

Effect of Conditional Cash Transfer Program on the Scholastic Performance of High School Students in Naga City

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ABSTRACT

Conditional cash transfer (CCT) programs, as for the Naga City, Philippines, includes the Pantawid Pamilyang Pilipino Program (4Ps) and Quality Elementary and High School Education in Naga (QUEEN), both aimed to help for students to have access in education and also improve its quality. The study sought to describe the effect of CCT programs on the scholastic performance of 237 students in a secondary school in Naga City, Philippines. Using a correlational descriptive design, the author analyzed the dropped-out rate and general weighted averages of students. Results revealed that CCT has no effect in reducing dropped out rate and no significant difference in academic performance among the beneficiaries and non-beneficiaries of the CCT.

Keywords — Conditional Cash Transfer, academic performance, descriptive design, Naga City, Philippines

INTRODUCTION

Education is the highest priority of the most government in the world. But, one of the urgent, pressing concerns inaccessibility to education. Although basic education is free and compulsory in most countries (World Policy Data Center, 2018), sadly, the achievement gap between children of families in the highest and lowest income groups has been widening steadily in recent years (Gegel, Lebedeva, & Frolova, 2015). The Philippines is no exception in this worldwide phenomenon. Although inequality in educational attainment declined from 1960 to 2000, there are wide discrepancies in the educational performance of regions and provinces (Masa, 2007). Thus, in 2007, the country piloted the Pantawid Pamilyang Pilipino Program or 4Ps (formerly Ahon Pamilyang Pilipino), a version of conditional cash transfer program here in the Philippines under the Department of Social Welfare and Development, patterned on programs in other developing countries like Brazil (Bolsa Familia), Colombia (Familias en Accion) and Mexico (Oportunidades) (Montilla, Delavin, Villanueva, & Turco, 2015). It aims to eradicate extreme poverty in the Philippines by investing in health and education, particularly in children from 0-18 years of age. In Naga City, Camarines Sur, even the nationwide implementation of the 4Ps, educational assistance to school children of low-income families are on a roll. City Ordinance Number 2007-045 institutionalizes the Quality Elementary and High School Education in Naga (QUEEN) program. It aims to ensure that all school children in Naga City will be able to access and complete elementary and high school education, especially the underprivileged or those coming from financially handicapped families in the city. For almost a decade, the program has been a flagship program that Naga City paraded all over the country as their effort to reach the Millennium Development Goals (Pabico, 2008).

These kinds of social dole out the program and its impact on education has been a subject of numerous studies. In a meta-analysis study of CCT programs in 47 countries, Garcia & Saadverda (2017) revealed that CCT has positive impacts on school enrolment, attendance, and school completion. Similar results were posted by Giang & Nguyen (2017), Pubra (2018) and Ferreira, Filmer & Schady (2017) and all agreed that the program should be maintained and targeting efficiency needs to be improved as the program has a meaningful effect for low-income households in terms of increasing student achievement. Studies of Barham, Macours, & Maluccio (2013) and Baez & Camacho (2011) revealed that those students had an average improvement on standardized tests and attained more school; however, no significant impact was found on cognition, consistent with

cognitive development taking place mostly during early childhood. Mo, Zhang, Yi, Luo, Rozelle, and Brinton (2013) published that the CCT program reduces dropout and is most effective among students with poor academic performance, and likely more effective among girls and younger students. On the contrary, Garza & Villareal (2007) reported that although participants in the CCT got lower test scores. Similarly, Dubois, De Janvry, & Sadoulet (2012) reported that CCT programs had a positive impact on school enrollment at all grade levels, but as to school performance, it had a positive impact at the primary school level but a negative impact at the secondary level. Also, Baird, Ferreira, Özler, & Woolcock (2014) found that cash transfers improve the odds of being enrolled in and attending school compared to no cash transfer program, but its effectiveness on improving test scores is small at best. These studies revealed mixed results, and these results seem to parallel with the studies conducted in the ASEAN and the Philippines. Studies of Montilla, Delavin, Villanueva, & Turco (2015) and Frufonga (2015) highlighted that 4Ps beneficiary children have more interest in school and more likely to attend regular classes as compared before the 4Ps implementation. Another study by Chaudhury & Okamura (2012) suggested that 4Ps had a strong and robust impact in improving education outcomes among younger children between 9-12 years old who were eligible for CCT education grants throughout 2008 and 2011, but 13-17 years old, the majority of whom are outside the age cut-off for CCT education grant eligibility, as suggested by insignificant coefficients across specifications, have inconsistent results. Tutor (2014) supported this by noting that the recent program modification of increasing education grants to older children and covering up to secondary school completion will help households sustain induced behavioral changes over time. Kyophilavong (2011) and Ferreira, Ferreira, Filmer, and Schady (2017) agreed that the number of children in a household should be considered because even the ineligible children in CCT programs due to age also needs assistance. Kostioukova (2011) strongly suggested the expansion of the CCT program up to secondary school students, since data show that it is the most vulnerable school age in terms of school drop-out.

