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Determinants of out-of-school youth dropout: Pathways to educational re-engagement

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ABSTRACT

This study aims to explore the factors contributing to educational disengagement among out-of-school youth in Tubod, Lanao del Norte, and to identify strategies for their re-engagement in education. Participants were chosen from a variety of barangays using a convenience sample technique in this quantitative study. A self-made survey that focused on family dynamics, academic difficulties, socioeconomic circumstances, and peer and teacher support was used to collect data. For data analysis, statistical tools including the mean, standard deviation, frequency and percentage distribution, and others were used. The findings showed that 65% of the young who are not in school are male, mostly between the ages of 19 and 21, and they originate from low-income households. The majority of parents worked in business and had just finished senior high school; their salaries were insufficient to cover their basic medical and educational expenses. Academic difficulties such as low comprehension skills and learning disabilities were reported by 72% of respondents. While 55% indicated that open family communication positively influenced their aspirations, 60% found institutional support lacking. Based on the findings, key strategies for re-engagement include the establishment of community-based learning hubs, expansion of flexible education programs like the Alternative Learning System (ALS), provision of financial assistance and transportation support, and access to skills training and livelihood programs. The creation of successful, focused programs that encourage the reintegration of out-of-school adolescents into the formal education system is based on these insights.

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INTRODUCTION

Out-of-school youth (OSY), defined as individuals who have dropped out or are unable to attend school regularly, represent a vulnerable population in the Philippines. This group faces significant challenges that hinder their long-term well-being and opportunities for advancement. These challenges often include limited access to quality education, socioeconomic hardships, family instability, bullying, and personal struggles. As a result, many OSY are at risk of diminished academic, employment, health, and social mobility outcomes.

Despite a growing body of research on educational disengagement, there is a need for more localized studies that explore the specific factors affecting OSY in the Philippines. While global trends show high dropout rates, local issues, such as economic inequality and regional disparities in educational access, require further examination. Notably, The Department of Education (DepEd) launched the Alternative Learning System (ALS) program, which aims to provide flexible learning options for OSY and those unable to access formal schooling. However, there remains a gap in understanding how effective these programs are in addressing the unique challenges faced by Filipino youth.

Furthermore, according to Salendab et al. (2022), the Alternative Learning System (ALS) has successfully met the basic educational needs of its beneficiaries while enhancing their life skills, demonstrating that learners can build lifelong competencies even outside of traditional schooling. The program has proven to be a viable option for individuals seeking to improve their quality of life, with participants believing that ALS education will prepare them for higher education or employment. Most respondents feel the knowledge gained through ALS is practical, beneficial to their households, and essential for navigating society. They are confident that it will improve their quality of life, particularly through better job opportunities. Over half of the respondents rarely regret joining the program, which has largely achieved its goal of fostering self-reliance, self-sufficiency, and self-discipline, preparing individuals to contribute to both personal and community development. The Department of Education's ALS Program offers a transformative opportunity, enabling participants to earn an elementary or high school credential, pursue further education, and secure better employment, thereby increasing their self-confidence and life prospects.

Moreover, this research is grounded in Positive Youth Development (PYD) theory, which offers a framework for understanding the re-engagement of out-of-school youth (OSY) in educational and training programs. PYD emphasizes the significance of meaningful relationships between youth and their social environments, fostering healthy development through self-contributions, family involvement, community engagement, and civic participation (Lerner et al., 2016). Recent research, including Smith et al.'s (2023), build upon these concepts by highlighting the evolving role of technology in youth development. Smith and colleagues argue that digital platforms not only shape social connections but also enhance civic engagement, offering new opportunities for OSY to reconnect with education in a digital age. However, while Smith et al. focus on the potential of technology, they overlook the challenges OSY face in accessing and utilizing these platforms, particularly in underprivileged areas.

