



MODELING THE INFLUENCE OF GIRL SCOUTING PARTICIPATION ON ADOLESCENT FEMALE DEVELOPMENT: A MULTIPLE REGRESSION ANALYSIS

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ABSTRACT

The purpose of this study was to examine the extent to which participation in Girl Scouting influences the holistic development of adolescent females. A descriptive-predictive correlation research design employing a quantitative approach was utilized. The respondents consisted of 95 adolescent female Girl Scouts, selected through a random sampling technique. Data were collected using a structured, researcher-adapted questionnaire and analyzed using mean and standard deviation to determine levels of participation and development, Pearson product-moment correlation to establish relationships, and multiple regression analysis to identify predictive indicators. Findings revealed that Girl Scout participation and adolescent female development were generally at a moderate level, with life skills training and responsibility participation demonstrating stronger manifestations. A statistically significant positive relationship was found between Girl Scout participation and adolescent female development. Among the indicators, responsibility participation emerged as the sole significant predictor of adolescent female development. The results affirmed the developmental value of structured, girl-centered scouting programs and underscored the importance of responsibility-based experiences in fostering maturity, self-confidence, and future-oriented behavior among adolescent females.

INDEX TERMS: Girl Scout Participation, Adolescent Female Development, Responsibility Participation, Social Values Engagement, Life Skills Training

INTRODUCTION

Globally, the development of adolescent girls into mature, confident, and future-oriented individuals continues to face persistent challenges shaped by gendered social expectations, reduced leadership opportunities, and unequal access to empowerment programs. International development reports consistently note that adolescence is a critical turning point where girls often experience declines in confidence, autonomy, and participation in decision-making, especially in comparison to their male counterparts (Banati et al., 2021).

In an international setting, specifically in the United States, large-scale evaluations conducted by Smith et al. (2023) reported that girls who participated in Girl Scout programs exhibited higher levels of leadership confidence, self-efficacy, and civic engagement compared to non-participants. Similarly, in the United Kingdom, it was found that girls involved in guiding activities reported significantly higher confidence, resilience, and self-worth, particularly during early to mid-adolescence when confidence levels typically decline (Pi-Sunyer et al., 2024). In Canada, youth development studies associated with Girl Guides

of Canada highlighted strong associations between program participation and enhanced leadership competencies, community involvement, and long-term civic engagement among young women (Ballard et al., 2021).

Within the Philippine context, specifically in Eastern Samar, there is an uneven participation of adolescent girls due to poverty and restricted access to leadership platforms, resulting in limited documentation of developmental outcomes (Luna et al., 2024). Likewise, in Maguindanao del Sur, studies on adolescent civic engagement highlighted that while youth programs existed, girl focused participation and outcome based evaluations remained scarce, largely due to socio cultural constraints and limited localized research initiatives (Capio, 2026).

At the local level, particularly in the province of Davao de Oro and within the Laak North District, the Girl Scouts of the Philippines played a visible role in promoting leadership, service, and personal growth among school-aged girls. Despite the presence of active Girl Scout councils and school-based troops, participation levels varied widely due to socio-economic constraints, limited parental involvement, and competing



academic demands. While anecdotal evidence suggested that Girl Scouting contributed positively to leadership and social responsibility, there remained a lack of systematic, data-driven studies quantifying its influence on adolescent female maturity, self-confidence, and future-oriented behavior within this specific local setting. Consequently, program implementation and enhancement efforts were often made without sufficient empirical grounding.

Moreover, the researcher's direct observation within public elementary schools in the Laak North District revealed notable differences in confidence, responsibility, and leadership behaviors between girls who were actively involved in Girl Scouting and those who were not. Girls with sustained participation appeared more willing to take responsibility, communicate ideas, and engage in school activities, while others exhibited hesitancy and limited initiative. Despite these observations, no localized study had comprehensively examined how specific dimensions of Girl Scout participation influenced adolescent female development in Davao de Oro. This research gap underscores the need for an empirical investigation that models and quantifies these relationships, thereby contributing evidence-based insights to support program strengthening, policy formulation, and gender-responsive youth development initiatives in the local context.

METHODOLOGY

Method Used

The research design employed in this study was a descriptive–predictive correlational design using a quantitative approach to determine the predictive relationship between Girl Scouting Participation and Adolescent Female Development. This design was appropriate because the study aimed to describe existing conditions and to examine statistically whether variations in Girl Scouting participation were associated with variations in developmental outcomes, without manipulating variables (Creswell & Creswell, 2018).

