

Silfverberg, Denise Valerie; Orbeta, Aniceto C.

**Working Paper**

## Review and assessment of the students grants-in-aid program for poverty alleviation (SGP-PA) and expanded SGP-PA

PIDS Discussion Paper Series, No. 2016-19

**Provided in Cooperation with:**

Philippine Institute for Development Studies (PIDS), Philippines

*Suggested Citation:* Silfverberg, Denise Valerie; Orbeta, Aniceto C. (2016) : Review and assessment of the students grants-in-aid program for poverty alleviation (SGP-PA) and expanded SGP-PA, PIDS Discussion Paper Series, No. 2016-19, Philippine Institute for Development Studies (PIDS), Quezon City

This Version is available at:

<https://hdl.handle.net/10419/173540>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



Review and Assessment of the Students  
Grants-in-Aid Program for Poverty  
Alleviation (SGP-PA) and Expanded SGP-PA

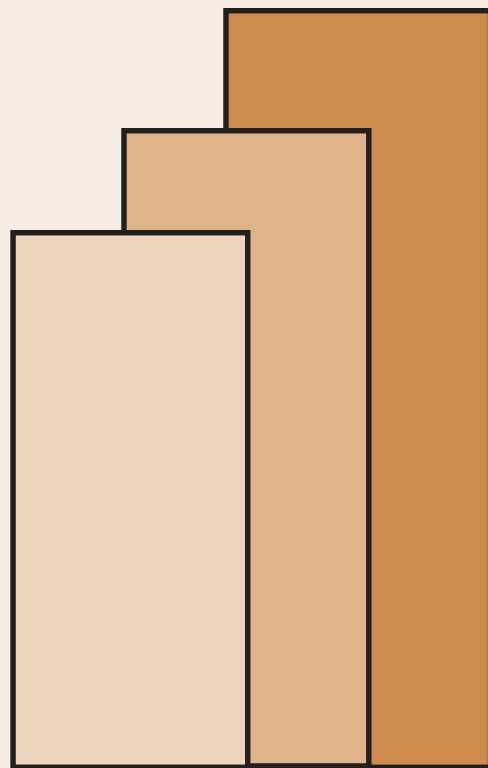
*Denise Valerie Silfverberg and Aniceto C. Orbeta Jr.*

**DISCUSSION PAPER SERIES NO. 2016-19**

The *PIDS Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements. The studies under the *Series* are unedited and unreviewed.

The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Institute.

Not for quotation without permission from the author(s) and the Institute.



May 2016

For comments, suggestions or further inquiries please contact:

**The Research Information Staff**, Philippine Institute for Development Studies

18th Floor, Three Cyberpod Centris - North Tower, EDSA corner Quezon Avenue, 1100 Quezon City, Philippines

Telephone Numbers: (63-2) 3721291 and 3721292; E-mail: [publications@mail.pids.gov.ph](mailto:publications@mail.pids.gov.ph)

Or visit our website at <http://www.pids.gov.ph>

# **Review and Assessment of Students' Grants-in-Aid Program for Poverty Alleviation (SGP-PA) and Expanded SGP-PA (ESGP-PA)**

Denise Valerie Silfverberg and Aniceto C. Orbeta, Jr.<sup>1</sup>

## Abstract

Making higher education more accessible for the poor serves the equity objective. Until today the main policy tool to achieve this objective is funding public higher institutions. This has been shown to have no significant correlation on the enrollment of the poor by earlier studies. This paper assesses a new initiative of the Philippine government called the Students Grants-in-Aid Program for Poverty Alleviation (SGP-PA) implemented starting 2012. While there are other grants-in-aid programs, SGP-PA has two important unique features, namely: (a) it is well-targeted to identified *Pantawid Pamilya* households; and (b) it provides a grant amount that is sufficient to cover all normal education expenses including living allowance. The assessment is done by comparing the academic performance of grantees to that of their peers. The results shows that their poorer socioeconomic background appears to be reflected only in their poorer grades in the first year. By their second year, they are already performing at par in Math and even better than their peers in Science and English. The study also highlights the importance of entrance exam scores in the academic performance of both grantees and their peers. Finally, the study also documents the challenges that the program is facing and provides recommendations on how to address these challenges.