Similar to the attempt of the above studies, this paper focus on the 4Ps beneficiaries. But adding to the mix are the beneficiaries of the local version of LGU, which is the QUEEN program. The study sought to describe to scholastic performance of students of the locale who are recipients of these programs. This undertaking attempts to add to the literature on CCT effects on high school students since most of the studies reviewed focused more on elementary students. This paper also seeks to help the implementing agencies of 4Ps to review their existing system for effective achievement results, especially in education.

FRAMEWORK

As for this study, it adopted the theory of change of conditional cash transfer on education (Baird, Ferreira, Özler, & Woolcock, 2014), extracted from a proposed systematic review comparing cash transfers (CT) effects on schooling outcomes. All forms of cash transfers (CT) constitute educational inputs and affect the demand for schooling, but CCTs do so through raising incomes and lowering the opportunity cost (price) of schooling. The CTs have impacts on the intermediate outcomes, and over time, on the final outcomes.

The 4Ps and QUEEN program represents the educational input as a form of CCT, using it as the independent variable of the study. In this theory, the authors postulated that all forms of CCT have effects on educational outcome, and this paper sought to establish that outcomes. The education outcome from the theory, which in this study is the scholastic performance of the students, serves as the dependent variable of the students. These outcomes included the over-all school year attendance and general weighted average. Further, the theory expands on extrinsic factors that affect the allocation of CCT directly to education, as these have an intervening effect on the final outcome of the education. As for this, the study also pierced the reasons how parents allocate their spending on education and why students dropped school, considering it as the intervening variable.

OBJECTIVES OF THE STUDY

The author described the effect of conditional cash programs such as 4Ps and QUEEN programs to the scholastic performance of Grade 7 students for the school year 2017-2018 in Tinago National High School, Naga City, Camarines Sur, Philippines. This study defined two sets of students, beneficiaries, and non-beneficiaries. Beneficiaries included the combined number of students who are recipients of 4Ps and QUEEN programs since both programs are similar in nature. Non-beneficiaries included students who are not recipients of any CCT programs mentioned. In this study, it specifically sought to determine the dropped-out rate of the beneficiaries and non-beneficiaries of conditional cash programs and determined the reasons for such. With a hypothesis that these recipients of conditional cash programs perform better than non-beneficiaries, the study also probed on the statistical difference of students' academic performance.

METHODOLOGY

Research Design

The present study utilized a correlational research design to investigate the association between the independent variable (4Ps and QUEEN membership) and the dependent variable (academic performance). The performance level of Grade 7 students was described. Moreover, the relationship between the active membership in the abovementioned programs and the performance of students was established.

Participants

The sample was 237 students which consisted of Grade 7 (first year) students from the official list of TNHS who were officially enrolled during the school year this research was conducted. Whole purposive sampling was used to since the researcher teaches at this grade level, which made the implementation of the study accessible. Since the study involved accessing data of students, the researcher sought the approval of the school principal for the conduct of the students. Also, parents of the students that were subjected to the study were asked to sign a written consent. Those students whose parents who did signify of non-participation to the study were eliminated in the study. The research was conducted from July 2017-March, 2018.

Instrumentation

This research focused on Grade 7 students enrolled in the school year 2017-2018, as per records of TNHS registrar. The list of 4Ps and QUEEN was obtained from the existing database of the school. The scholastic performance was lifted to the official forms submitted by respective teachers on the school registrar at the end of the school year. As for participation rate, dropped out students were divided into two categories, official and left dropped out. Official dropped out are those students who informed their teachers and fully accomplished the official dropped out the form of the school. Left students were those students who did not finish the whole school year without accomplishing the form. Reasons for those left students were accounted for, though it should be noted that not all students were interviewed for due to factors such as hospitalization and moving out of the city. As for the general weighted average, it only involved students who were able to finish the whole school year. Dropped out students were not included in the computation. Also, transferees were automatically discarded in

the scholastic performance variable. The researcher assumed that the teaching styles and school activities were the same with all the students, ruling out teaching methodology and curriculum as a factor. Other factors like behavioral delinquencies and student tardiness that may affect the scholastic performance of the students were disregarded in this study.