In this study, the independent variable was examined in relation to the dependent variable. A descriptive–correlational design is suitable for research contexts where variables naturally occur, and the researcher seeks to examine relationships rather than establish direct causality (Mertler, 2021). The predictive component of the design involved the use of multiple linear regression analysis, which enabled the researcher to determine the extent to which the dimensions of Girl Scouting participation significantly predicted adolescent female development. Regression analysis is an appropriate technique when the objective is to assess the relative contribution and predictive strength of multiple independent variables to a dependent variable (Pallant, 2020).

Moreover, the descriptive dimension of the design allowed the researcher to summarize the characteristics of the respondents and variables using frequencies, means, and standard deviations, providing an empirical overview of participation and developmental levels. Descriptive statistics are essential in

quantitative educational research to establish baseline trends and contextualize inferential findings (Bernard, 2023).

Consequently, descriptive–predictive correlational research design enabled a systematic examination of how different dimensions of Girl Scouting participation statistically influenced adolescent female development, while respecting ethical constraints and avoiding experimental manipulation. This design supports evidence based decision making and allows cautious generalization of findings to comparable educational and developmental contexts (Mohajan, 2022)..

Sources of Data

The primary data sources for this study were public school teachers in the Laak North District, Division of Davao de Oro. As the key respondents, these educators provided professional assessments of the observed developmental changes and participation levels of the adolescent female students under their supervision. Their proximity to students in both academic and co-curricular settings enabled a comprehensive evaluation of leadership, responsibility, and social values. Data were gathered through a standardized survey instrument, ensuring that the insights reflected the actual experiences and behavioral growth observed within the local scouting units.

Data Gathering Instruments

The primary research instrument used in this study was a structured survey questionnaire designed to assess the influence of Girl Scouting Participation on Adolescent Female Development. The questionnaire was researcher adapted from empirically grounded studies and established developmental frameworks to ensure construct validity and contextual relevance.

The independent variable of this study, Girl Scouting Participation, was adapted from the work of Lagatano and Diocos (2024), which measured key dimensions such as leadership roles, responsibility and accountability, service and community engagement, values formation, and practical skills development. These dimensions closely align with the core components of the Girl Scout Leadership Experience. Drawing from this validated and contextually relevant framework, the present study refined and reorganized the indicators to suit adolescent female participants and to operationalize Girl Scouting participation in terms of leadership exposure, responsibility participation, social values engagement, and life skills training.

On the other hand, the dependent variable of this study, Adolescent Female Development, was adapted from the work of Beal (2011) on the development of future orientation and related psychosocial constructs. Beal's framework examined adolescents' emotional regulation, self-beliefs, self-efficacy, reflective thinking, and future oriented planning using validated survey indicators grounded in developmental psychology. Drawing from this empirically established model, the present study refined and reorganized the indicators to operationalize development in terms of adolescent female maturity, self-



confidence level, and future oriented behavior, ensuring alignment with recognized developmental processes while maintaining relevance to adolescent female learners.

The questionnaire was organized into two main sections: (1) Girl Scouting Participation and (2) Adolescent Female Development. Each sub variable consisted of five clearly defined indicators, allowing teacher respondents to provide systematic evaluations based on their observations of the girl child during the School Year 2025–2026. To uphold ethical standards, the instrument

included a Researcher's Plea and explicit instructions emphasizing confidentiality and responsible data use.

All items were measured using a five point Likert type scale, designed to capture the extent of participation and observed developmental outcomes. The quantified responses provided a sound statistical basis for descriptive analysis and linear regression modeling, ensuring consistency, precision, and reliability in data interpretation.

Scale	Descriptive Rating	Interpretation
4.20 – 5.00	Very High	The Girl Scouting Participation Adolescent Female Development is always manifested
3.40 – 4.19	High	The Girl Scouting Participation Adolescent Female Development is oftentimes manifested
2.60 – 3.39	Moderate	The Girl Scouting Participation Adolescent Female Development is sometimes manifested
1.80 – 2.59	Low	The Girl Scouting Participation Adolescent Female Development is rarely manifested
1.00 – 1.79	Very Low	The Girl Scouting Participation Adolescent Female Development is not manifested

To ensure the internal consistency of the adapted survey instrument, a reliability test was conducted using data obtained from a pilot study involving 30 respondents. As reflected in the results, the overall scale for Girl Scout Participation obtained a Cronbach's Alpha of 0.93, indicating excellent internal consistency, while its subscales yielded coefficients ranging from 0.87 to 0.91, which were interpreted as good to excellent. Specifically, leadership exposure registered an alpha of 0.88, responsibility participation achieved 0.91, social values engagement obtained 0.87, and life skills training recorded 0.89, confirming that all indicators consistently measured their intended constructs.