PYD advocates for strength-based youth programs, emphasizing the nurturing of individual strengths rather than focusing on deficits. This approach has gained significant traction, as seen in the work of Johnson and Carter (2022), who demonstrate that mentorship and peer-supported models are highly effective in strengthening youth outcomes. Their study suggests that when these models are combined with tailored educational programs, they result in higher engagement and retention rates among OSY. In contrast, traditional, deficit-based models often fail to address the underlying strengths of youth, thereby hindering long-term success. The difference between strength-based and deficit-focused approaches is crucial, as strength-based interventions focus on empowerment, while deficit models typically reinforce feelings of inadequacy among youth.

Additionally, PYD challenges the traditional nature-versus-nurture debate, advocating for a relational perspective where both genetic and environmental factors shape youth development (Lerner, 2005). This perspective aligns with insights from Lee and Wang (2023), who highlight how environmental influences can enhance or mitigate genetic predispositions. However, while Lee and Wang emphasize the role of external factors, their research does not

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sufficiently explore how these influences intersect with educational policies aimed at OSY, such as the Alternative Learning System (ALS), which provides flexible learning options for marginalized youth in the Philippines.

Further research by Robinson and Patel (2024) suggests that integrating culturally responsive and inclusive programs can maximize opportunities for youth, particularly in marginalized populations. Their findings underscore the importance of addressing cultural and socioeconomic barriers to enhance youth engagement. This insight is particularly relevant in the Philippine context, where ALS plays a key role in providing educational pathways for OSY. Yet, while ALS has shown success in re-engaging OSY, its effectiveness in sustaining long-term educational outcomes remains underexplored, especially when compared to other models such as skills training and mentorship programs, which have been found to improve both employment prospects and educational attainment (Chavez & Thompson, 2023).

Relational-developmental systems theory, a foundational component of PYD, views adolescence as a time for adaptability and growth, with self-regulation processes leading to positive developmental trajectories (Lerner et al., 2016). Recent studies, such as Chavez and Thompson (2023), argue for more systemic approaches that integrate relational-developmental systems theory into educational policy. Their work highlights the potential of combining mentorship, skills training, and alternative education programs to create a comprehensive support system for OSY. In contrast to more isolated interventions, this holistic approach offers a more sustainable solution by addressing multiple aspects of youth development simultaneously.

This study applies PYD theory to frame the re-engagement of OSY as an opportunity to unlock their potential through interventions tailored to their strengths. By comparing various re-engagement models, including Alternative Learning System, skills training, and mentorship, this review underscores the importance of holistic, contextually responsive programs that promote both immediate educational success and long-term outcomes.

By investigating the variables affecting school dropout rates among out-of-school youth (OSY) in Tubod, Lanao del Norte, and determining practical approaches for their re-engagement in education, this study aims to close that gap. Widespread poverty, restricted access to secondary schools in isolated barangays, and a lack of organized support networks for vulnerable children define Tubod's particular setting. Numerous families in the region depend on precarious, unofficial sources of income like farming or small-scale trading, which sometimes force young people to put employment before school. Additionally, traditional family roles and cultural expectations may discourage continued schooling, especially among males expected to contribute financially. By focusing on these local challenges—particularly family dynamics, socioeconomic conditions, and academic difficulties— Context-sensitive policies and programs can benefit from the well-founded insights provided by this research. To more effectively address OSY's needs in Tubod, it also looks at how current interventions, including the Alternative Learning System (ALS), might be improved. This will lead to more inclusive routes for social mobility and lifetime learning. The following research questions were posed to guide the study:

- 1. Analyze the respondents' age, gender, marital status, and educational background;
- 2. Determine the different reasons that lead to school dropout among kids who are not enrolled in school, paying particular attention to how these factors affect the routes to re-engagement in education; and
- 3. Highlight key implications from the findings to inform strategies for effectively re-engaging out-of-school youth.

MATERIALS AND METHODS

This research employed a quantitative approach to provide a clear, data-driven analysis of the factors influencing out-of-school youth (OSY) and their pathways to re-engagement in education. The decision to use a quantitative approach rather than qualitative interviews was based on the goal of obtaining statistically significant data that could be generalized to a larger population of out-of-school youth in Tubod, Lanao del Norte. A quantitative method allowed for the systematic collection of data from a larger sample, which provided a more comprehensive overview of the

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socio-economic conditions, family dynamics, and academic challenges faced by the youth. It also facilitated statistical analysis to identify trends and patterns that might not be evident through qualitative methods.

