

Effectiveness of the Multi-Disciplinary Approach in Addressing the Non-Attendance of Pantawid Pamilyang Pilipino Program (4ps) Beneficiary Students in Masbate City

Laramie M. Ocharan

Department of Social Welfare and Development, Field Office V, Legazpi City, Philippines

Publication history: Received: May 04, 2026; Revised: May 18, 2026; Accepted: June 05, 2026

Email of Corresponding Author: lmocharan.fo5.dswd@gmail.com

Abstract

This study examined the effectiveness of a multi-disciplinary approach in addressing the school non-attendance of Pantawid Pamilyang Pilipino Program (4Ps) beneficiary students in Masbate City. Anchored on Social Ecological Theory, Human Capital Theory, and Maslow's Hierarchy of Needs, the study used a quantitative descriptive-correlational research design. Data were gathered from 57 parent-respondents selected through purposive sampling using a researcher-made and expert-validated questionnaire. Frequency, percentage, weighted mean, ranking, and Pearson Product-Moment Correlation Coefficient were used to analyze the data. Findings showed that most respondents were older, female, married, elementary graduates, engaged mainly in farming, earning below ₱5,000 monthly, and supporting two to three 4Ps child-beneficiaries. The multi-disciplinary approach was perceived as effective, particularly in terms of social welfare support, family support, health-related support, and academic support. It was also found effective in improving school attendance, academic performance, parental involvement, and behavioral adjustment, although behavioral adjustment received a comparatively lower rating. The major factors affecting school non-attendance were community, personal, socio-economic, school-related, and family-related factors, including poverty, unsafe environments, low motivation, bullying, family conflicts, and health concerns. A moderate positive and significant relationship was found between the effectiveness of the multi-disciplinary approach and the factors affecting non-attendance. The study recommends strengthened feeding programs, health checkups, attendance monitoring, home visitation, parental seminars, anti-bullying measures, transportation or school supply support, and regular inter-agency coordination. The study supports SDG 4, SDG 1, SDG 3, SDG 10, SDG 16, and SDG 17 by promoting inclusive education, poverty reduction, learner well-being, reduced inequality, institutional coordination, and stakeholder partnership. Its sustainability impact lies in strengthening educational, socio-economic, public health, governance, institutional, and community-based support systems for vulnerable learners.

Keywords: Academic Support, Behavioral Adjustment, Health-Related Support, Multi-Disciplinary Approach, Pantawid Pamilyang Pilipino Program, Parental Involvement, Social Welfare Support

1. Introduction

This study examines the effectiveness of a multi-disciplinary approach in addressing the school non-attendance of Pantawid Pamilyang Pilipino Program (4Ps) beneficiary students in Masbate City. It is grounded on the premise that school absenteeism among 4Ps beneficiaries is not merely a financial concern, but a multidimensional issue shaped by poverty, family responsibilities, health problems, peer influence, school-related barriers, and community conditions. Thus, the study positions coordinated academic, family, social welfare, and health-related support as necessary interventions for improving attendance, academic performance, parental involvement, and behavioral adjustment among at-risk learners.

Education is widely recognized as a foundation of national development and individual empowerment. In the Philippine context, the right to quality and accessible education is protected under the 1987 Philippine Constitution, which mandates the State to "protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all" (Philippine Constitution, 1987, Art. XIV, Sec. 1). Despite this mandate, many Filipino children, especially those from marginalized households, continue to encounter barriers to regular schooling. To respond to poverty-related educational barriers, the Philippine government institutionalized the Pantawid Pamilyang Pilipino Program through Republic Act No. 11310 (2019), positioning 4Ps as a national poverty reduction strategy (LawPhil, n.d.). The program provides conditional cash transfers to poor households, requiring parents to support their children's regular school attendance and access to basic health services (Department of Social Welfare and Development [DSWD], n.d.). Although 4Ps has contributed to improved enrollment and school participation, school non-attendance among beneficiaries remains a persistent concern. Earlier studies found that 4Ps increased enrollment and reduced dropout rates, yet many beneficiaries still experienced absenteeism due to child labor, transportation costs, family duties, and other poverty-related burdens. Reyes et al. (2015) noted these continuing challenges, while Orbeta and Paqueo (2016) reported

that conditionalities alone were insufficient to address deeper socio-economic and psychosocial barriers. Dela Cruz (2022) further emphasized that non-attendance among 4Ps students is linked not only to financial difficulty but also to health issues, peer influence, and family dynamics. School non-attendance is therefore shaped by poverty-related constraints, lack of motivation, child labor, teenage pregnancy, bullying, health concerns, and social environment pressures (Department of Education [DepEd], 2013). Under the Enhanced Basic Education Act of 2013 or Republic Act No. 10533, these barriers require holistic and responsive solutions suited to learners' diverse needs (Refworld, 2013). This supports the view that education is not solely a school-based responsibility but a multi-sectoral concern involving families, teachers, social workers, healthcare providers, and community stakeholders.

The literature shows that multidisciplinary approaches enhance educational engagement by integrating diverse forms of expertise and support. Rai (2020) found that multidisciplinary education improves critical thinking, creativity, adaptability, and learner engagement. Abrol (2023) similarly affirmed that multidisciplinary instruction promotes multicultural understanding, inclusivity, and collaboration. Abnett et al. (2022) reported that exposure to multidisciplinary teams improved empathy, reflection, and professional communication, while Husukić et al. (2023) demonstrated that structured multidisciplinary engagement enhances innovation, intercultural competence, and teamwork. Multidisciplinary approaches have also been applied in specialized and professional fields. Langner et al. (2023) showed that integrating computer science, policy, and social sciences strengthens problem-solving in cybersecurity education. Wei et al. (2022) established the usefulness of multidisciplinary team-based clinical nursing evaluation, while Wen et al. (2025) found that combining multidisciplinary diagnosis and case-based learning improves clinical reasoning, teamwork, and academic performance. These studies suggest that multidisciplinary strategies are effective because they connect academic, practical, social, and professional dimensions of learning. In school-based intervention contexts, multidisciplinary collaboration has been linked to improved attendance and behavior. Enderle et al. (2025) found that coordinated efforts among teachers, psychologists, and families improved attendance among learners with social, emotional, and behavioral difficulties. Chauke (2024) showed that teacher intervention strategies implemented through a multidisciplinary framework reduced youth violent behavior in a historically disadvantaged school. Ren and Zhao (2025) further demonstrated that predictive modeling of absenteeism becomes more accurate when multidisciplinary variables are considered, while Farquharson et al. (2025) emphasized that collaboration among school leaders and researchers improves policy implementation.