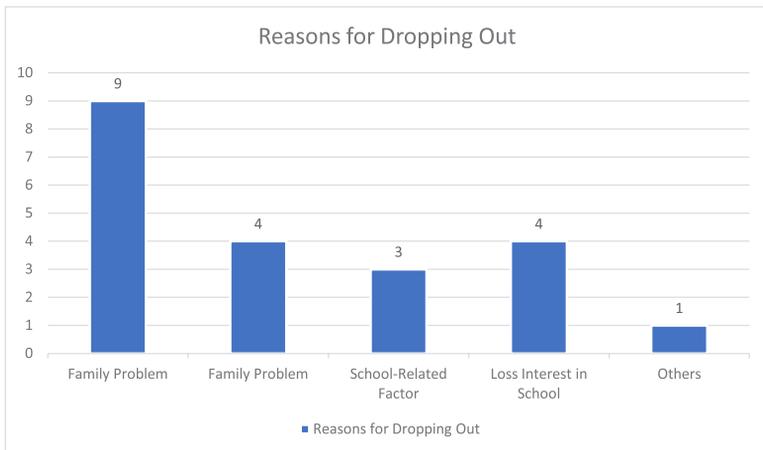
For data analysis, simple frequency, percentage, and ranking determined the academic of student beneficiaries. The study also employed a two-tailed t-test to establish the difference in the academic performance of beneficiaries and non-beneficiaries of the CCT programs.

RESULTS AND DISCUSSION

Table 1. Dropped Out Rate of Students

| CATEGORY | No. of Students (July) | Dropped Out | | Total | % of Dropped Out |
|-------------------|------------------------|------------------------|--------------------|-------|------------------|
| | | Dropped Out (Official) | Dropped Out (Left) | | |
| Beneficiaries | 106 | 4 | 12 | 23 | 21.7% |
| Non-Beneficiaries | 128 | 2 | 20 | 22 | 17.1% |
| | 237 | 5 | 39 | 45 | 18.9% |

*Note that only 21 out 23 students were included in this data set



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Figure 1. Reasons for Dropping Out of Student Beneficiaries

The dropped out rate of students shows that CCT beneficiaries have a higher dropped out rate than the non-beneficiaries. Mapping out the reasons, most of the students identified as the financial problem seems to be the leading reasons for dropping out. Based on anecdotal records, these students either have broken families or came from families with more school-aged children. Although CCT aims to help families to alleviate poverty, it does not account for the number of school-aged children in the families; thereby, even with its financial support, it is not enough for them to stay in school. It should be noted that the CCT program only covers a maximum of three children, and poor households with a large number of children have to spread resources thinly across school-aged children. Four of the nine students said that they quit school for them to support their families. Chaudhury & Okamura (2012) and Kostioukova (2011) noted in their paper that households with more than three school-aged children are poorer on average than households with fewer than four children. Also, it should be taken into account the opportunity costs. First, sending older children to school is associated with opportunity costs, in the form of school fees, supplies, transportation costs, and so on. For example, since there are less high schools than primary schools, high school children are generally more likely to travel farther away from the homestead to school, requiring households to spend more money on transportation (Chaudhury & Okamura, 2012). Given the resource constraints of poor households, it would have been more likely that the CCT grants would have less of an impact on relatively poorer households in increasing enrollment (Kyophilavong, 2011; Ferreira, Ferreira, Filmer & Schady, 2017). Also, motivation to finish schooling could be a possible explanation for the results. Mo, Zhang, Yi, Luo, Rozelle, and Brinton (2013) highlighted that since it is likely that lower socio-economic students have a higher expectation of success in the educational system (and a higher chance of accessing the higher returns that come with higher educational attainment), no matter how poor they are, such students were much less likely to plan to drop out anyway (with or without CCT), thus they tend to drop out in general.