Similarly, the overall scale for Adolescent Female Development demonstrated a Cronbach's Alpha of 0.92, which is likewise interpreted as excellent reliability. Its subscales yielded coefficients of 0.86 for adolescent female maturity, 0.90 for self confidence level, and 0.88 for future oriented behavior, all of which fall within the good to excellent range. According to Pallant (2020) and Creswell (2018), a Cronbach's Alpha value of 0.70 or higher indicates acceptable reliability, while values exceeding 0.80 signify strong internal consistency. Based on these criteria, the results confirm that the research instrument possessed a high degree of reliability and was capable of producing stable, consistent, and dependable measurements.

Sampling Technique

The respondents of this study comprised public school teachers from 6 selected elementary schools within the Laak North District, namely Amogad Elementary School, Datu Davao Elementary School, Datu Ampunan Elementary School, Mansinao-an Elementary School, Melale Elementary School, and Malinao Elementary School. To determine the appropriate sample size from a total population of 125 teachers, the researcher used

RAOSOFT web application with a 5% margin of error, which resulted in a minimum required sample of 95 respondents. These 95 teacher-respondents were selected using stratified random sampling to ensure proportionate representation from each of the five participating schools, thereby maintaining objectivity and enhancing the validity of the linear regression analysis.

Furthermore, to ensure the reliability and stability of the research instrument, a separate pilot group of 30 teachers from outside the Laak North District was tapped to undergo a test-retest validity procedure. This group shared similar professional characteristics and involvement in scouting as the actual respondents, but did not participate in the final data collection. This specific under-sampling and validation measure was implemented to prevent bias and confirm that the survey items yielded consistent results before the full-scale administration within the district.

Well-defined inclusion criteria guided the selection of respondents, ensuring the credibility, relevance, and overall rigor of the collected data. First, the study strictly required active involvement by Girl Scouts of the Philippines (GSP) members; participants were required to be currently serving as troop leaders, assistant troop leaders, or designated GSP focal persons within their respective academic institutions. This ensured that respondents possessed a deep, functional understanding of the scouting framework. Second, a mandate for sustained interaction was implemented, requiring respondents to engage in regular, hands-on interaction with the girl children. This included leading weekly troop meetings, providing consistent mentorship, and directly supervising diverse community-based initiatives.

Third, current stationing was a fundamental requirement, meaning only teachers currently assigned to the five identified participating public elementary schools Amogad, Datu Davao,



Datu Ampunan, Mansinoa-an, Melale, and Malinao Elementary School were eligible for inclusion. Finally, the study prioritized voluntary participation, where all selected teachers provided signed informed consent, ensuring full ethical compliance and transparency throughout the research process. These stringent criteria collectively ensured that the data were sourced exclusively from educators with authentic firsthand experience. By maintaining these standards, the researcher ensured that evaluations of adolescent developmental milestones specifically maturity, self-confidence, and future-oriented behavior were provided by highly qualified, credible key informants.

Data Gathering Procedure

The data gathering process followed a systematic and ethical approach, adhering strictly to the policies of The Rizal Memorial Colleges, Inc. and the Department of Education (DepEd). The procedure was designed to ensure professional transparency, participant confidentiality, and data integrity throughout the various phases of the study.

Permission and Ethical Clearance

In September 2025, the researcher initiated the formal request process by securing approval from the Research Adviser and the Dean of the Graduate School. Subsequently, formal letters of permission were submitted to the Schools Division Superintendent of DepEd Davao de Oro and the Public Schools District Supervisor (PSDS) of Laak North District. These communications delineated the study's intent, the nature of the teacher-respondents' involvement, and the overarching goal of modeling adolescent development. This stage was critical for addressing ethical safeguards and ensuring that the study aligned with regional educational policies.

Orientation and Informed Consent

In December 2025, following the successful completion of the research colloquium, the researcher conducted a formal orientation for the identified teacher-respondents. During this session, the participants were fully briefed on the study's purpose, their right to withdraw at any time without penalty, and the measures taken to ensure their anonymity. Informed consent forms were distributed and signed before any data were collected, establishing a transparent and voluntary relationship between the researcher and the respondents.