The literature also connects multidisciplinary education to employability and lifelong learning. Ayisi-Addo and Biney (2023) emphasized that multidisciplinary perspectives foster adaptability, continuous skills development, and innovation. Maghiar and Brown (2022) reported that employers value cross-disciplinary technological competence, communication, and problem-solving skills. Vasojević (2022) found that scholarship beneficiaries benefit from multidisciplinary academic exposure, while Lien et al. (2023) reported that scholarship programs and Confucius Institutes influence international student mobility through cross-cultural academic engagement. Philippine studies on 4Ps and related financial assistance programs generally affirm the educational benefits of social protection. Bumanglag et al. (2024) found that student financial assistance reduced financial burden and improved participation and motivation. Rapist and Pañares (2023) reported that 4Ps cash grants positively influenced academic performance, attendance, and compliance with school requirements. Bradecina et al. (2025) found improvements in academic performance and retention among beneficiaries of educational cash transfer programs, while Flores et al. (2019) found better attendance and academic outcomes among 4Ps beneficiaries compared to non-beneficiaries. Beyond academic performance, 4Ps has been associated with broader human development outcomes. Organo (2023) found that 4Ps positively influenced education, health, and nutrition among learner-beneficiaries. Basiri (2024) concluded that the program contributes to human capital development by increasing school participation and improving wellbeing. Bustos et al. (2023) identified associations between 4Ps household enrollment and improved child nutrition indicators, including reductions in wasting and stunting. However, Omaweng (2022) found that family responsibilities, limited resources, and personal challenges still affected academic performance, while Vizococho (2022) identified implementation issues affecting school-based feeding program outcomes. Beneficiary satisfaction and implementation efficiency also influence program effectiveness. De Jesus and Villanueva (2023) found moderate to high satisfaction with 4Ps implementation, particularly in financial assistance distribution and compliance monitoring. Parreño and Eslabon (2022) reported positive satisfaction but noted concerns regarding delays and administrative processes. Salva et al. (2023) concluded that 4Ps helps address short-term poverty but requires continuous monitoring and policy improvement. Diaz (2025) found that 4Ps contributed to poverty reduction, school attendance, and health service utilization, while Puracan et al. (2024) emphasized that social protection effectiveness depends on governance and implementation efficiency. De Regla and Santos Jr. (2025) further showed that government support can strengthen adaptive capacity among 4Ps communities.

International literature on educational equity and financial aid supports these findings. Mccambly et al. (2024) argued that educational quality discourse intersects with inequality and marginalization. Berlanga and Corti (2025) found improved academic performance and persistence among scholarship recipients, while Qi et al. (2022) showed that structured financial aid systems reduce economic barriers and increase learning motivation. Londoño-Velez et al. (2023) found that financial aid improved access to high-quality universities and upward mobility, and Nugroho et al. (2023) showed that conditional

cash transfers influenced families' expectations for educational continuity. However, financial assistance must be complemented by psychosocial and guidance support. Liu and Fu (2022) found that perceived poverty affects life satisfaction through self-esteem. Nasr et al. (2024) showed that financial stress affects student wellbeing, and Wagner et al. (2022) linked depression symptoms to lower academic performance. Chilewa and Osaki (2022) found that guidance and counseling support career development, while Singh and Alhulail (2022) demonstrated that predictive models can identify students at risk of dropping out. Yu and Li (2022) showed that technological tools can improve financial aid targeting, and Iskandar et al. (2023) found that financial support and technology adaptation improve resilience. Lusardi and Anne Messy (2023) emphasized the importance of financial literacy, while Akbulut (n.d.) highlighted the role of government-funded educational and social aid. Kobashi et al. (2022) showed the value of public-private-people partnerships, while Xia's (2023) discussion of strategic planning highlights the importance of structured program implementation. Local studies further indicate that 4Ps can improve school outcomes but may not fully eliminate attendance problems. Talimio and Salagubang (2022) found that 4Ps empowered Filipina women through household decision-making and financial management. Aranas et al. (2021), Colinares (2024), and Sasaki et al. (2019) reported improved attendance, academic performance, and completion rates among 4Ps beneficiaries. Malinao (2025), Tan and Restauro (2021), and Cansancio (2024) also found positive academic performance among elementary and learner-beneficiaries, although family support and motivation affected outcomes. Merano (2025) and Labitad and Ganzan (2025) found that 4Ps improved attendance and participation, but academic outcomes also depended on school-level factors and instructional quality. Briñosa et al. (2025) emphasized the role of human capital investment and parental attitudes, while Semanero (2025) argued that 4Ps influences family welfare and student achievement through household stability and parental involvement. Riveral et al. (n.d.) reported positive stakeholder perceptions of 4Ps effectiveness, but Lluz (2020) found that family obligations, peer influence, and economic pressures still contributed to dropout. Villamater (2021) observed that COVID-19-related resource and technology barriers affected Grade 7 4Ps students, and Aguado (2021) noted that administrative challenges and delays could affect satisfaction and compliance.

Globally, the study aligns with the United Nations Convention on the Rights of the Child, which the Philippines ratified in 1990 and which obligates the State to provide conditions that allow children to develop fully and equitably (UNICEF Philippines, n.d.). It also supports the United Nations 2030 Agenda, particularly Sustainable Development Goal 4, which promotes inclusive and equitable quality education and lifelong learning opportunities for all. Nationally, the study is situated within the implementation of 4Ps as a conditional cash transfer program designed to reduce poverty, promote school attendance, and improve access to health services. While national evidence suggests that 4Ps has improved enrollment and participation, persistent absenteeism among beneficiaries shows that financial support alone may not be enough to sustain school attendance. Locally, the study focuses on Masbate City, the capital of Masbate, a province located near the center of the Philippine archipelago. Historical and geographic descriptions identify Masbate as a province composed of the major islands of Masbate, Ticao, and Burias, with cultural, agricultural, fishing, and tourism-based characteristics (CityofMasbate.gov.ph; Masbate-Wikipedia). Masbate City serves as the province's major center for education, trade, governance, and services. According to the 2020 Census of Population and Housing of the Philippine Statistics Authority, Masbate City has a population of 104,522 distributed across approximately 22,000 households. The study focuses on selected barangays representing urban and rural communities, namely Anas, B. Titong, Bagumbayan, Bantigue, Bapor, Bayombon, Biyong, Cagay, Cawayan Exterior, Espinosa, F. Magallanes, Ibingay, Kinamaligan, Malinta, Mayngaran, Nursery, Pawa, Sinalongan, and Tugbo. These areas provide a relevant setting for examining educational, social, and economic conditions affecting 4Ps beneficiary students and their families.

This study is anchored on Social Ecological Theory (Urie Bronfenbrenner, 1979), Human Capital Theory (Gary Becker, 1964), and Maslow's Hierarchy of Needs (Abraham Maslow, 1943). Social Ecological Theory (Urie Bronfenbrenner, 1979) explains that human development is shaped by multiple environmental systems, including the family, community, and broader social structures. This theory supports the study because school non-attendance among 4Ps beneficiaries may be influenced by interconnected conditions such as poverty, family responsibilities, school environment, and community support. Human Capital Theory (Gary Becker, 1964) views education and skills development as investments that improve individual productivity and economic opportunity. This theory is relevant because non-attending 4Ps beneficiaries may lose opportunities to develop knowledge, skills, and competencies necessary for future employment, financial independence, and socioeconomic mobility. The multidisciplinary approach may contribute to human capital development by combining counseling, educational support, social assistance, and community-based intervention. Maslow's Hierarchy of Needs (Abraham Maslow, 1943) explains that basic physiological and safety needs must be addressed before individuals can pursue higher-level needs such as belongingness, esteem, and self-actualization. This theory applies to the study because many 4Ps beneficiaries may experience unmet needs related to food security, financial stability, health, safety, or emotional support. A multidisciplinary approach is therefore appropriate because it addresses academic concerns alongside social, economic, and health-related barriers. Conceptually, the study follows an input-process-output logic. The inputs include the profile of parent-respondents and the dimensions of multidisciplinary support, including academic support, family support, social welfare support, and health-related support. The process involves survey-based data gathering, presentation, analysis, and interpretation. The output is an empirical assessment of the effectiveness of a multidisciplinary

intervention for out-of-school Pantawid Pamilyang Pilipino Program beneficiaries in Masbate City, with feedback intended to inform schools, the Department of Education, the Department of Social Welfare and Development, local government units, and other stakeholders.