Table 2. Distribution of General Weighted Average of Students

| CATEGORY | 90- above (Advanced) | | 85-89 (Proficient) | | 80-84 (Approaching Proficiency) | | 75-79 (Developing) | | Below-74 (Beginning) | | TOTAL |
|-----------------------|-------------------------|-------|-----------------------|-------|---------------------------------------|-------|-----------------------|-------|-------------------------|-------|-------|
| | # | % | # | % | # | % | # | % | # | % | |
| BENEFICIARIES | 9 | 10.84 | 11 | 13.25 | 29 | 34.94 | 23 | 27.71 | 11 | 13.25 | 83 |
| NON- BENEFICIAIRES | 13 | 12.26 | 22 | 20.75 | 31 | 29.24 | 28 | 26.41 | 12 | 11.32 | 106 |

Table 3. T-test value (t) of GWA among the Beneficiaries and Non-beneficiaries of 4Ps and QUEEN

| | Mean | S ² | df | t-value | p-value | Critical t-value | Interpretation |
|-------------------|----------|----------------|----|---------|---------|---------------------|------------------------------|
| Beneficiaries | 81.38262 | 2852.319 | | | | | |
| | | | 81 | 1.244 | 0.05 | 1.980 | No significant difference |
| Non-Beneficiaries | 82.48093 | 2444.413 | | | | | |

The researcher hypothesized that there is a significant difference among the beneficiaries and non-beneficiaries of 4Ps and QUEEN. Two-tailed T-test (t) determined the significant difference between the beneficiaries. Results of computation are shown in Table 3, where the t-value was 1.224, which was lower than the critical value of 1.980 (t= df, 81, 5%), interpreted as not significant. This non-significance can be attributed to the fact that the general weighted average, as revealed in problem number two, leans towards average. Many of the students have an average weighted average, and the further test is needed for them to be sorted it out. Another one is that there is no direct correlation between the expenditure of CCT to the education of the beneficiaries. Barham, Macours, & Maluccio (2013) Mo, et al. (2013), and Dubois, De Janvry, & Sadoulet, (2012) supported these findings that the program recipients who graduate from high school seem to perform at the same level as equally poor non-recipient graduates. Garza & Villareal (2007), Baez & Camacho (2011), Chaudhury & Okamura (2012), and Tutor (2014) noted in their papers that some beneficiaries are not allocating the CCT to education, but heavily pour the benefits in buying daily needs. Although the teams of Frufonga (2015) and Montilla, Delavin, Villanueva, & Turco (2015) claimed that there is a significant

increase of the student's attendance who are beneficiaries of the 4Ps program, their findings remains blurry connecting to academic achievement because of lack of other income-generating opportunities, high cost of education and limited provision and duration of 4Ps as major constraints that hinders the children's full acquisition and benefits of education. Giang & Nguyen (2017) and Pubra (2018) further highlighted that to maximize CCT programs' benefit in student achievement, effective monitoring of the program, especially in spending and allocation of the parents to education, is highly needed. But it should be taken note that GWA is just one of the many sources of academic performance data. Since GWA is affected by a lot of factors, there is a need to sort out if it has a long term effect on students' academic development and conclusively say that CCTs have no significant effect on academic performance.

CONCLUSIONS

This undertaking revealed that the CCT has no direct effect on reducing the dropped out rates and no significant difference in the academic performance of the beneficiaries and non-beneficiaries. Students seem to be unaffected by the CCT programs, although one of the core objectives of these programs is for these students to improve their scholastic performance. Implementing agencies should review their programs to calibrate their targets.

RECOMMENDATIONS

The results of this study and several papers reviewed on this study seemingly agree for agencies to look for solutions on how to improve the delivery of the CCT programs to alleviate poverty and improve the quality of education of the student beneficiaries of the programs. These agencies should also look at the opportunity cost of education especially in secondary school students. As for the conduct of this study, other factors such as spending habits, family structure, etc. should be included to fully grasp the effect of the CCT programs on scholastic performance.

TRANSLATIONAL RESEARCH

The results of this study will be used by our school in its School Improvement Plan (SIP) to incorporate the benefits of 4Ps and QUEEN members' parents as separate stakeholders from PTA. In future planning. At the same time, this

research will be presented to the agencies concerned, like the LGU and DSWD, for them to reassess the benefits of these programs and if they are really targeting long effects for the students.

