result of internal displacement because it impacts livelihood, causes the dissolution of family and community structures, has an impact on education, nutrition, and health care, and causes the dissolution of conventional social norms. Children that are relocated may experience negative effects on their health, academic performance, and future. Due to this forced transfer, children are occasionally physically assaulted, exploited, or kidnapped [27]. Children are among the greatest victims of development-induced displacement, despite their evident sensitivity, as these life events stress people out and negatively impact their mental and physical health. In addition to destroying socioeconomic structures, displacement also destroys physical ones [28].

### 3. Objectives and Hypotheses

One of the objectives of this study is to find out impact of barriers to challenges in education faced by children in a development-induced displaced population resettled in Semmencherry. Based on the objective the hypotheses formulated for this study were:

H<sub>0</sub>: educational barriers have no impact on challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

### 4. Methodology

The research design of this study is sequential exploratory in nature. The area of research is Semmencherry in Tamil Nadu. The total population of this study includes 150 families who are displaced and resettled in Semmencherry, Tamil Nadu Slum Clearance Board Tenements due to Elevated Express Highway Projects in Chennai. A base line survey conducted by the researcher and it reveals that there were 119 children between the age group of 14 - 17 years. These children constitute the universe of the study. The collection of data consists of both primary data and secondary data. Sample size of the study is 119 children and out of which 57 children are males and 62 children are females. The Primary data shall be collected by floating a semi structured interview schedule. Before finalizing the interview schedule, the questions would be subjected to pilot testing. The item scales used for this study is 1. Brief Multidimensional Students Life Satisfaction Scale (BMSLSS) – [29]. 2. Perceptions of Educational Barriers Scale – Revised (PEB-R), McWhirter, et al. [30]. The statistical tools used for analyzing data is SEM analysis using IBM SPSS AMOS 23.0 software. The secondary data would be collected from books and journals, published and unpublished research report, and various websites related to rehabilitation and resettlement.

# 5. Analysis and Result

The major hypothesis of this study is:

*H*<sub>0</sub>: Perceived educational barriers have no impact on challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

Base on this hypothesis, sub hypotheses formulated are:

 $H_{0:}$ : Perceived educational barriers have no impact on health challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

 $H_{\omega}$ : Perceived educational barriers have no impact on socio-cultural challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

 $H_{\omega}$ : Perceived educational barriers have no impact on economic challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.

*H*<sub>0</sub>*:* Perceived educational barriers have no impact on environmental challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.



#### Figure 1.

SEM analysis used for testing impact perceived educational barriers on challenges.

Table 1.

Model Fit Indices Summary.

Parameters	Acceptable values for Good Fit	<b>Research Model Values</b>
GFI	>0.9	0.998
AGFI	>0.9	0.987
CFI	>0.9	0.917
RMSEA	<0.06	0.000
RMR	<0.02	0.011

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 4: 1066-1074, 2025 DOI: 10.55214/25768484.v9i4.6172 © 2025 by the authors; licensee Learning Gate Fig 1 shows Sem analysis in for testing impact perceived educational barriers on challengesfaced by children in a development-induced displaced population resettled in Semmencherry. Table 1 shows model fit indices summary. Table 1 shows the Goodness of Fit Index (GFI) value was 0.998, Adjusted Goodness of Fit Index (AGFI) value was 0.987 and Comparative Fit Index (CFI) value was 0.917. All these values are (greater than 0.9) indicating a very good fit. It was found that Root Mean Score Error of Approximation (RMSEA) value was 0.000 (lesser than 0.06) and Root Mean Square Residual (RMR) value was 0.011 (lesser than 0.02). The values indicate that the model is a good fit.

Dimensions	Path	Dimensions	SE	P Value	Result
Perceived Educational Barriers	<	Health Challenges	0.087	0.006**	Significant
Perceived Educational Barriers	<	Socio-Cultural Challenges	0.070	0.000**	Significant
Perceived Educational Barriers	<	Economic Challenges	0.571	0.003**	Significant
Perceived Educational Barriers	<	Environmental Challenges	0.118	0.001**	Significant

Table 2.

Result of testing of hypotheses using SEM analysis.

Note: \*\*Significant at 0.01.