The reviewed literature shows that multidisciplinary approaches improve learning, engagement, behavior, professional readiness, and school support systems. It also shows that 4Ps and related financial assistance programs contribute to school participation, academic performance, health, nutrition, human capital development, and poverty reduction. However, studies also reveal continuing challenges, including absenteeism, dropout risks, family obligations, health concerns, peer influence, implementation delays, resource limitations, and psychosocial barriers. The main research gap is that most existing studies focus on 4Ps beneficiaries who are already attending school or on general program outcomes. There remains limited empirical evidence on how a multidisciplinary approach specifically addresses the needs of 4Ps beneficiaries who are not attending school, especially in a local setting such as Masbate City. This study responds to that gap by examining the effectiveness of coordinated academic, family, social welfare, and health-related interventions in addressing the non-attendance of 4Ps beneficiary students. Specifically, the study seeks to describe the profile of parent-respondents, identify the multidisciplinary approaches used, determine the most effective aspects of these approaches, assess their level of effectiveness in terms of school attendance, academic performance, parental involvement, and behavioral adjustment, identify the socio-economic, family-related, school-related, personal, and community factors affecting non-attendance, determine the relationship between intervention effectiveness and non-attendance factors, and propose measures to improve school attendance.

This study primarily aligns with SDG 4 – Quality Education because it directly addresses school non-attendance, inclusive access to education, student retention, and learning participation among marginalized 4Ps beneficiaries. The study supports the goal of ensuring that no learner is excluded from educational opportunities because of poverty, family concerns, health problems, or community-based barriers. It also aligns with SDG 1 – No Poverty because 4Ps is positioned as a poverty reduction strategy intended to break the intergenerational cycle of poverty through education and health support (LawPhil, n.d.; Department of Social Welfare and Development [DSWD], n.d.). By examining how multidisciplinary support can improve attendance among 4Ps beneficiaries, the study contributes to understanding how social protection programs may strengthen long-term poverty reduction. The study is also related to SDG 3 – Good Health and Well-Being because health-related support, feeding programs, health checkups, and access to basic health services are part of the intervention context. Literature also shows that 4Ps has links with health, nutrition, and wellbeing outcomes (Organo, 2023; Bustos et al., 2023; Basiri, 2024), while financial stress, mental health, and wellbeing affect educational outcomes (Liu and Fu, 2022; Nasr et al., 2024; Wagner et al., 2022). The study supports SDG 8 – Decent Work and Economic Growth through its connection to Human Capital Theory (Gary Becker, 1964), which views education as an investment in productivity and economic opportunity. Improving school attendance among 4Ps beneficiaries can support long-term employability, skills development, and socioeconomic mobility. It further contributes to SDG 10 – Reduced Inequalities by focusing on marginalized learners and families who experience poverty-related barriers to schooling. The study's concern with equitable access to education, social welfare support, health-related support, and family support reflects the need to reduce educational disadvantage among vulnerable households. The study also connects with SDG 16 – Peace, Justice, and Strong Institutions because it can inform policy implementation, monitoring, governance, and institutional coordination among schools, DepEd, DSWD, LGUs, and community stakeholders. Finally, it supports SDG 17 – Partnerships for the Goals because the proposed solution depends on collaboration among educators, parents, social workers, healthcare providers, local government units, and community organizations.

The study contributes to educational sustainability by generating evidence on how schools and stakeholders can sustain attendance among 4Ps beneficiaries through coordinated academic, family, social welfare, and health-related support. This is important because absenteeism and dropout risks cannot be addressed effectively through financial assistance alone. It also contributes to socio-economic sustainability by examining how school participation among poor households can support human capital development, long-term employability, and poverty reduction. The findings may help strengthen programs that prevent educational exclusion and promote future economic participation among disadvantaged learners. The study supports public health sustainability because it recognizes that student attendance is affected by health, nutrition, emotional wellbeing, and access to health-related services. By including health-related support within the multidisciplinary approach, the study promotes a more integrated understanding of learner development. In terms of policy and governance sustainability, the study may assist DepEd, DSWD, LGUs, school heads, and teachers in designing coordinated interventions, strengthening compliance monitoring, improving community-based support, and addressing gaps in program implementation. It also contributes to institutional sustainability by providing localized evidence that may guide school-based programs, social welfare services, and stakeholder partnerships. Finally, the study contributes to community sustainability by emphasizing shared responsibility in addressing non-attendance. It recognizes that parents, learners, teachers, schools, social workers, health providers, and community stakeholders must work together to create supportive conditions for regular schooling. Through this multidisciplinary perspective, the study advances a more holistic and sustainable response to the educational needs of 4Ps beneficiary students in Masbate City.

2. Material and methods

2.1 Research Design

The study used a quantitative descriptive–correlational research design to determine the effectiveness of the multi-disciplinary approach in addressing the non-attendance of Pantawid Pamilyang Pilipino Program (4Ps) beneficiary students in Masbate City. The descriptive component described the profile of parent-respondents in terms of age, sex, civil status, educational attainment, occupation, monthly income, number of children, and number of children beneficiaries under the 4Ps program. It also described the multi-disciplinary approaches used in terms of academic support, family support, social welfare support, and health-related support, as well as their perceived effectiveness in improving school attendance, academic performance, parental involvement, and behavioral adjustment. The correlational component examined whether a significant relationship existed between the effectiveness of the multi-disciplinary approach and the factors affecting school non-attendance. These factors were categorized as socio-economic, family-related, school-related, personal, and community factors. According to Creswell and Creswell (2018), quantitative descriptive research designs are appropriate when the objective is to systematically describe existing conditions and perceptions as they naturally occur, while correlational designs are suitable for determining the degree of relationship between variables. Similarly, Ary et al. (2019) emphasized that descriptive–correlational research is appropriate in educational and social research when the purpose is to describe variables and examine associations without manipulating them.

2.2 Locale of the Study

The study was conducted in Masbate City, the provincial capital of Masbate and popularly known as the “Home of Philippine Rodeo.” Masbate is located near the center of the Philippine archipelago and consists of the major islands of Masbate, Ticao, and Burias. Historically, Masbate was mentioned in early Spanish colonial records and later identified as Masbate in 1582 (CityofMasbate.gov.ph). It is politically part of the Bicol Region and is described as a province located between the Visayas and Luzon Island groups (Masbate-Wikipedia). Masbate City is located at the center of the Philippine archipelago and serves as the province’s center for education, trade, governance, and services. According to the 2020 Census of Population and Housing of the Philippine Statistics Authority, Masbate City has a population of 104,522 distributed among approximately 22,000 households. The study covered selected barangays representing both urban and rural communities, namely Anas, B. Titong, Bagumbayan, Bantigue, Bapor, Bayombon, Biyong, Cagay, Cawayan Exterior, Espinosa, F. Magallanes, Ibingay, Kinamaligan, Malinta, Mayngaran, Nursery, Pawa, Sinalongan, and Tugbo. These areas provided the setting for examining the educational, social, and economic conditions affecting 4Ps beneficiary students and their families.

2.3 Respondents of the Study

The respondents were parents of beneficiary students under the Pantawid Pamilyang Pilipino Program (4Ps) in Masbate City. They were selected because they directly monitor, guide, and support their children’s schooling and compliance with program conditions, particularly regular school attendance. As primary caregivers, they were considered suitable sources of information because they could observe the challenges faced by their children and assess the effectiveness of interventions provided by schools, social workers, health professionals, and community stakeholders.