LITERATURE CITED

- Baez, J. E., & Camacho, A. (2011). *Assessing the long-term effects of conditional cash transfers on human capital: evidence from Colombia*. The World Bank. Retrieved from <https://bit.ly/2XOGpbV>
- Baird, S., Ferreira, F. H., Özler, B., & Woolcock, M. (2014). Conditional, unconditional and everything in between: a systematic review of the effects of cash transfer programmes on schooling outcomes. *Journal of Development Effectiveness*, 6(1), 1-43. doi:10.1080/19439342.2014.890362
- Barham, T., Macours, K., & Maluccio, J. A. (2013). *More schooling and more learning? Effects of a three-year conditional cash transfer program in Nicaragua after 10 years*(No. IDB-WP-432). IDB Working Paper Series. Retrieved from <https://bit.ly/2xCfAsY>
- Chaudhury, N., Okamura, Y., Chaudhury, N., & Okamura, Y. (2012). *Conditional cash transfers and school enrollment: impact of the conditional cash transfer program in the Philippines* (No. 71904). The World Bank. Retrieved from <https://bit.ly/30jI9HO>
- Dubois, P., De Janvry, A., & Sadoulet, E. (2012). Effects on School Enrollment and Performance of a Conditional Cash Transfer Program in Mexico. *Journal of Labor Economics*, 30(3), 555-589. doi:10.1086/664928
- Ferreira, F., Filmer, D., & Schady, N. (2017). Own and Sibling Effects of Conditional Cash Transfer Programs: Theory and Evidence from Cambodia. *Research on Economic Inequality*, 25, 259-298. Emerald Publishing Ltd.
- Frufonga, R. F. (2015). The Pantawid Pamilyang Pilipino Program (4Ps) in Iloilo, Philippines: an evaluation. *Asia Pac J Multidisciplinary Res*, 3, 59-65. Retrieved from <https://bit.ly/2RYPo56>

- Garza, M., & Villarreal, H. J. (2007). *Do Conditional Cash Transfers Affect Poor Students Performance*. Working Paper EGAP/ITESM Campus Monterrey. Retrieved from <https://bit.ly/32gI7T2>
- Giang, L.T., & Nguyen, C. V. (2017). How would cash transfers improve child welfare in Viet Nam? *Children and Youth Services Review*, Elsevier, 82(C), 87-98.
- Gegel, L., Lebedeva, I., & Frolova, Y. (2015). Social Inequality in Modern Higher Education. *Procedia-Social and Behavioral Sciences*, 214, 368-374. Retrieved from <https://doi.org/10.1016/j.sbspro.2015.11.662>
- Kyophilavong, P. (2011). Impact of Cash Transfer on Poverty and Income Distribution in Laos. In: Sothea Oum, Giang Thanh Long, Vathana Sann, Phouphet Kyophilavong, *Impacts Of Conditional Cash Transfers On Growth, Income Distribution And Poverty In Selected ASEAN Countries* (pp 55-76): Eria.
- Kostioukova, Anastasia. (2011). Alleviating Social Disadvantages of Rapid Economic Growth: A Case for Conditional Cash Transfer (CCT) Application in Old Siam. CMC Senior Theses. Paper 148. Retrieved from http://scholarship.claremont.edu/cmc_theses/148
- Mo, D., Zhang, L., Yi, H., Luo, R., Rozelle, S., & Brinton, C. (2013). School Dropouts and Conditional Cash Transfers: Evidence from a Randomised Controlled Trial in Rural China's Junior High Schools. *The Journal of Development Studies*, 49(2), 190-207. doi:10.1080/00220388.2012.724166
- Montilla, M. M., Delavin, E. A., Villanueva, R. M., & Turco, R. A. (2015). Pantawid pamilyang Pilipino program (4Ps): Assistance to pupil's education. *Asia Pacific Journal of Education, Arts, and Sciences*, 2 (3), 1-5. Retrieved from <https://bit.ly/32oLBTA>
- Pabico, A. P. (2008, May 30). Naga City's class act. Philippines: Philippine Center for Investigative Journalism. Retrieved January 13, 2018, from <https://pcij.org/stories/naga-citys-class-act/>

Tutor, M. V. (2014). *The impact of Philippines' conditional cash transfer program on consumption* (No. 2014-05). UPSE Discussion Paper. Retrieved from <https://bit.ly/2JwjLvI>

World Policy Data Center. (2018, October 11). Education. Retrieved from WORLD Policy Analysis: <https://www.worldpolicycenter.org/topics/education/policies>