Table 2 shows that, perceived educational barriers has impact on health challenges, because the p value is less than the significance level, hence the null hypothesis is rejected.Perceived educational barriers has impact on socio-cultural challenges, because the p value is less than the significance level, hence the null hypothesis is rejected.Perceived educational barriers has impact on economic challenges, because the p value is less than the significance level, hence the null hypothesis is rejected.Perceived educational barriers has impact on economic challenges, because the p value is less than the significance level, hence the null hypothesis is rejected.Perceived educational barriers has impact on environmental challenges, because the p value is less than the significance level, hence the null hypothesis shown in Table 3.

**Table 3.**Summary of Sub Hypotheses.

No.	Hypotheses Statement	Result
Hoi	Perceived educational barriers have no impact on health challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.	Perceived educational barriers has a positive impact on health challenges in education faced by children in a development- induced displaced population resettled in Semmencherry.
H <sub>02</sub>	Perceived educational barriers have no impact on socio-cultural challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.	Perceived educational barriers has a positive impact on socio-cultural challenges in education faced by children in a development- induced displaced population resettled in Semmencherry.
H <sub>03</sub>	Perceived educational barriers have no impact on economic challenges in education faced by children in a development-induced displaced population resettled in Semmencherry.	Perceived educational barriers has a positive impact on economic challenges in education faced by children in a development- induced displaced population resettled in Semmencherry.
H <sub>04</sub>	Perceived educational barriers have no impact on environmental challenges in education faced by children in a development-induced displaced population resettled in Semmencherry	Perceived educational barriers has a positive impact on environmental challenges in education faced by children in a development- induced displaced population resettled in Semmencherry.

All sub hypotheses are rejected. So, perceived educational barriers have impact on challenges related to education faced by children in a development-induced displaced population resettled in Semmencherry.

# 6. Conclusion

Those who have been displaced generally experience unfavorable effects. The environment is also ignored. The displaced people's economic system crumbles. The social order collapses, and the locals become refugees overnight in their own homes. The endeavor that uproots people from their homes, farms, and places of employment frequently benefits those who are uprooted in a highly unequal and disproportionate way. Those who have been forced to flee experience physical, psychological, and socio cultural hardship. Economic, political, and other cultural repercussions of relocation are linked to socio cultural stress. The effects of displacement also affect women and children. Data show that the impact varies depending on the socioeconomic class of the children involved, despite the fact that the majority of the available information suggests that children are more likely than males to worsen after being forcibly removed to a government-sponsored shelter. The result of this study shows that perceived educational barriers have an impact on challenges in education faced by children in a developmentinduced displaced population resettled in Semmencherry. This study would lead to the development of a good future for resettled children.

## **Transparency:**

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

### **Copyright**:

 $\bigcirc$  2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

### References

- [1] R. Peet, Neoliberalism, inequality, and development. In Waquar Ahmed, Amitabh Kundu, Richard Peet (Eds.), Indias new economic Policy: A critical analysis. New York: Routledge, 2011.
- [2] S. K. Katiyar and R. Khandelwal, "Relocation in Kutch: Bridging old fault lines," *Economic and Political Weekly*, vol. 36, no. 26, pp. 2319-2321, 2001.
- [3] L. B. Hota and D. Suar, "Displacement and resettlement in tribal and non-tribal dominated dam projects of Orissa: Who reconstructs livelihood and how?," *Psychology and Developing Societies*, vol. 23, no. 1, pp. 85-120, 2011. http://doi.org/10.1177/097133361002300104
- [4] R. Ghate, "Tadoba-Andhari Tiger reserve: Relocation versus wildlife preservation," *Economic and Political Weekly*, vol. 40, no. 46, pp. 4807–4809, 2005.
- [5] S. N. Engel, Development economics: from classical to critical analysis. In R. A. Denemark (Ed.), The International Studies Encyclopedia. West Sussex: Blackwell, 2010.
- [6] W. Fernandes, "Development induced displacement and sustainable development," *Social Change*, vol. 31, no. 1-2, pp. 87-103, 2001. https://doi.org/10.1177/004908570103100208
- [7] E. Colombatto, "On economic growth and development," *The Review of Austrian Economics*, vol. 19, no. 4, pp. 243-260, 2006. http://doi.org/10.1007/s11138-006-9247-x
- [8] G. Caspary, "The impacts of development-induced displacement on human security," *Human Security Journal*, vol. 4, no. summer, pp. 70-81, 2007.
- [9] S. P. Dash, "Resettlement and rehabilitation in Orissa: A study of the upper Indravati hydro-electric project," *Social Change*, vol. 38, no. 4, pp. 661-688, 2008. https://doi.org/10.1177/004908570803800406
- C. Geisler, "A new kind of trouble: evictions in Eden\*," International Social Science Journal, vol. 55, no. 175, pp. 69–78, 2003. http://doi.org/10.1111/1468-2451.5501007
- [11] P. A. House, "Relocation of families displaced by expressway development: Milwaukee case study," Land Economics, vol. 46, no. 1, pp. 75-78, 1970. https://doi.org/10.2307/3145426
- [12] K. B. Nayak, "Development of underdevelopment: Facets of deforestation and displacement in Orissa," Social Change, vol. 34, no. 1, pp. 26-39, 2004. https://doi.org/10.1177/004908570403400103