2.4 Sample and Sampling Procedure

The study employed purposive sampling. Respondents were deliberately selected based on criteria aligned with the objectives of the study. Specifically, the participants were parents with children currently identified as 4Ps beneficiaries and who had encountered school attendance-related concerns. This ensured that the respondents had direct knowledge and experience regarding attendance issues, interventions received, and challenges encountered by their families. Purposive sampling was considered appropriate because the study focused on individuals who were knowledgeable about the phenomenon under investigation. According to Creswell and Creswell (2018), purposive sampling allows researchers to intentionally select participants who can best provide information related to the central issue being studied. Similarly, Saunders, Lewis, and Thornhill (2019) emphasized that purposive sampling is suitable when the objective is to gather relevant and reliable data from a specific group rather than to generalize findings to a broader population. A total of fifty-seven (57) survey questionnaires were distributed to the selected respondents, and all were retrieved, resulting in a 100% retrieval rate.

2.5 Research Instrument

The primary data-gathering instrument was a researcher-made structured survey questionnaire. It was developed based on the objectives of the study, related literature on school attendance, multi-disciplinary interventions, social protection programs, and existing instruments used in evaluating attendance-related interventions among beneficiaries of the Pantawid Pamilyang Pilipino Program (4Ps). The questionnaire was organized to gather data on the demographic profile of the respondents, the effectiveness of the multi-disciplinary approach, factors affecting school non-attendance, and suggested measures to improve attendance among 4Ps beneficiary students in Masbate City. The first part gathered demographic data, including age, sex, civil status, educational attainment, occupation, monthly income, number of children, and number of

children beneficiaries under the 4Ps program. The second part measured the multi-disciplinary approaches used to address non-attendance in terms of academic support, family support, social welfare support, and health-related support. The third part assessed the effectiveness of the approach in improving school attendance, academic performance, parental involvement, and behavioral adjustment. The fourth part identified socio-economic, family-related, school-related, personal, and community factors affecting school non-attendance. The fifth part gathered suggested measures such as enhanced feeding programs, regular tutorials, parental monitoring, home visits, health services, and strengthened stakeholder collaboration. The instrument used a four-point Likert scale with the responses Strongly Agree, Agree, Disagree, and Strongly Disagree. Before administration, the questionnaire was validated by experts in education, social work, and research methodology to ensure clarity, relevance, and alignment with the study objectives. Revisions were made based on the validators' comments to improve the wording, sequencing, and organization of the items.

2.6 Data Gathering Procedure

The research process followed a systematic procedure. First, the researcher submitted a research capsule to the adviser for review and approval. The capsule included the proposed title, statement of the problem, theoretical background, respondents and sampling plan, research design, and possible sources of data. Comments and suggestions from the adviser were incorporated to improve the study. After the title and proposal were approved, the researcher developed the structured questionnaire and subjected it to expert validation. Revisions were made based on the validators' feedback. A formal permission letter, duly noted by the research adviser, was then prepared and submitted to the Regional Director of Legazpi City. The letter was addressed to the school heads of selected public schools in Masbate City where children of Pantawid Familyang Pilipino Program (4Ps) beneficiaries were enrolled, requesting approval to administer the questionnaire to the parents of 4Ps beneficiary students. Upon approval, the researcher personally administered the validated questionnaires to the selected respondents. Instructions were explained clearly to ensure proper understanding. The accomplished questionnaires were retrieved on the same day, resulting in a 100% retrieval rate. After data collection, the responses were encoded, recorded, and tabulated. An expert statistician assisted in the analysis and interpretation of the data using appropriate statistical tools.

2.7 Data Analysis Techniques

The data were encoded, tabulated, and analyzed using appropriate statistical tools. Frequency count and percentage were used to describe the demographic profile of the parent-respondents. Weighted mean and ranking were employed to determine the multi-disciplinary approaches used, the aspects perceived as most effective, the level of effectiveness of the approach, the factors affecting school non-attendance, and the suggested measures to improve attendance. To determine whether a significant relationship existed between the effectiveness of the multi-disciplinary approach and the factors affecting school non-attendance, the Pearson Product-Moment Correlation Coefficient (r) was computed at the 0.05 level of significance. All statistical analyses were interpreted using the established adjectival and verbal interpretations consistent with the study's rating scales.

3. Results and Discussion

3.1 Main Findings on Respondent Profile and Multi-Disciplinary Support

3.1.1 Demographic Profile of the Parent-Respondents

The study involved 57 parent-respondents. Most were 55 years old and above, with 39 respondents or 68.42%, followed by 10 respondents or 17.54% aged 45–54 years old, and 8 respondents or 14.04% aged 35–44 years old. In terms of sex, 52 or 91.23% were female, while 5 or 8.77% were male. Most respondents were married, with 46 or 80.70%, while 11 or 19.30% were widowed. For educational attainment, 31 or 54.39% were elementary graduates, 19 or 33.33% were high school graduates, 4 or 7.02% reached high school level, and 3 or 5.26% reached elementary level. In terms of occupation, 19 or 33.33% were farmers, 15 or 26.32% were fisherfolk, 14 or 24.56% were housekeepers, and 9 or 15.79% were vendors. Most respondents had a monthly income below ₱5,000, with 47 or 82.46%, while 10 or 17.54% earned ₱5,000–₱9,999. Most also had large families, with 28 or 49.12% having 7–10 children, 18 or 31.58% having 11 children and above, and 11 or 19.30% having 4–6 children. In terms of children-beneficiaries, 53 or 92.98% had 2–3 children-beneficiaries, while 4 or 7.02% had 1 child-beneficiary. These findings show that the parent-respondents generally came from low-income households with large family sizes and limited educational attainment. The predominance of older caregivers may affect school support because older caregivers often rely on experience-based parenting but may also face physical and economic constraints (UNICEF, 2019). The predominance of female respondents suggests that mothers are more actively involved in school-related matters, especially in low-income households (UNESCO, 2018). The high proportion of married respondents may indicate more stable family structures, which are associated with better monitoring of schooling and attendance (Amato, 2014). However, the limited educational background of many parents may restrict their ability to provide academic assistance, increasing the need for school-based and external support (World Bank, 2020). Their engagement in farming, fishing, and domestic work also reflects livelihood demands that may reduce time and energy for school supervision (ILO, 2017). The presence of multiple beneficiary children further reflects the role of conditional cash

transfer programs in supporting households with several school-aged children (Department of Social Welfare and Development, 2021).

3.1.2 Multi-Disciplinary Approaches Utilized

In terms of academic support, the overall weighted mean was 3.04, interpreted as strongly agree. Academic monitoring had the highest rating, with a weighted mean of 3.37, followed by school programs that help improve academic performance, with 3.35. Remedial or tutorial sessions received 2.93, coordination with other professionals received 2.86, and provision of learning materials received 2.67. For family support, the overall weighted mean was 3.23, also interpreted as strongly agree. Regular parent-teacher communication ranked highest, with a weighted mean of 3.33, followed by parenting seminars at 3.25, family counseling at 3.23, home visits at 3.19, and parental guidance at 3.16. For social welfare support, the overall weighted mean was 3.67, interpreted as strongly agree. Coordination between social workers and schools ranked highest at 3.81, followed by monitoring of school attendance at 3.75, cash grant motivation at 3.68, support for social or financial difficulties at 3.60, and community programs at 3.53. For health-related support, the overall weighted mean was 3.11, interpreted as strongly agree. Feeding programs ranked highest at 3.68, followed by health awareness programs at 3.07, medical assistance at 3.00, and health checkups and coordination with health professionals, both at 2.89. These findings indicate that academic, family, social welfare, and health-related supports were all perceived as useful in addressing school non-attendance among 4Ps beneficiary students. Academic support reflects the value of remedial instruction, learning materials, and monitoring in reducing absenteeism and improving engagement among disadvantaged learners (OECD, 2019). Family support highlights the importance of parental engagement, home visits, and regular communication with teachers in improving attendance and school persistence (Hill & Tyson, 2009). Social welfare support received the strongest rating, suggesting that attendance monitoring, school-social worker coordination, cash grants, and community assistance are highly valued in helping poor families sustain school participation; this aligns with evidence that conditional cash transfers and coordinated monitoring improve attendance among poor households (World Bank, 2017). Health-related support also emerged as important because feeding programs, health awareness, and medical assistance help reduce health-based causes of absenteeism, consistent with findings that health and nutrition support improve attendance and learning capacity among vulnerable children (World Health Organization, 2020).