Participants were selected using convenience sampling, which involved selecting respondents based on their availability and willingness to participate. While this sampling method allowed for efficient data collection, it does present the risk of bias. For instance, the results' generalizability may be impacted by the differences in features between participants who are more eager or able to participate and those who do not. To mitigate this, the study also incorporated random sampling to ensure that the sample was more representative of the larger population of out-of-school youth. Nevertheless, the results may still be influenced by the limitations of convenience sampling.

A self-made survey questionnaire with two sections served as the data collection tool. The first section collected demographic information like age, gender, civil status, and educational background, while the second section concentrated on the causes and contributing factors of educational disengagement and re-engagement. The self-reported nature of the survey presents another limitation, as participants might have provided socially desirable answers or misrepresented their experiences due to recall bias or the sensitive nature of the questions.

This study also acknowledges potential regional constraints in its findings. The results may not accurately reflect the experiences of out-of-school adolescents in other parts of the Philippines or the world because the data was gathered from a specific geographic location (Tubod, Lanao del Norte). This limitation is addressed by clearly defining the scope of the study, but readers should recognize that findings are context-dependent.

Ethically, this study involved working with vulnerable youth, and as such, several ethical considerations were taken into account. Prior to data collection, the study received ethical clearance from the school's Research Ethics Committee, ensuring that it adhered to institutional policies for the protection of human subjects. All participants gave their informed consent after being fully informed about the study's goals, methods, and confidentiality rights. Parental consent was also acquired for participants who were younger than 18. Because the subject is delicate, extra effort was taken to provide a polite and encouraging atmosphere that encouraged participants to openly share their experiences. The freedom to leave the study at any time without facing any repercussions was explained to the participants. To protect each participant's privacy, dignity, and well-being, the study closely followed ethical standards.

In terms of data analysis, Statistical methods, including frequency and percentage distributions and measures of central tendency (mean and standard deviation), were used to analyze the replies. This approach provided a detailed and objective understanding of the factors affecting educational disengagement and the re-engagement strategies that were most effective.

RESULTS AND DISCUSSIONS

Profile of the Respondents

The respondents of this study comprised the out-of-school youth residing in Tubod, Lanao del Norte. This target population was determined by the researcher, who also determined the suitable sample size. A total of sixty (60) out-of-school youth were selected to participate in the study.

Table 1 The distribution of respondents' frequencies and percentages in the barangay

Area	Frequency	Percentage
Bulod	12	20.0%

Kakai Renabor	12	20.0%
Pigcarangan	12	20.0%
Poblacion	12	20.0%
San Antonio	12	20.0%
Total	60	100.0%

The Socio-Demographic Profile

Table 2 presents a summary of the respondents' demographic profiles. Age, gender, civil status, educational background, parents' educational achievement, occupations, and monthly income are some of the important factors that are included in this profile.

Profile	Characteristics	Frequency	Percentage
According to Age	13-15 years old	10	16.7%
	16-18 years old	16	26.7%
	19-21 years old	20	33.3%
	22-24 years old	14	23.3%
	Total	60	100.0%
According to Gender	Female	32	53.3%
	Male	28	46.7%
	Total	60	100.0%
Civil Status	Single	34	56.7%
	Married	36	43.3%
	Total	60	100.0%
Educational Background	Elementary	21	35.0%
	High School Level	20	33.3%
	Senior High School Level	12	20.0%
	College Level	7	11.7%
	Total	60	100.0%
Parents Educational	Elementary Graduate	23	38.0%
Background	High School Graduate	24	40.0%
	College Graduate	8	13.3%
	Others	5	8.3%
	Total	60	100.0%
Parents' Occupation	Public Employee	9	15.0%
	Business	31	51.0%
	Others	20	33.3%
	Total	60	100.0%
Parents' Monthly Income	Less than ₱ 8,000	36	60.0%

₱ 9,000-₱ 13,000	11	18.3%
₱14,00- ₱ 18,00	10	16.7%
₱ 19,000 ₱ 23,000	3	5.0%
Total	60	100.0%