Distribution and Systematic Retrieval

During the last week of February 2026, the researcher employed a standardized, systematic approach to distribute the survey instruments. To ensure a high response rate and data completeness, the researcher personally coordinated with the school heads of the five participating elementary schools. The questionnaires were distributed to the 95 sampled teachers and retrieved within a specified timeframe. To maintain reliability, a follow-up protocol was implemented to clarify any missing entries, ensuring that the final dataset was robust and ready for analysis.

Collation and Statistical Treatment

Once the retrieval process was completed, the researcher carefully managed the data collation. The raw responses were initially encoded and organized by the researcher using Microsoft Excel to facilitate data cleaning, checking for completeness, and ensuring accuracy. After preliminary processing, the data were submitted to the statistician, who also used the Statistical Package for the Social Sciences (SPSS) for advanced statistical analysis.

Using SPSS, the statistician conducted reliability analysis through Cronbach's Alpha to assess the internal consistency of the research instrument, followed by descriptive statistics to summarize the data. Pearson Product-Moment Correlation and Multiple Linear Regression Analysis were then performed to determine the relationship between Girl Scouting participation and the developmental outcomes of the girl child, as well as to identify significant predictors of adolescent female development.

Statistical Treatment

To systematically address the research objectives, appropriate descriptive and inferential statistical tools were employed. The study utilized frequency counts, mean, and standard deviation to describe the extent of Girl Scouting participation and adolescent female development based on a five-point Likert-type scale. Reliability analysis using Cronbach's Alpha was conducted to determine the internal consistency of the research instrument. To examine the relationship between Girl Scouting participation and adolescent female development, the Pearson Product-Moment Correlation Coefficient was applied. Furthermore, Multiple Linear Regression Analysis was used to identify which indicators of Girl Scouting participation significantly influenced adolescent female development.

Descriptive Statistics

For the first and second research questions, which aimed to determine the extent of Girl Scouting participation (in terms of leadership exposure, responsibility participation, social values engagement, and life skills training) and the extent of adolescent female development (in terms of maturity, self-confidence, and future-oriented behavior), descriptive statistics were employed. Specifically, the mean and standard deviation were computed to describe the central tendencies and the variability of the responses. This approach provided a clear and concise summary of how the teacher-respondents perceived each domain based on their professional observations of the girl-children under their supervision.

Pearson Product-Moment Correlation Coefficient

For the third research question, which investigated the significant relationship between Girl Scouting participation and adolescent female development, the Pearson Product-Moment Correlation Coefficient was applied. This inferential method was suitable for determining the strength and direction of the linear relationship between the composite scores of the independent variables and the dependent variables. The Pearson allowed the researcher to identify whether higher levels of scouting engagement were



statistically associated with greater maturity, confidence, and future-oriented behavior.

Multiple Linear Regression Analysis

For the final research question, which sought to determine which specific indicators of Girl Scouting participation significantly influenced adolescent female development, Multiple Linear Regression Analysis was conducted. This method modeled and quantified the predictive power of the four independent variables on the dependent outcomes. Through analysis of regression coefficients and significance levels, the study identified which specific domains were the most robust predictors of development. This statistical treatment enabled the researcher to determine which aspects of the scouting program should be prioritized to maximize developmental impact, providing the mathematical basis for the study's conclusions and recommendations.

Ethical Considerations

The Ethical Considerations section of this study outlines the principles and protocols observed to ensure that the rights, dignity, and well-being of all participants particularly the girl-children under observation were safeguarded throughout the research process. It discusses key ethical dimensions, including informed consent and assent, management of participant vulnerability, and the strict maintenance of confidentiality and privacy.

Furthermore, this section details the risk and benefit assessment, the application of justice and fairness in respondent selection, and the established researcher qualifications and transparency. By securing the necessary institutional approvals and ensuring that data collection, analysis, and reporting were conducted with integrity, this study maintains a steadfast commitment to ethical compliance and respect for the participants' welfare and autonomy.

Social Value

As a researcher, I aimed to contribute insights to empower educators, program facilitators, and community leaders to strengthen leadership and life skills training for young girls. Because teachers' perceptions were central to this research, I recognized their critical role as witnesses to and facilitators of learners' growth. I believed that by capturing their perspectives, the study could generate meaningful recommendations that supported the holistic development of the girl-child, ultimately fostering more confident, mature, and future-ready individuals in our schools and communities.