3.1.3 Most Effective Aspects of the Multi-Disciplinary Approach

Among the four dimensions of the multi-disciplinary approach, social welfare support was perceived as the most effective, with a weighted mean of 3.67. This was followed by family support with 3.23, health-related support with 3.11, and academic support with 3.04. The overall weighted mean was 3.26, interpreted as strongly agree and rated as highly effective. This result shows that while all dimensions were perceived as effective, social welfare support was viewed as the most influential in responding to the needs of 4Ps beneficiaries. This suggests that the combination of social worker monitoring, school coordination, cash grants, and community assistance directly addresses barriers that prevent students from attending school regularly. The result supports global evaluations showing that integrated education, health, and financial assistance produce stronger attendance outcomes than single-sector interventions (Bastagli et al., 2016).

3.2 Effectiveness of the Multi-Disciplinary Approach

3.2.1 Effectiveness in Improving School Attendance

The multi-disciplinary approach was rated strongly agree in terms of improving school attendance, with an overall weighted mean of 3.49. The highest-rated indicator was that the approach encourages students to attend classes, with a weighted mean of 3.74. This was followed by addressing barriers to attendance at 3.56, improving school attendance at 3.53, reducing absenteeism at 3.51, and monitoring attendance at 3.14. These findings indicate that the approach helped encourage learners to attend classes and address common attendance barriers. The coordinated involvement of teachers, parents, social workers, health professionals, and community members appears to support regular school participation. This finding supports evidence that coordinated school-family-community strategies effectively remove attendance barriers (UNICEF, 2021).

3.2.2 Effectiveness in Improving Academic Performance

The approach was also rated strongly agree in terms of academic performance, with an overall weighted mean of 3.09. The respondents strongly agreed that the approach improves academic performance, tutorials and resources enhance learning, and the approach motivates students to study better, each with a weighted mean of 3.16. They agreed that teachers and workers provide needed academic support, and that collaboration helps solve academic problems, both with a weighted mean of 2.98. This result suggests that the multi-disciplinary approach supports academic improvement by combining instructional support, tutorials, learning resources, and collaborative problem-solving. Although some indicators were rated only agree, the overall interpretation still shows that the approach contributes positively to learning outcomes. This aligns with studies indicating that multi-sector collaboration enhances learning outcomes by addressing both academic and non-academic constraints (Adelman & Taylor, 2015).

3.2.3 Effectiveness in Strengthening Parental Involvement

The approach was rated strongly agree in terms of parental involvement, with an overall weighted mean of 3.07. Parents monitoring school attendance received the highest weighted mean of 3.12, followed by parents becoming more aware of their role in schooling at 3.09, strengthening parental involvement at 3.07, improving school-parent communication at 3.05, and encouraging school support through parenting sessions at 3.00. These findings show that the approach helped improve parents' participation in monitoring attendance, communicating with teachers, and supporting learning at home. The result emphasizes that parent engagement is an essential element in reducing absenteeism among 4Ps beneficiary students. This supports research showing that structured parenting programs and regular school communication increase parents' educational engagement (Epstein, 2011).

3.2.4 Effectiveness in Supporting Behavioral Adjustment

The approach received an overall weighted mean of 2.99 in terms of behavioral adjustment, interpreted as agree. The highest-rated indicator was support for emotional adjustment, with a weighted mean of 3.02. Students showing better discipline and cooperation and the approach reducing misbehavior both received 3.00. The approach improving student behavior and counseling addressing behavior issues both received 2.96. This result indicates that the approach had a positive but comparatively lower effect on behavioral adjustment than on attendance, academic performance, and parental involvement. It suggests that counseling, guidance, teacher support, parental support, and social worker assistance help students improve discipline, cooperation, and emotional regulation, but behavioral concerns may require more sustained intervention. The positive effect on behavior is supported by evidence that counseling and psychosocial support improve emotional regulation and discipline among at-risk students (American Psychological Association, 2019).

3.3 Factors Affecting School Non-Attendance

3.3.1 Socio-Economic Factors

Socio-economic factors received an overall weighted mean of 3.42, interpreted as strongly agree. Lack of money preventing students from attending school regularly received the highest weighted mean of 3.86, followed by poverty limiting students' ability to buy school needs at 3.84, financial problems as the main reason for non-attendance at 3.63, lack of transportation allowance at 2.89, and the need to help earn income for the family at 2.88. These findings show that poverty and lack of financial resources remain major causes of school non-attendance among 4Ps beneficiary students. The results suggest that families may struggle to provide school supplies, uniforms, transportation, and other school-related needs, which can prevent regular attendance. The strong influence of poverty supports extensive research identifying financial hardship as the primary driver of absenteeism among marginalized learners (World Bank, 2018).

3.3.2 Family-Related Factors

Family-related factors received an overall weighted mean of 2.82, interpreted as agree. Family conflicts discouraging students from going to school received the highest weighted mean of 3.63, followed by household chores preventing attendance at 3.00, lack of parental support at 2.79, parents' absence or neglect at 2.54, and weak parental monitoring of school attendance at 2.12. These findings indicate that home conditions affect school attendance, particularly when learners experience family conflict, household responsibilities, limited parental support, or weak monitoring. Although the overall result was lower than other factor categories, it still shows that family dynamics contribute to absenteeism. Family conflict and household responsibilities affecting attendance align with studies showing that unstable home environments reduce students' school participation (Conger et al., 2010).

3.3.3 School-Related Factors

School-related factors received an overall weighted mean of 3.26, interpreted as strongly agree. Bullying was the highest-rated factor, with a weighted mean of 3.89, followed by strict teachers at 3.79, lack of school facilities at 3.23, negative relationships with teachers at 3.21, and poor teaching strategies at 2.18. This result suggests that school climate strongly affects attendance among 4Ps beneficiary students. Bullying, strict disciplinary practices, inadequate facilities, and poor teacher-student relationships may discourage learners from attending classes. The strong effect of bullying and strict discipline supports evidence that unsafe and unsupportive school climates significantly increase absenteeism (UNESCO, 2019).

3.3.4 Personal Factors

Personal factors received an overall weighted mean of 3.66, interpreted as strongly agree. Lack of interest in studying received the highest weighted mean of 3.82. Peer influence and health problems both received 3.81, followed by laziness or lack of motivation at 3.77 and poor study habits at 3.09. These findings indicate that students' personal motivation, peer relationships, health condition, and study habits significantly influence attendance. The results suggest that absenteeism is not caused only by poverty or school conditions but also by individual attitudes, choices, and well-being. The role of motivation, health, and peer influence is consistent with findings that individual attitudes and well-being strongly predict attendance behavior (Kearney, 2016).