Vol. 9, No. 4: 1066-1074, 2025

Edelweiss Applied Science and Technology

ISSN: 2576-8484

DOI: 10.55214/25768484.v9i4.6172

- [13] T. C. Bisht, "Development-induced displacement and women: The case of the Tehri Dam, India," *The Asia Pacific Journal of Anthropology*, vol. 10, no. 4, pp. 301-317, 2009. https://doi.org/10.1080/14442210903271312
- [14] M. Asif, "Why displaced persons reject project resettlement colonies," *Economic and Political Weekly*, vol. 35, no. 25, pp. 2005–2008, 2000.
- [15] J. Li and R. U. Ayres, "Economic growth and development: Towards a catchup model," *Environmental and Resource Economics*, vol. 40, pp. 1-36, 2008. http://doi.org/10.1007/s10640-007-9138-z
- [16] H. Panda, J. Park, and D.-A. Kong, "Industrialization through FDI, displacement and development: POSCO-India Orissa," project in International Area Review, vol. 11, no. 287-307, 2008 2.pp. https://doi.org/10.1177/223386590801100215
- [17] C. Phuong, The international protection of internally displaced persons. Cambridge: Cambridge University Press, 2004.
- [18] D. S. Swamy, The political economy of industrialisation: From self reliance to globalisation. New Delhi: Sage, 1994.
- [19] R. Sharma, "Involuntary displacement: A few encounters," *Economic and Political Weekly*, vol. 38, no. 9, pp. 907-912, 2003.
- [20] F. Padel and S. Das, Resettlement realities: The Gulf between policy and practice. In Mathur, H. M. (Ed.), Resettling displaced people: Policy and practice in India. New Delhi: Routledge, 2011.
- [21] L. Lobo, Development induced dispalcement in Gujarat 1947 2004. In U. Mehta & R. Puniyani (Eds.), Sectarianism, politics and development. Jaipur: Rawat, 2008.
- [22] C. Mariotti, "Resettlement and risk of adverse incorporation: The case of the Polavaram dam," *Development in Practice*, vol. 25, no. 5, pp. 628-642, 2015. https://doi.org/10.1080/09614524.2015.1052373
- [23] A. Kabra, "Displacement and rehabilitation of an Adivasi settlement: Case of Kuno Wildlife Sanctuary, Madhya Pradesh," *Economic and Political Weekly*, vol. 38, no. 29, pp. 3073-3078, 2003.
- [24] G. Shahabuddin, R. Kumar, and M. Shrivastava, "Pushed over the edge: Village relocation from Sariska," *Economic* and Political Weekly, vol. 40, no. 32, pp. 3563-3565, 2005. https://www.jstor.org/stable/4416981
- [25] A. Lasgorceix and A. Kothari, "Displacement and relocation of protected areas: A synthesis and analysis of case studies," *Economic and Political Weekly*, vol. 44, no. 49, pp. 37-47, 2009.
- [26] B. Srinivasan, "Social impacts of large dams: Gender, equity and distribution issues," *Economic and Political Weekly*, vol. 36, no. 43, pp. 4108-4114, 2001. https://doi.org/10.2307/4411298
- [27] P. N. Vithayathil and C. Sunny, "Development projects and human rights protection: The CIAL in Kerala," *Rajagiri Journal of Social Development*, vol. 5, no. 1, pp. 16-25, 2009.
- [28] B. Pandey, "The Kalinganagar tragedy: Development goal or development malaise," Social Change, vol. 38, no. 4, pp. 609-626, 2008. https://doi.org/10.1177/004908570803800403
- [29] J. L. Seligson, E. S. Huebner, and R. F. Valois, "Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS)," *Social Indicators Research*, vol. 61, pp. 121-145, 2003.
- [30] E. H. McWhirter, M. Crothers, and S. Rasheed, "The effects of high school career education on social-cognitive variables," *Journal of Counseling Psychology*, vol. 47, no. 3, p. 330, 2000.