Informed Consent and Assent

To uphold the ethical principle of voluntary participation, the researcher ensured that informed consent was obtained from all teacher-respondents. Each participant was provided with a comprehensive explanation of the study's purpose, the specific procedures involved, and the potential risks and benefits. This transparency allowed the teachers to make an autonomous and informed decision regarding their involvement. The researcher

emphasized that participation was entirely voluntary and that any respondent could withdraw at any stage of the process without any negative consequences or administrative repercussions.

In addition to adult consent, the researcher addressed the ethical necessity of assent and institutional clearance. Since the study's focus involved observing "girl-children" in a school setting, formal clearance was sought from the appropriate school officials and the Department of Education to ensure the ethical conduct of the research. For any direct interactions or specific behavioral tagging involving minors, the principle of assent was respected by maintaining a non-intrusive, supportive environment for the students' well-being. By securing these permissions, the researcher affirmed a steadfast commitment to respecting the autonomy and decision-making rights of both the professional respondents and the youth they represented.

Vulnerability of Research Respondents

The researcher was acutely mindful that hierarchical structures within the school division might influence the perceptions and responses of the teacher-participants. To mitigate this potential bias, all data collection was conducted in a non-coercive and respectful manner. The researcher emphasized that participation was entirely voluntary and that all identities would remain strictly anonymous, ensuring that the teachers' professional standing would never be compromised.

A concerted effort was made to create a safe and supportive environment where teachers could express their views freely, without fear of judgment or administrative repercussions. By prioritizing these safeguards, the researcher upheld the ethical responsibility of minimizing risk and undue pressure. This approach ensured that the data gathered reflected the educators' genuine observations and professional insights throughout the research process.

Privacy and Confidentiality

To uphold the privacy of the teacher-respondents, the researcher ensured that all collected information was used solely for academic purposes. Each participant was informed that their individual responses would not be disclosed to any third party, including school administrators, fellow teachers, or the Department of Education division office. By clearly delineating the boundaries of data usage, the researcher protected the participants from any potential professional exposure, ensuring that their involvement remained a private matter between the respondent and the investigator.

Regarding confidentiality, the researcher implemented a systematic de-identification process where numerical codes were assigned to each survey instead of using names. All physical and digital records were securely stored, with electronic data kept in password-protected files accessible only to the researcher. These strict confidentiality protocols were designed to foster a high level of trust and honesty among the participants, providing a secure



and respectful environment where insights could be shared without the risk of being traced back to a specific individual.

Risk, Benefits and Safety

The study posed minimal to no risk, as it focused exclusively on teachers' professional perceptions and observed experiences regarding Girl Scouting and adolescent female development. To ensure a proactive approach to participant welfare, the researcher informed all respondents of their fundamental rights, explicitly stating that they could decline participation or withdraw from the study at any time without fear of negative consequences or professional repercussions.

In terms of potential benefits, the research offered a valuable platform for teacher-respondents to reflect on their pedagogical roles and contribute directly to the enhancement of youth development programs. The findings are intended to inform future policy and refine practice within schools and scouting institutions, ultimately serving the broader educational community.

To safeguard participant well-being, all research procedures were conducted with sensitivity and strict adherence to established ethical guidelines. By fostering a professional and supportive atmosphere, the researcher ensured that participation did not result in any emotional, psychological, or professional harm, thereby maintaining the integrity and dignity of all involved throughout the study.

Justice

The researcher was committed to maintaining fair and unbiased selection procedures by ensuring that no respondent was favored or excluded on the basis of personal or professional characteristics. Every participant was given the same level of respect, consideration, and access to information regarding the study, ensuring that the recruitment process remained transparent across the five participating schools in the Laak North District. By practicing strict impartiality throughout the research process, the researcher promoted equitable representation, honoring the diverse voices of all teacher-respondents and upholding the ethical requirement of distributing the study's burdens and benefits fairly across the professional community.

Transparency

The researcher ensured that all aspects of the research process were communicated clearly and honestly to the teacher-respondents. From the outset, a thorough explanation was provided regarding the study's objectives, scope, methodology, and the intended academic use of the results. It was explicitly clarified that participation was voluntary and that all responses would be kept strictly confidential. Furthermore, the researcher remained committed to disclosing any updates or changes relevant to the study's conduct throughout the data collection period. By maintaining transparency at every stage, the researcher aimed to build professional trust with the respondents and reinforce the overall ethical integrity of the research.