3.3.5 Community Factors

Community factors received the highest overall weighted mean among the factor categories, with 3.78, interpreted as strongly agree. Unsafe community environment and distance from home to school both received the highest weighted mean of 3.86. Peer groups in the community received 3.79, local issues such as drugs and early relationships received 3.72, and lack of community support received 3.67. These findings show that external community conditions strongly affect school attendance. Unsafe surroundings, long travel distance, peer influence, local social issues, and limited community support can prevent students from attending school regularly. The impact of unsafe environments and distance to school supports studies showing that community safety and accessibility are critical determinants of school attendance (UNICEF, 2020).

3.4 Relationship Between the Effectiveness of the Multi-Disciplinary Approach and Factors Affecting Non-Attendance

The computed r-value was 0.58, indicating a moderate positive linear relationship between the effectiveness of the multi-disciplinary approach and the factors affecting the school non-attendance of 4Ps beneficiaries. With a significance level of 0.05 and a critical r-value of ± 0.2609 , the computed r-value was greater than the critical value. Therefore, the null hypothesis was rejected, and the relationship was found to be statistically significant. This finding suggests that stronger implementation of the multi-disciplinary approach is associated with better mitigation of the factors affecting school non-attendance. In practical terms, effective academic, family, social welfare, health, and community support can help reduce barriers that cause absenteeism. The significant moderate positive relationship confirms systems-based research demonstrating that stronger multi-disciplinary interventions are associated with reduced attendance barriers and improved school participation (Bronfenbrenner, 1979).

3.5 Suggested Measures to Improve School Attendance

The suggested measures received an overall weighted mean of 3.89, interpreted as strongly agree. The highest-rated measure was the implementation of feeding programs to encourage daily attendance, with a weighted mean of 3.95. This was followed by regular health checkups and medical support at 3.93, regular tutorials and close collaboration among schools, social workers, and health professionals, both at 3.89, stronger parental monitoring at 3.88, and regular home visits by teachers and social workers at 3.82. These findings indicate that respondents strongly supported practical, coordinated, and needs-based measures to improve school attendance. Feeding programs and health services were prioritized, showing that learners' basic health and nutrition needs are closely linked to school participation. Tutorials, parental involvement, home visits, and inter-agency collaboration were also viewed as important strategies for sustaining attendance. The strong agreement with proposed measures supports evidence that feeding programs, health services, parental involvement, and inter-agency collaboration are among the most effective strategies for improving attendance among poor learners (World Food Programme, 2021).

4 Conclusion & Recommendations

The study concludes that the parent-respondents were mostly older, female, married, elementary graduates, engaged mainly in farming, earning below ₱5,000 monthly, and supporting two to three 4Ps child-beneficiaries, reflecting socio-economic conditions that may affect children's school attendance. The multi-disciplinary approach was found effective in addressing the non-attendance of 4Ps beneficiary students in Masbate City through academic support, family engagement, social welfare coordination, health assistance, improved school attendance, academic performance, parental involvement, and behavioral adjustment. However, school non-attendance remained influenced by interconnected socio-economic, family, school, personal, and community factors, particularly poverty, unsafe environments, low motivation, bullying, family conflicts, and health-related concerns. The significant moderate positive relationship between the effectiveness of the multi-disciplinary approach and the factors affecting non-attendance supports the need to institutionalize coordinated systems involving teachers, guidance counselors, social workers, health professionals, barangay officials, parents, and other stakeholders.

Based on the findings, schools should implement regular feeding programs for 4Ps beneficiaries with high absenteeism records, conduct quarterly health checkups in partnership with local health units, maintain student health records, and establish attendance tracking mechanisms where students with three consecutive absences or five absences in a month are flagged for parent notification, counseling, or home visitation. Parents of frequently absent students should attend conferences or parenting seminars on attendance monitoring, positive discipline, and academic support, while schools should address bullying through anonymous reporting systems, peer mentoring, and classroom guidance sessions. Local government units may provide transportation allowances, bicycle distribution, or school supply kits, while schools may conduct values formation sessions, peer mentoring groups, and attendance recognition systems to address low motivation. Teachers, social workers, barangay officials, health personnel, and school heads should also conduct coordinated home visits, ensure safe routes to school, monitor areas with negative peer influence, organize youth engagement activities, and hold monthly coordination meetings to review attendance data and evaluate interventions.

The study was limited to parents of 4Ps beneficiary students from selected public and private schools in the barangays of

Anas, B. Titong, Bagumbayan, Bantigue, Bapor, Bayombon, Biyong, Cagay, Cawayan Exterior, Espinosa, F. Magallanes, Ibingay, Kinamaligan, Malinta, Mayngaran, Nursery, Pawa, Sinalongan, and Tugbo. It did not cover other public elementary and secondary schools in Masbate City, and only 57 parents were included as respondents; therefore, the findings have limited generalizability but provide a focused analysis within the defined local context.

Compliance with ethical standards

The study was conducted in accordance with institutional ethical standards and proper research protocols, including the securing of approval and permission from concerned authorities before data gathering. Participation of the parent-respondents was voluntary, and informed consent was obtained prior to the administration of the questionnaire. The confidentiality and privacy of all information were observed, and the data gathered were used solely for academic and research purposes. The authors declare that there was no conflict of interest in the conduct of the study, and all contributions from the adviser, validators, respondents, school personnel, and other assisting individuals were properly acknowledged. Copyright ownership and authorship responsibility remain with the researcher/authors, and the work was prepared with due regard for ethical compliance, accuracy, and academic integrity.

REFERENCES

- Abnett, H., Tuckwell, R., & Evans, L. (2022). Early introduction of the multi-disciplinary team through student Schwartz Rounds: A mixed methodology study. *BMC Medical Education*, 22, Article 523. <https://doi.org/10.1186/s12909-022-03549-7>
- Abrol, S. (2023). Multidisciplinary approach: Impact on multicultural education of learners. *International Journal for Multidisciplinary Research*.
- Adelman, H. S., & Taylor, L. (2015). Immigrant children and youth in the USA: Facilitating equity of opportunity at school. *Education Sciences*, 5(4), 323–344. <https://doi.org/10.3390/educsci5040323>
- Aguado. (2021). *Implementation of Pantawid Pamilyang Pilipino Program (4Ps) in Barangay Talumpok, Batangas City*.
- Akbulut. (n.d.). *Educational and social aids financed by government budget and other public funds*.
- Amato, P. R. (2014). The consequences of divorce for adults and children: An update. *Društvena Istraživanja*, 23(1), 5–24. <https://doi.org/10.5559/di.23.1.01>
- American Psychological Association. (2019). *Guidelines for school-based mental health services*. American Psychological Association.
- Aranas et al. (2021). Academic performance of the Grade VIII Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries in Dipolog City Division South District. *International Journal of Trend in Scientific Research and Development*.
- Ary, D., Jacobs, L. C., Sorensen Irvine, C. K., & Walker, D. A. (2019). *Introduction to research in education* (10th ed.). Cengage Learning.
- Ayisi-Addo, A. K., & Biney, I. K. (2023). Lifelong learning from multi-disciplinary perspectives: Approaches and opportunities in the 21st century. In *Lifelong learning: Perspectives, opportunities and challenges* (pp. 191–214). Nova Science Publishers.
- Basiri. (2024). *Study on the effects of Pantawid Pamilyang Pilipino Program (4Ps) on human capital development*.
- Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). *Cash transfers: What does the evidence say? A rigorous review of programme impact and of the role of design and implementation features*. Overseas Development Institute.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Berlanga, V., & Corti, F. (2025). *Impact of scholarships on university academic performance: A comparative analysis of students with and without scholarships*.
- Blake, J. (1989). *Family size and achievement*. University of California Press.
- Bradecina, J. B. D., Campo, J. M., Leonardo, K. W. S., & Onsay, E. A. (2025). Impact evaluation of educational cash transfer programs on college students' academic performance in the Philippines. *Dynamics of Rural Society Journal*, 3(2), 122–142. <https://doi.org/10.37905/drsj.v3i2.81>
- Briñosa et al. (2025). *Pantawid Pamilyang Pilipino Program, human capital investments, parents' attitude and learners' academic performance*.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bumanglag et al. (2024). *Impact of students' grants-in-aid program for poverty alleviation to the beneficiaries of San Roque, Peñablanca, Cagayan*.
- Bustos, M., Lau, L. L., Kirkpatrick, S. I., Dubin, J. A., Manguerra, H., & Dodd, W. (2023). Examining the association between household enrollment in the Pantawid Pamilyang Pilipino Program (4Ps) and wasting and stunting status among children experiencing poverty in the Philippines: A cross-sectional study. *Asia Pacific Journal of Public Health*, 35(6–7), 420–428. <https://doi.org/10.1177/10105395231189570>