Keywords: Higher education, Grants-in-Aid, Affirmative Action, Philippines  
JEL: I22, I23

---

<sup>1</sup> Consultant and Senior Research Fellow, Philippine Institute for Development Studies (PIDS). We acknowledge the very able assistance provided by Emma Cinco, Ann Jillian Adona, Sol Cortes and Katrina Gonzales of PIDS at various stages of the conduct of the study. This study would not have been possible without the assistance of Commissioner Cynthia Bautista of CHED. We also acknowledge the inputs of different research teams of the cooperating SUCs which made this study possible. Separate SUC-based reports are produced. All opinions are of the authors and not of the institutions they are affiliated with.

## ACRONYMS

---

CHED	Commission on Higher Education
DOLE	Department of Labor and Employment
DSWD	Department of Social Welfare and Development
ESGP-PA	Expanded Students' Grants-in-Aid Program for Poverty Alleviation
NAPC	National Anti-Poverty Commission
NSO	National Statistics Office
OLS	Ordinary Least Squares
SGP-PA	Students' Grants-in-Aid Program for Poverty Alleviation
SUC	State Universities and Colleges

# CONTENTS

---

List of figures

List of tables

1. Introduction	1
2. Literature Review	2
3. Program Background	5
4. Methodology	
4.1 Data Collection	6
4.2 Methods of Analysis	8
5. Results and Analysis	
5.1 SGP-PA	9
5.2 ESGP-PA	13
5.3 Differences between SGP-PA and ESGP-PA	17
5.4 Relative Academic Performance Controlling for Entrance Exam Scores and Socioeconomic Characteristics	18
5.5 Program Dropouts	22
6. SUC Experiences with Program Handling	
6.1 Programmatic and Implementation Issues	23
6.2 Implemented Interventions	25
7. Recommendations	26
8. References	28
Appendices	

## List of Figures

---

- Fig. 1** Entrance exam scores of SGP-PA grantees and their peers  
**Fig. 2** Difference in means between SGP-PA grantees and peers for English and Mathematics  
**Fig. 3** Difference in means between SGP-PA grantees and peers for Sciences  
**Fig. 4** Entrance exam scores of ESGP-PA grantees and their peers  
**Fig. 5** Difference in means between ESGP-PA grantees and peers for English and Sciences  
**Fig. 6** Difference in means between ESGP-PA grantees and peers for Mathematics  
**Fig. 7** Difference in means of semestral grades between SGP-PA and ESGP-PA grantees  
**Fig. 8** Reasons cited for dropping out

## List of Tables

---

- Table 1 Selected SGP-PA SUCs  
Table 2 Selected ESGP-PA SUCs  
Table 3 Data submissions  
Table 4 Profiles of SGP-PA grantees and their peers  
Table 5 Profiles of ESGP-PA grantees and their peers  
Table 6 Profiles of SGP-PA and ESGP-PA grantees  
Table 7 OLS results for first year academic achievement  
Table 8 OLS results for second year academic achievement

## INTRODUCTION

---

Making higher education more available for poor but capable students is an important objective of any government. Up to this point the main policy tool to achieve this objective is funding public higher institutions. Interestingly, it has been shown that despite the expansion of the number of publicly funded higher education institutions in recent years, the number of SUCs is not correlated with attendance of the poor in higher education institutions (Orbeta et al, 2016). It has also been shown that the returns to higher education continues to be high (Paqueo, Orbeta and Albert et al, 2011) so completing higher education remains to be a good investment and making the poor complete higher education is a proven strategy of breaking the cycle of poverty.

In 2012, the Students Grants-in-Aid Program for Poverty Alleviation (SGP-PA) was implemented through the Commission on Higher Education (CHED) Memorandum Order No. 09, Series of 2012. Implementers of the program include selected State Universities and Colleges (SUCs), the Department of Social Welfare and Development (DSWD), and the Department of Labor and Employment (DOLE).

The SGP-PA is a new initiative taken by the government to provide access to the poor but capable students to higher education. The objective of the program is to increase the number of higher education graduates among poor households by directly providing financing for their education in selected SUCs. While there were other grants in aid (GIA) programs, SGP-PA has two important features that makes it different from the others: (a) it is well-targeted to identified poor households; and (b) it provides substantial grant amount sufficient to cover all normal education expenses including living allowance.

The program was implemented in the academic year 2012- 2013, with 4,041 selected beneficiaries from identified and classified poor households in the 609 focus municipalities covered under DSWD's *Pantawid Pamilyang Pilipino Program*. The program was rolled out in the academic year 2014-2015 by 36,412 beneficiaries under the Expanded SGP-PA (ESGP-PA), bringing the total number of beneficiaries to 40,453. Total number of implementing SUCs expanded from 35 to 112 across the country.