Qualification of the Researcher

The researcher possessed the necessary academic preparation and practical expertise to conduct this study effectively. Having undergone formal training in educational research, the researcher utilized a deep understanding of methodology, curriculum development, and youth program implementation to design and execute the study.

Conflict of Interest

The researcher maintained that there were no personal, financial, or institutional affiliations that could influence the study outcomes or the treatment of the respondents. The sole intention of the research was to contribute to the body of knowledge regarding adolescent female development and to support the continuous improvement of youth programs such as the Girl Scouts of the Philippines.

Adequacy of Facilities

Data gathering was facilitated in school environments that were conducive to concentration, privacy, and voluntary participation. The availability of designated spaces such as faculty rooms, conference areas, or classrooms provided respondents with a secure and comfortable setting to accomplish the research instruments. Additionally, necessary resources, including computers, internet access, and data storage devices, were readily available for efficient data collection, processing, and analysis.

Community Involvement

I engaged with school leaders, teacher-respondents, and local scouting coordinators to ensure that the study aligned with the participating communities' values, practices, and developmental goals. The research process respected community dynamics and cultural sensitivities by fostering collaborative dialogue and encouraging openness.

Results and Discussion

Level of Supreme Elementary Learner Government (SELG) Participation

Level of Girl Scout Participation

The following table presents the level of Girl Scout participation as a multidimensional construct with descriptive findings among indicators, namely: leadership exposure, responsibility participation, social values engagement, and life skills training.

Level of Leadership Exposure

Presented in Table 1 is the level of leadership exposure of the girl-child in Girl Scout participation, as measured through indicators related to leadership roles, decision-making involvement, teamwork facilitation, attendance in leadership training, and confidence in guiding discussions. The table shows an overall mean interpreted as Moderate, indicating that while opportunities for leadership exposure exist, active engagement and formal leadership roles are not consistently experienced across all indicators.



Table 1
Level of Leadership Exposure

No	Leadership Exposure	Mean	SD	Descriptive Interpretation
1	The girl-child has held leadership positions in Girl Scout activities or events.	2.37	0.48	Low
2	The girl-child actively participates in decision-making during troop meetings.	3.41	0.49	High
3	The girl-child leads small group tasks and encourages team cooperation.	2.94	0.71	Moderate
4	The girl-child has attended leadership training or leadership development programs offered by the GSP.	3.04	0.87	Moderate
5	The girl-child demonstrates confidence in facilitating discussions during Girl Scout activities.	3.36	0.73	Moderate
	Mean Average	3.02	0.66	Moderate

Very High (4.20–5.00); High (3.40–4.19); Moderate (2.60–3.39); Low (1.80–2.59); Very Low (1.00–1.79)

Table 1 presents the level of leadership exposure with an overall mean of 3.02 and an SD of 0.66, described as Moderate, indicating that the girl-child experiences leadership exposure to a reasonable extent but not consistently across all domains of participation. This suggests that while the Girl Scouting program provides leadership-related experiences, the depth and formalization of these opportunities vary among participants.

Among the indicators, the highest mean was obtained by active participation in decision making during troop meetings with a mean of 3.41, and SD of 0.49, described as High. This reflects the program's emphasis on participatory processes, where girls are encouraged to voice opinions, contribute to group decisions, and engage in collaborative planning. The next highest indicator was demonstrating confidence in facilitating discussions during Girl Scout activities with a mean of 3.36 and SD of 0.73, described as Moderate. This indicates that the girl-child is generally able to articulate ideas and engage peers during group interactions.

Following this was attendance in leadership training or leadership development programs, with a mean of 3.04, and SD of 0.87, described as Moderate. While leadership training opportunities are present, the moderate rating implies uneven access or participation. The indicator leading small group tasks and encouraging team cooperation obtained a mean of 2.94 with an SD of 0.71, described as Moderate. This suggests that opportunities for peer-level leadership exist but are not consistently maximized. Finally, the lowest mean was recorded for holding formal leadership positions in Girl Scout activities or events, with a mean of 2.37 and an SD of 0.48, described as Low.

This finding points to a clear limitation in translating participatory engagement into formal leadership authority.

The findings suggest that Girl Scout participation meaningfully supports the development of foundational leadership competencies, particularly decision making, communication, and collaborative engagement, yet reveals limitations in translating participatory experiences into formal leadership roles. Contemporary research affirms that youth leadership programs are most effective when experiential participation is complemented by clearly designated leadership positions that allow adolescents to exercise authority and accountability (Molina López et al., 2024). Moreover, evidence indicates that structured experiential environments such as scouting and camp based programs foster resilience, emotional regulation, and social responsibility, reinforcing the program's role as a critical developmental context while underscoring the need to intentionally expand formal leadership opportunities for the girl child to maximize developmental outcomes (Berry et al., 2026).