- Cansancio. (2024). Academic performance of the learners-beneficiaries of Pantawid Pamilyang Pilipino Program (4Ps) in La Union Elementary School, Hagonoy, Davao del Sur. *International Journal of Advanced Multidisciplinary Studies*.
- Chauke. (2024). *Teacher intervention strategies on reducing youth violent behaviour in one historically disadvantaged school: A multi-disciplinary approach*.
- Chilewa, E. A., & Osaki, K. M. (2022). The effectiveness of guidance and counseling practices on students' career development in secondary schools in Temeke Municipality.
- City Government of Masbate. (n.d.). *About us*. <https://cityofmasbate.gov.ph/about-us/>
- Colinares. (2024). Implementation of the Pantawid Pamilyang Pilipino Program (4Ps) on the academic achievement among learner-beneficiaries. *International Journal of Trend in Scientific Research and Development*, 8(4), 334–366.
- Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family*, 72(3), 685–704. <https://doi.org/10.1111/j.1741-3737.2010.00725.x>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- De Jesus, F. S., & Villanueva, W. (2023). The satisfaction level of the beneficiaries of Pantawid Pamilyang Pilipino Program (4P's). *American Journal of Society and Law*, 2(2), 29–37. <https://doi.org/10.54536/ajsl.v2i2.1535>
- De Regla, & Santos, Jr. (2025). *Tradition and transition: Climate change adaptation among 4Ps communities of Bustos, Bulacan, Philippines*.
- Dela Cruz, M. A. (2022). Barriers to school attendance among Pantawid Pamilyang Pilipino Program (4Ps) beneficiary students in rural communities. *Philippine Journal of Education and Development*, 47(2), 112–126.
- Department of Education. (2013, September 24). *Implementing rules and regulations of Republic Act No. 10533, otherwise known as the Enhanced Basic Education Act of 2013*. Department of Education.
- Department of Social Welfare and Development. (2021). *Pantawid Pamilyang Pilipino Program (4Ps) annual report*. Department of Social Welfare and Development.
- Department of Social Welfare and Development. (n.d.). *Pantawid Pamilyang Pilipino Program (4Ps)*. Department of Social Welfare and Development.
- Diaz. (2025). *Assessing the economic impact of the Pantawid Pamilyang Pilipino Program (4Ps) in the Philippines: A systematic review*.
- Enderle et al. (2025). *Their voices matter: Student and professional perspectives on overcoming school attendance problems in the context of social, emotional, and behavioral difficulties*.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Westview Press.
- Farquharson et al. (2025). *Identifying and de-implementing low-value practices in education: A multi-disciplinary approach for district and school leaders*.
- Flores, M. J. S., Espinoza, C. A. B., Enrico, H. C., & Casimiro, R. R. (2019). Pantawid Pamilyang Pilipino Program (4Ps): Its effect on the academic performance of student-beneficiaries in Calaba National High School in the Philippines. *Journal of Public Administration and Governance*, 9(2), 193–208. <https://doi.org/10.5296/jpag.v9i2.14762>
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment. *Developmental Psychology*, 45(3), 740–763. <https://doi.org/10.1037/a0015362>
- International Labour Organization. (2017). *Global estimates of child labour: Results and trends, 2012–2016*. International Labour Office.
- Kearney, C. A. (2016). *Managing school absenteeism at multiple tiers: An evidence-based and practical guide for professionals*. Oxford University Press. <https://doi.org/10.1093/med:psych/9780199985296.001.0001>
- Kobashi, Y., Shimazu, Y., Sonoda, Y., Saito, H., Yoshida, M., & Tsubokura, M. (2022). Maturing of public-private-people partnership (4P): Lessons from 4P for triple disaster and subsequently COVID-19 pandemic in Fukushima. *Journal of Global Health*, 12, Article 03028. <https://doi.org/10.7189/jogh.12.03028>
- Kurniawan, Maulana, A., & Iskandar, Y. (2023). The effect of technology adaptation and government financial support on sustainable performance of MSMEs during the COVID-19 pandemic. *Cogent Business & Management*, 10(1), Article 2177400. <https://doi.org/10.1080/23311975.2023.2177400>
- Labitad, & Ganzan. (2025). *Pantawid Pamilyang Pilipino Program and district school performance*.
- Langner, G., Furnell, S., Quirchmayr, G., & Skopik, F. (2023). A comprehensive design framework for multi-disciplinary cyber security education. In *Human aspects of information security and assurance* (pp. 105–115). Springer. https://doi.org/10.1007/978-3-031-38530-8_9
- LawPhil. (n.d.). *Republic Act No. 11310: An Act Institutionalizing Pantawid Pamilyang Pilipino Program (4Ps)*. https://lawphil.net/statutes/repacts/ra2019/ra_11310_2019.html
- Lien, D., & Miao, L. (2023). International student mobility to China: The effects of government scholarship and Confucius Institute. <https://doi.org/10.1177/2212585X231213787>
- Liu, B., & Fu, S. (2022). Perceived poverty and life satisfaction in college students with impoverished backgrounds: The mediating role of self-esteem. *Psychology Research and Behavior Management*, 15, 327–337. <https://doi.org/10.2147/PRBM.S349907>