The financial benefits of an SGP-PA grantee include Php 10,000 per semester for tuition and other fees, Php 2,500 per semester for textbooks and other learning materials, Php 3,500 per month for 10 school months as stipend. The total grant amounts to Php 60,000 per academic year per student.

The initial assessments of both the SGP-PA and ESGP-PA will serve as a baseline as well as a barometer for the performance of the program thus far. The assessment aims to recognize how observations on student performance and stakeholders' feedback can improve implementation for later waves of the program as well as for any other grants-in-aid program that may be modeled after the SGP-PA.

***General objective***

The assessment intends to produce an empirical documentation and analysis of tertiary education affirmative action in the Philippine context.

***Specific objectives*** include:

1. To document progress in program implementation;
2. To identify and document bottlenecks and implementation issues that have arisen in the first wave of the program and check if these issues have been addressed in the second wave;
3. To identify interventions that can be proposed to enhance implementation and improve the likelihood that the program achieve its objectives;
4. To identify and measure progress towards end objective of the program – employing these students in high value-added occupations; and
5. To determine the relationship between entrance exam scores and academic performance in order to ascertain its importance in the selection method.

## LITERATURE REVIEW

---

The SGP-PA is a form of affirmative action, a type of intervention for disadvantaged groups in society. This literature review will focus on affirmative action for socially or economically disadvantaged students.

***Affirmative Action in Theory***

The social background of a child or a student as a reason for educational stratification is said to be more important in the earlier parts of the educational ladder (Mare, 1981). However, gaps in tertiary education are still an observed phenomenon and affirmative action has been one of the most popular ways of addressing this problem (Desai, et al., 2008).

Affirmative action “regulates the allocation of scarce positions in education, employment, or business contracting so as to increase the representation in those positions of persons belonging to certain population subgroups” (Fryer, et al., 2005:147). It is seen as a way of inducing a shift in demand for those in the identified group (Fryer, et al., 2005). Desai and Kulkarni (2008) point out that there are widening socioeconomic differences in higher levels of education in spite of educational growth.

For education in particular, affirmative action is used as an intervention to increase the educational attainment of marginalized members of society. Such policy comes in the form of scholarships or financial aid, and reserved quotas in competitive colleges. The ultimate goal is to ensure increased returns to education for the targeted group. It is, therefore, not uncommon to have analogous policy in place in the labor market.



Debates continue about the efficacy of affirmative action programs. Bertrand, et.al. (2007) highlight the two main arguments against affirmative action. First, the question of who the program is really targeting is raised. This particular issue applies more to affirmative action targeting different racial groups, for instance. The concern is that the more advantaged individuals from the targeted groups are displacing less advantaged individuals from the non-targeted group. The second argument against affirmative action has to do with the “mismatch” hypothesis. It is hypothesized that those who are targets of affirmative action policy are being placed in an academic environment that they are not prepared for which, in turn, will lead to high drop out rates and poor performance in the job market. Greenberg (2002) points out a few additional arguments made by those opposing affirmative action, including stigmatization and stereotyping the beneficiaries in their own eyes and those of others as well, due to its failure to reward merit.

### *Affirmative Action in Practice*

There are numerous examples of affirmative action for education in literature. Majority of studies are from the US and are race-based affirmative action. Such affirmative actions in place are for Latinos and for black Americans (Alon, et al., 2005, Arcidiacono, 2005).

More similar to class-based affirmative action is that implemented in India, which is caste-based affirmative action. The approach in India is twofold – first, specific quotas are reserved for lower-caste members of society (the *dalits* and *adivasi*) and second, programs to reduce the cost of education such as the provision of scholarships, fellowships and other necessary school materials are implemented (Desai, et al., 2008).

Desai et al.’s (2008) study on affirmative action in India found that success rates for the target group (*dalits*) did not improve, implying that affirmative action did not help this particular group at the college level. They further note that educational inequalities will continue until the dominant groups attain educational saturation at any given educational level. However, they do acknowledge that affirmative action may have had some impact but the results are ambiguous.

Bertrand et al. (2007) conducted a similar study with a particular focus on engineering college in India. They found that those who were admitted by affirmative action benefited from attending engineering college despite starting academically worse-off compared to their peers. The study, however, noted within-group disparities, observing that “while lower-caste members do benefit from the policy, it is the economically better-off among them who benefit the most” (Bertrand, et al., 2007:4). Within-groups disparities were also noted in Malaysia, where ethnic affirmative action was implemented for tertiary education and employment through the use of quotas for university admission and scholarships. Lee (2012) found that the quota system increased access to and completion of tertiary education but differences persisted within race groups. This system, however, has led to progressive distribution and intergenerational mobility as 58% of scholars had fathers who attained only primary schooling. However, Lee (2012) notes that it is unclear if the distribution of benefits has been done in a systematic way that balances merit and socio-economic background.