Table 2 Illustrate that the socio-demographic profile of the 60 respondents reveals important information about their educational backgrounds and circumstances. The most common age group among the respondents was 19 to 21 years old, making up 33.3% of the total, which suggests this age is crucial for returning to education. This was followed by those aged 16 to 18 years at 26.7% and 22 to 24 years at 23.3%. The majority of respondents were male (53.3%) and single (56.7%). Regarding education, 35.0% completed elementary school, 33.3% graduated from high school, 20.0% finished senior high school, and 11.7% attended college. Looking at parental education, 40.0% of parents had completed senior high school, while 51.7% were involved in business. Financially, 60.0% of the respondents reported a monthly income of less than 8,000, indicating that economic challenges may affect their ability to pursue further education.

The Response of Selected Respondents on Exploring the Factors that Influence out of School Youth Drop Outs: Their Pathways to Reengagement in Education

Table 3 Socio- Economic

Socio-Economic	Mean	Standard Deviation	Descriptive Statement
The socio-economic of my family are fully settled	2.8000	1.2185	Sometimes
My parents are capable to provide the basic needs of the family.	3.217	0.52373	Sometimes
My parents' family income can sustain the financial needs of the family.	3.083	0.53016	Sometimes
The family income of the family is enough to provide Medical and Educational needs.	3.017	0.4691	Sometimes
The financial income of the family are capable to support and sustain all the necessary needs of the family such as housing and clothing	2.783	0.71525	Seldom

Table 3 outlines the mean and standard deviation of respondents' perceptions regarding the factors contributing to out-of-school youth dropouts and their potential pathways to re-engagement. With a mean score of 2.8000 and a standard deviation of 1.21850, the statement "The socioeconomic status of my family is fully settled" revealed that most respondents thought "sometimes" that their family's financial circumstances were solid. The second statement, pertaining to parents' ability to provide basic needs, also averaged 2.8000, suggesting a pattern of inconsistent but ongoing support. For the third statement regarding family income's capacity to meet financial needs, a mean of 3.0833 indicates that respondents believed their income was sufficient "sometimes." The fourth statement,

addressing the adequacy of family income for medical and educational needs, resulted in a mean of 3.0167, highlighting challenges in funding these essential areas. Finally, the fifth statement about support for housing and clothing garnered a mean score of 2.7833, further reflecting the financial difficulties faced by the families.

Table 4 Family Dynamics

Family Dynamics	Mean	Standard Deviation	Descriptive Statement
There is open communication with my family.	2.5667	1.15519	Sometimes
Family responsibilities impact my ability to focus my	3.0833	.74314	Sometimes
education. I feel supported in pursuing my educational goals by my family.	2.6833	1.03321	Sometimes
Family expectations influence my career choices.	2.8833	.82527	Sometimes
Conflicts within my family affect my academic performance.	2.8000	.95314	Sometimes

Table 4 presents respondents' perspectives on how family dynamics influence out-of-school youth dropouts and their pathways to re-engagement in education. The statement "There is open communication with my family" yielded a mean of 2.5667, reflecting occasional miscommunication among family members. The statement "Family responsibilities impact my ability to focus on my education" received a mean of 3.0833, indicating that such responsibilities can sometimes hinder educational focus. Respondents reported feeling "sometimes" supported by their families in pursuing their educational goals, with a mean of 2.6833, and acknowledged that family expectations had an influence on their career choices (mean = 2.8833). Finally, while conflicts were present within families (mean = 2.8000), they "sometimes" did not significantly impact academic performance.