Level of Responsibility Participation

Presented in Table 2 is the level of responsibility participation of the girl-child in Girl Scout participation, as measured through indicators related to volunteering for duties, task fulfillment, accountability, initiative in organizing activities, and assistance provided to younger members. The table shows an overall mean interpreted as Moderate, indicating that the girl-child demonstrates responsible participation to a reasonable extent, although consistency varies across specific responsibilities.



Table 2
Level of Responsibility Participation

No	Responsibility Participation	Mean	SD	Descriptive Interpretation
1	The girl-child regularly volunteers to take on duties and responsibilities during troop activities.	3.12	0.78	Moderate
2	The girl-child fulfills assigned tasks in a timely and organized manner.	2.67	0.74	Moderate
3	The girl-child takes accountability when group tasks are not completed successfully.	4.14	0.56	High
4	The girl-child shows initiative in organizing events or troop meetings.	2.89	0.81	Moderate
5	The girl-child assists younger members in understanding and completing their responsibilities.	3.62	1.01	High
Mean Average		3.29	0.78	Moderate

Very High (4.20–5.00); High (3.40–4.19); Moderate (2.60–3.39); Low (1.80–2.59); Very Low (1.00–1.79)

Table 2 presents the level of responsibility participation with an overall mean of 3.29 and an SD of 0.78, described as Moderate, indicating that the girl-child participates in responsibilities within troop activities to a fair degree but not uniformly across all indicators. This suggests that while Girl Scouting provides opportunities for developing responsibility, the manifestation of responsible behaviors is influenced by the type and nature of tasks involved.

Among the indicators, the highest mean was obtained by taking accountability when group tasks are not completed successfully, with a mean of 4.14 and an SD of 0.56, described as High. This reflects a strong sense of accountability, suggesting that the girl-child is willing to accept responsibility for group outcomes. The next highest indicator was assisting younger members in understanding and completing their responsibilities, with a mean of 3.62 and an SD of 1.01, described as High. This indicates that the girl-child frequently assumes supportive and mentoring roles within the troop, which are essential expressions of responsibility in youth group settings.

Following these was regularly volunteering to take on duties and responsibilities during troop activities, with a mean of 3.12 and an SD of 0.78, described as Moderate. This suggests that the girl-child shows willingness to shoulder responsibilities, although such behavior may depend on situational opportunities or encouragement. The indicator showing initiative in organizing events or troop meetings obtained a mean of 2.89 with an SD of 0.81, described as Moderate, indicating that initiative-driven responsibility is present but not consistently demonstrated. The lowest mean was recorded for fulfilling assigned tasks in a timely and organized manner, with a mean of 2.67 and an SD of 0.74, described as Moderate, suggesting challenges related to consistency and organization when responsibilities are formally assigned.

The current findings revealed a high level of accountability demonstrated by the girl-child. These findings strongly support

the studies of Silke and Brady (2025), showing that adolescent girls demonstrate stronger collaboration, empathy, and communication skills when they participate in structured, purpose-driven youth organizations that provide safe and inclusive platforms for engagement. Evidence from experiential and scouting-related programs highlights that girls thrive in environments where peer support and mentoring are emphasized, which may explain the high levels of accountability and assistance (Indriyani et al., 2025). However, the moderate findings related to task organization and initiative may reflect broader challenges faced by adolescents, including competing academic demands, digital distractions, and contextual constraints that limit sustained engagement in responsibility-driven activities (Pérez-Juárez et al., 2023).

Conclusion and Recommendations

Summary of Findings

The level of Girl Scouts' participation was found to be generally moderate to high across its indicators. Specifically, leadership exposure was rated as moderate, indicating that opportunities for participatory decision-making and expression exist, although formal leadership roles were limited. Responsibility participation was registered at a moderate level, with particularly strong accountability behaviors displayed by participants. Social values engagement was likewise moderate, with high regard for respect and ethical conduct, but lower engagement in civic duty and environmental sustainability. In contrast, life skills training achieved a high extent, demonstrating that Girl Scouting effectively equips adolescent girls with practical, self-management, and independence-related competencies.