- Lluz. (2020). Surviving and quitting: The case of 4Ps (Pantawid Pamilyang Pilipino Program) student dropouts. *International Journal of Research*.
- Londoño-Velez, J., et al. (2023). *Financial aid and upward mobility: Evidence from Colombia's Ser Pilo Paga*.
- Lusardi, A., & Messy, F. A. (2023). The importance of financial literacy and its impact on financial wellbeing.
- Maghiar, M., & Brown, C. (2022). *A qualitative multi-disciplinary analysis of employers' technology competency perceptions for graduates' readiness to the workforce*.
- Malinao. (2025). *The academic performance of Pantawid Pamilyang Pilipino Program (4Ps) elementary children of Zumarraga, Samar*.
- Masbate. (n.d.). In *Wikipedia*. Retrieved June 5, 2026, from <https://en.wikipedia.org/wiki/Masbate>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Mccambly et al. (2024). *Constructing an educational "quality" crisis: (E)quality politics and racialization beyond target beneficiaries*.
- Merano. (2025). 4P's program and the academic performance of beneficiaries and non-beneficiaries elementary pupils in Cabulisan Elementary School, Inopacan District. *International Journal of Research and Innovation in Social Science*.
- Nasr, R., Rahman, A. A., Haddad, C., Nasr, N., Karam, J., Hayek, J., Ismael, I., Swaidan, E., Salameh, P., & Alami, N. (2024). The impact of financial stress on student wellbeing in Lebanese higher education. *BMC Public Health*, 24, Article 1809. <https://doi.org/10.1186/s12889-024-19312-0>
- Nugroho, S., Listyaningsih, U., & Pitoyo, A. J. (2023). Expectations of educational continuity among beneficiary families of the Indonesian Conditional Cash Transfer (PKH): A case study in Tabuan Island, Tanggamus Regency. *Populasi*, 31(2). <https://doi.org/10.22146/jp.92552>
- OECD. (2019). *Education at a glance 2019: OECD indicators*. OECD Publishing.
- Omaeng. (2022). *Perceived factors affecting academic performance of Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries of Apayao State College*.
- Orbeta, A. C., Jr., & Paqueo, V. B. (2016). *Pantawid Pamilyang Pilipino Program: Boon or bane?* Philippine Institute for Development Studies.
- Organo. (2023). *Impact of the Pantawid Pamilyang Pilipino Program to the education, health and nutrition status of learner-beneficiaries in the Third Congressional District of Quezon*.
- Parreño, N. H., & Eslabon, D. E. (2022). Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries: An analysis of their satisfaction levels. *International Journal of Multidisciplinary Research and Analysis*, 5(1). <https://doi.org/10.47191/ijmra/v5-i1-01>
- Philippine Constitution. (1987). *The 1987 Constitution of the Republic of the Philippines*. Official Gazette.
- Puracan et al. (2024). *Traversing poverty alleviation initiatives: A comparative analysis of the welfare card system in Thailand and Pantawid Pamilyang Pilipino Program (4Ps) in the Philippines*.
- Qi, S., Ma, Q., & Ji, X. (2022). The influence of financial aid systems on student academic development in higher education in China. *Sustainability*, 14(21), Article 14068. <https://doi.org/10.3390/su142114068>
- Rai. (2020). Impact of multidisciplinary approach among the students with reference to New Education Policy 2020. *A Global Journal of Humanities*.
- Rapist, & Pañares. (2023). *Implementation of 4P's cash grant and student-beneficiaries academic performance*.
- Refworld. (2013, May 15). *Philippines: Republic Act No. 10533 of 2013, Enhanced Basic Education Act*. <https://www.refworld.org/docid/51f4c7c44.html>
- Ren, & Zhao. (2025). *Support vector regression-based estimate of student absenteeism rate*.
- Reyes, C. M., Tabuga, A. D., Mina, C. D., & Asis, R. D. (2015). *Promoting inclusive growth through the 4Ps* (Discussion Paper Series No. 2015-12). Philippine Institute for Development Studies.
- Riveral et al. (n.d.). *The perceived effectiveness of Pantawid Pamilyang Pilipino Program towards increasing performance indicators*.
- Salva, M., Ganir, F. D., Lacanilao, R. B. T., Simon, J. R. D., Torres, G. D. B., Yadao, M. E. G. P., & Calimag, V. P. M. (2023). Pantawid Pamilyang Pilipino Program: An assessment. *International Journal of Research Studies in Education*, 12(3), 1–16. <https://doi.org/10.5861/ijrse.2023.1001>
- Santos, J. R., & Ramos, K. D. (2021). A holistic approach to reducing dropout among disadvantaged learners: Lessons from Philippine public schools. *Asian Journal of Education and Social Studies*, 14(3), 45–57.
- Sasaki et al. (2019). *A study on attendance, academic performance and completion rate for the Pantawid Pamilyang Pilipino Program recipients in a selected secondary school*.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Semanero. (2025). *Beyond the cash transfer: The 4Ps' ripple on family welfare and students' academic achievement*.
- Shanableh et al. (2022). *Challenges and opportunities of multi-disciplinary, inter-disciplinary and trans-disciplinary research*.
- Singh, H. P., & Alhulail, H. N. (2022). Predicting student-teachers dropout risk and early identification: A four-step logistic regression approach. *IEEE Access*, 10, 6470–6482. <https://doi.org/10.1109/ACCESS.2022.3141992>

- Talimio, P. J. M. G., & Salagubang, M. R. M. (2022). Effectiveness of Pantawid Pamilyang Pilipino Program (4Ps) on Filipina women empowerment in Barangay 211, Zone 19, Lico Street, Tondo Manila. *Antorcha*, 7(1).
- Tan, & Restauero. (2021). *Pantawid Pamilyang Pilipino Program (4P's) and the academic performance of the beneficiaries*. UNESCO. (2018). *Global education monitoring report: Gender review*. UNESCO Publishing.
- UNESCO. (2019). *Behind the numbers: Ending school violence and bullying*. UNESCO Publishing.
- UNICEF Philippines. (n.d.). *The Philippines was one of the first countries to ratify the CRC in August 1990*. UNICEF Philippines.
- UNICEF. (2019). *The state of the world's children 2019: Children, food and nutrition*. UNICEF.
- UNICEF. (2020). *COVID-19: Are children able to continue learning during school closures?* UNICEF.
- UNICEF. (2021). *Reimagining education: Education recovery after COVID-19*. UNICEF.
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
- Vasojević. (2022). *International students, beneficiaries of the state scholarships of the Republic of Serbia and their education in the 21st century*.
- Villamater. (2021). COVID-19 pandemic: Effect on academic performance of 4P's Grade 7 students. *International Journal of Research*.
- Villanueva, L. P. (2020). The role of multi-disciplinary support systems in improving school attendance of at-risk students. *International Journal of Multidisciplinary Research and Education*, 6(1), 77–89.
- Vizcocho, D. J. D. (2022). Problems encountered by school-based feeding program beneficiaries and their academic performance. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(4), 597–612. <https://doi.org/10.11594/ijmaber.03.04.12>
- Wagner, F., Wagner, R. G., Kolanisi, U., Makuapane, L. P. M., Masango, M., & Gómez-Olivé, F. X. (2022). The relationship between depression symptoms and academic performance among first-year undergraduate students at a South African university: A cross-sectional study. *BMC Public Health*, 22, Article 2067. <https://doi.org/10.1186/s12889-022-14517-7>
- Wei et al. (2022). Construction on teaching quality evaluation indicator system of multi-disciplinary team (MDT) clinical nursing practice in China: A Delphi study. *Nurse Education in Practice*.
- Wen, F., Mo, J., & Li, R. (2025). Application value of multi-disciplinary collaborative diagnosis and treatment combined with CBL teaching model in gynecological oncology practice teaching. *Frontiers in Medicine*, 11, Article 1468256. <https://doi.org/10.3389/fmed.2024.1468256>
- World Bank. (2017). *Conditional cash transfers and human development*. World Bank Group.
- World Bank. (2018). *Learning to realize education's promise*. World Bank Group.
- World Bank. (2020). *Ending learning poverty: What will it take?* World Bank Group.
- World Food Programme. (2021). *State of school feeding worldwide 2021*. World Food Programme.
- World Health Organization. (2020). *School health services*. World Health Organization.
- Xia. (2023). *The 4Ps of marketing and applications in various brands*.
- Yu, & Li. (2022). *Auxiliary judgment of financial aid for poor students based on improved K-means algorithm*.
- Zejniliović, E., Husukić, E., Pignatti, L., & Castellano-Pulido, F. J. (2023). An experiment of collaborative, international, multi-disciplinary design studio: Erasmus+ CBHE TACEESM project Summer School. *Archnet-IJAR: International Journal of Architectural Research*, 17(2). <https://doi.org/10.1108/ARCH-09-2022-0206>