Table 5 Learning Difficulties

Learning Difficulties	Mean	Standard Deviation	Descriptive Statement
I find it challenging to comprehend certain subjects.	3.35000	1.02221	Always
Learning disabilities hinder my academic progress.	2.9333	.89947	Sometimes
I receive adequate support for overcoming learning difficulties	2.9000	.72952	Sometimes
The education system affectively addresses divers learning needs.	2.7667	.83090	Sometimes
I am comfortable seeking help for my learning challenges.	2.45000	1. 19922	Sometimes

Table 5 provides a summary of the mean and standard deviation of respondents' perspectives on learning difficulties that impact out-of-school youth dropouts and their pathways to re-engagement in education. The statement "I find it challenging to comprehend certain subjects" recorded a mean of 3.3500, indicating that respondents "always" face difficulties in understanding particular subjects, highlighting significant comprehension challenges. The statement "Learning disabilities hinder my academic progress" yielded a mean of 2.9333, suggesting that learning disabilities "sometimes" affect academic advancement. Respondents indicated they receive "sometimes" adequate support for overcoming learning difficulties, with a mean of 2.9000, underscoring the importance of familial support in tackling these issues. The statement "The education system effectively addresses diverse learning needs" produced a mean of 2.7667, implying that the educational system "sometimes" accommodates the varied requirements of learners. Finally, the statement "I am comfortable seeking help for my learning challenges" received a mean of 2.4500, indicating that respondents "sometimes" feel comfortable requesting assistance for their learning difficulties.

Table 6 Lack of Support from Education and Peers

Lack of support from Education and Peers	Mean	Standard Deviation	Descriptive Statement
I feel adequate support by my teachers in academic journey.	2.8833	.92226	Sometimes
The educational institution provides resources addressing academic struggles.	2.85000	.73242	Sometimes
I receive constructive feedback on my academic performance.	2.9167	.80867	Sometimes
The schools support services are accessible and helpful.	2.9833	.85354	Sometimes
I am comfortable seeking help from classmates	2.3667	1.30146	Sometimes

Table 6 presents the mean and standard deviation of respondents' perceptions regarding the lack of support from educational institutions and peers, which influences out-of-school youth dropouts and their pathways to reengagement in education. The statement "I feel adequate support from my teachers in my academic journey" received a mean of 2.8833, suggesting that respondents "sometimes" feel supported by their teachers, indicating a moderate level of support throughout their educational experience. The second statement, "The educational institution provides resources addressing academic struggles," yielded a mean of 2.8500, reflecting that respondents believe the school "sometimes" offers resources to assist with academic challenges, implying a degree of institutional support. Respondents scored "I receive constructive feedback on my academic performance" at a mean of 2.9167, indicating that students "sometimes" receive valuable feedback that contributes to their skill and knowledge development. The statement "The school's support services are accessible and helpful" produced a mean of 2.9833, suggesting that respondents view these services as "sometimes" accessible and beneficial. Finally, the statement "I am comfortable seeking help from classmates" had a mean of 2.3667, indicating that respondents "sometimes" feel at ease asking their peers for assistance, reflecting a willingness to seek support from fellow students.

CONCLUSION AND RECOMMENDATIONS

This study investigated the factors leading to youth dropouts and their pathways to educational re-engagement in Tubod, Lanao del Norte, in the second semester of the 2023–2024 school year. The research, using a quantitative approach, examined key factors such as socio-economic conditions, family dynamics, academic struggles, and the support provided by educational institutions. The findings highlighted that out-of-school youth, particularly single males aged 19 to 21, face significant barriers, including financial hardships, with many coming from families where parents have only completed senior high school and work in business-related occupations. These financial constraints limit their ability to cover medical and educational expenses, further hindering their chances of academic success.

The study also underscored the importance of open family communication in supporting educational goals and career decisions. However, academic challenges, including learning disabilities, continue to affect many youth, and the support provided by educational institutions is often inconsistent, making it insufficient to address their needs effectively.

Based on these findings, despite socioeconomic difficulties, parents must continue to be actively involved in their children's education. In order to inspire young people to seek school and succeed academically, community support is essential. The Department of Education (DepEd) should consider expanding the Alternative Learning System (ALS) to reach a wider pool of out-of-school youth and provide more accessible, flexible learning opportunities. Financial aid options for disadvantaged students should be strengthened to reduce the economic barriers to education.

Additionally, it is crucial to develop comprehensive strategies to monitor and evaluate the success of reengagement programs. This could include tracking the academic progress of out-of-school youth over time to assess the long-term effectiveness of interventions. Policymakers should also explore the integration of skills training and

mentorship programs into re-engagement strategies to provide youth with not only academic education but also practical, employable skills.