In terms of the level of adolescent female development, the overall mean was described as moderate, with variations across specific indicators. Adolescent female maturity was rated moderate, reflecting strengths in self-reflection and openness to growth, alongside challenges in decision-making and emotional regulation. The level of self-confidence was also moderate, characterized by strong communicative confidence but relatively



weaker initiative-taking behaviors. Similarly, future-oriented behavior was found to be moderate, with high proficiency in task planning and use of current experiences for future growth, but limited proactive pursuit of long-term opportunities and clearly defined career goals.

Analysis of the relationship between Girl Scouts' participation and adolescent female development revealed a statistically significant positive relationship. The results indicate that higher levels of participation in Girl Scouting are associated with higher levels of adolescent female development. However, the magnitude of the relationship was moderately low, suggesting that while Girl Scouting contributes meaningfully to developmental outcomes, adolescent development is also shaped by other contextual factors such as family, school, and community influences.

Finally, among the indicators of Girl Scouting participation, responsibility participation emerged as the only significant predictor of adolescent female development. Leadership exposure, social values engagement, and life skills training did not show statistically significant individual influence when considered alongside other indicators. This finding highlights the central role of accountability, task fulfillment, and responsibility-taking in fostering maturity, self-confidence, and future-oriented behavior, underscoring responsibility participation as a critical mechanism through which Girl Scouting supports adolescent female development.

Conclusion

The findings of the study partially supported the anchored theories, with strong alignment to the core propositions of the Positive Youth Development (PYD) Framework and support for Social Cognitive Theory and Gender Role Theory. Consistent with PYD, the results demonstrated that Girl Scouting participation functioned as a developmental asset by fostering responsible participation, life skills training, social values engagement, and leadership-related experiences that contributed to adolescent female maturity, self-confidence, and future-oriented behavior.

The significant overall relationship between Girl Scout participation and adolescent female development, as well as the predictive power of responsibility participation, affirmed the PYD assumption that structured, strength-based environments promote positive developmental outcomes through intentional engagement rather than deficit correction. However, the moderate levels observed in some developmental indicators suggested that asset-building occurred unevenly, indicating partial rather than full realization of the PYD model.

The findings likewise partially affirmed Social Cognitive Theory and Gender Role Theory. The prominence of responsibility participation as a significant predictor supported Social Cognitive Theory's emphasis on learning through observation, behavioral practice, and the development of self-efficacy through mastery

experiences. At the same time, the non-significant predictive influence of leadership exposure, social values engagement, and life skills training indicated that not all modeled or observed behaviors translated directly into measurable developmental outcomes when examined simultaneously.

The results suggested that Girl Scouting provided a gender-responsive environment that supported confidence, maturity, and planning behaviors; however, the moderate and uneven development of future-oriented behavior and leadership initiative implied that broader societal and contextual gender constraints continued to shape adolescent outcomes.

Recommendations

Based on the results of this study, the following recommendations are proposed:

1. **Strengthen Formal Leadership Pathways in Girl Scouting.** The Girl Scouts of the Philippines (GSP) Council and troop leaders are encouraged to design and institutionalize more formal, designated leadership roles for adolescent girls, such as rotating troop officers, project heads, and youth-led committees.
2. **Integrate Structured Responsibility-Based Projects.** Since responsibility participation emerged as the sole significant predictor of adolescent female development, troop leaders and school Girl Scout coordinators should expand responsibility-centered activities, including long-term group projects, mentoring programs for younger scouts, and task cycles with clear accountability mechanisms.
3. **Enhance Career Guidance and Future Planning Interventions.** To address the very low scores in opportunity-seeking aligned with long-term aspirations, the Department of Education (DepEd), in partnership with GSP and school guidance counselors, should integrate career exploration, goal-setting workshops, and exposure activities such as career talks, college readiness sessions, and vocational pathway orientations into scout programs.
4. **Provide Initiative and Decision-Making Skill Development Workshops.** Given the low initiative-taking and very low decision-making scores, GSP trainers, guidance counselors, and youth development facilitators should conduct targeted workshops on decision-making, problem-solving, and initiative-building, using simulations, role-playing, and real-world scenarios.
5. **Strengthen Community and Parental Involvement in Girl Scouting Programs.** To mitigate external constraints that may limit developmental gains, local government units (LGUs), parent-teacher associations, and community partners are encouraged to actively support Girl Scouting initiatives through resource provision, mentorship, and community-based projects.

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Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study; all data used were obtained from previously published sources as cited in the reference list.

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