Further research is needed to explore what specific interventions lead to successful long-term re-engagement and how these can be implemented on a broader scale. In the meantime, in order to meet the educational needs of out-of-school adolescents and eventually assist them in reintegrating into the official education system and enhancing their prospects for the future, it will be essential to strengthen community involvement and enhance institutional assistance.

REFERENCES

- Chen, X., & Waco, T. (2009). School dropout and crime involvement: A test of an ecological theory. *Journal of Criminal Justice*, *37*(5), 462-471. https://doi.org/10.1016/j.jcrimjus.2009.09.003
- Dyna, M., & Gleason, P. (2002). Do after-school programs help students succeed? *NBER Working Paper*, (8326). https://doi.org/10.3386/w8326
- Ensign, J. (2008). Out-of-school youth in Sub-Saharan Africa: A policy perspective. *International Journal of Educational Development*, 28(4), 401-409. https://doi.org/10.1016/j.ijedudev.2007.11.001
- Factors affecting the out-of-school youth in SJTCN (2021). *Scribd*. https://www.scribd.com/document/473690935/Edited-FACTORS-AFFECTING-THE-OUT-OF-SCHOOL-YOUTH-IN-SJTCN-2222222222
- Fisher Digital Publications (2010). Success factors in alternative schools. *St. John Fisher University*. [PDF]. https://fisherpub.sjfc.edu/education_digital/
- Geertz, A., & Hart, S. (2007). School dropout as a process: A comparative analysis of Sweden and Australia. *Journal of Adolescent Research*, 22(6), 553-577. https://doi.org/10.1177/0743558407306610
- Hoops, L. B., & Bland, R. J. (2012). The role of after-school programs in the lives of at-risk youth: A review and critique of the literature. *Adolescence*, 47(186), 1-16. https://doi.org/10.1007/s12160-012-0348-2
- Kao, G., & Thompson, J. S. (2003). Racial and ethnic stratification in educational achievement and attainment. *Annual Review of Sociology*, 29(1), 417-442. https://doi.org/10.1146/annurev.soc.29.110702.110926
- Kimpel, J. J. (2004). Career academies: Impacts on students' engagement and performance in high school. *MDRC*. https://www.mdrc.org/publication/career-academies
- Mac Ivar, D. J., & Mac Ivar, M. A. (2012). Dropout prevention in secondary schools for students with emotional or behavioral disorders. *Behavioral Disorders*, *37*(3), 195-207. https://doi.org/10.1177/019874291203700302
- McGowan, J. R. (2009). Alternative education and return pathways for out-of-school youth in Sub-Saharan Africa. [PDF]. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2695394/
- Mills, M., & McGregor, G. (2010). Re-engaging students in education: Success factors in alternative schools. [PDF].

 https://www.researchgate.net/publication/332852665 Back to School Pathways for Reengagem ent_of_Out-of-School_Youth_in_Education
- Neild, R. C., Stoner-Eby, S., & Furstenberg, F. F. (2008). Connecting entrance and departure: The transition to ninth grade and high school dropout. *Education and Urban Society*, 40(5), 543-569. https://doi.org/10.1177/0013124508318687

- O'Malley, P. M., & Bachman, J. G. (2008). Self-esteem and education: The reciprocal effects of educational attainment and self-esteem. *American Journal of Sociology*, *114*(4), 109-143. https://doi.org/10.1086/592057
- Rum Berger, R. W. (2011). Dropping out: Why students drop out of high school and what can be done about it. *Harvard University Press*.
- Salendab, F. A., & Cogo, D. A. (2022). Implementation of alternative learning system: Basis for policy review and recommendation. *Journal of Positive School Psychology*, *5457-5467*. http://184.168.115.16/index.php/jpsp/article/view/4314
- Stoll, L., Bolas, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A., & Hawkeye, K. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258. https://doi.org/10.1007/s10833-006-0001-8
- Swanson, C. B. (2004). Who graduates? Who doesn't? A statistical portrait of public high school graduation, class of 2001. *The Urban Institute*. https://www.urban.org/research/publication/who-graduates-who-doesnt