Arcidiacono (2005), on the other hand, found that income level of the student (or student's family) did not affect the advantages black students in the United States derived from affirmative action. He did note that the advantages only occurred at high quality schools. The study did not just look at the advantages from admission but also how future earnings were affected. He found that affirmative action had little effect on future earnings of the student who benefitted from affirmative action. Arcidiacono (2005) notes that "While the effects of affirmative action in higher education on expected earnings is small, removing affirmative action programs would have effects on the distribution of blacks at top-tier schools and the percentage of blacks attending college."

Alon and Tienda (2005) found that the likelihood of college completion of minorities increased as the selectivity of the institution attended increased. Their study recommended that affirmative action should be promoted at selective institutions.

Aubel's (2011) study on Afro-descendant women in Brazil found that affirmative action in the form of a quota system was seen as an entry point into universities. The subjects in her study noted that in order for the policy to be effective – i.e., in order for them to be able to stay in school and complete the degree – financial assistance would have to be an attached component of the program. Most beneficiaries of the policy had to attend night classes in order to work during the day. Degrees with night courses offered were limited to "less prestigious majors" and, in effect, had little impact on the improvement of earnings of the targeted group.

A meta-review of gender-based and race-based affirmative action in education and employment was conducted by Holzer and Neumark (2005). Some of the consolidated findings from the studies they found include support for the "mismatch hypothesis". When a student is admitted to a university for which they are less qualified, it could lead to worse educational and employment outcomes for these studies. They note that, "The combined results of these studies support the notion that, on average, affirmative action in university admissions generates no harm, and probably some gains, in graduation rates and later earnings for minorities who attend more elite colleges and universities. This conclusion, though, might mask some potentially important variation in the distribution of effects of affirmative action" (Holzer, et al., 2005).

Pedrosa, et al. (2007) note what they call "educational resilience" among beneficiaries of affirmative action at a Brazilian university. They observed that students coming from a disadvantaged environment, in socioeconomic and educational terms, perform relatively better than those coming from higher socioeconomic and educational strata. Caste-based affirmative action for MBA students in India show somewhat different results from that in Brazil. Chakravarty, et al., (2008) observed that beneficiaries of affirmative action had, on average, considerably lower undergraduate college marks than their peers, a result that persisted in the first year of the program. The gap diminished in the second year but it is argued that this observation can only be partially attributed to catching up as students are allowed to take electives in second year, which may have easier grading policies. The

authors then note that the beneficiary students come in with, on average, weaker academic backgrounds and are heavily penalized for this in the job market.

## PROGRAM BACKGROUND

---

### *Selection of grantees*

For the first round of SGP-PA, the beneficiaries were selected from the 609 focus priority cities and municipalities identified by the National Anti-Poverty Commission (NAPC) and the DSWD. Six potential beneficiaries were identified from each city or municipality and were ranked according to their Proxy Means Test (PMT) scores<sup>2</sup>. These beneficiaries are endorsed to CHED after being validated by DSWD.

According to program rules, the grantees had to fit the general requirements for eligibility and comply with documentary requirements in order to be listed in the program. The general requirements included:

1. Identified as a *Pantawid Pamilya* beneficiary;
2. Not more than 30 years of age at the time of selection<sup>3</sup>;
3. Must be physically and mentally fit;
4. Has completed high school or equivalent;
5. Must not be covered by other higher education scholarship / public institution grants;
6. Must pass the entrance exam and academic requirements set by the leading SUC;
7. Must pass the requirements set by the National SGP-PA committee; and
8. Must enroll/shift/transfer to CHED priority programs preferably in the leading identified SUCs most accessible from their residence.

The grantees also had to submit documentary requirements:

1. Accomplished SGP-PA application form;
2. Certification from DSWD declaring as *Pantawid Pamilya* beneficiary;
3. Birth certificate certified by the National Statistics Office (NSO) or local civil registrar;
4. Health certificate issued by any government physician;
5. Form 138 or has passed Philippine Educational Placement Test (PEPT); and
6. Signed commitment of participation.

The commitment of participation includes clauses stating that the grantee shall take full load each term and completes the program within the prescribed 4-year period. The grantee

---

<sup>2</sup> PMT scores are computed based on readily measurable socioeconomic household characteristics. This are used as an alternative indicator of socioeconomic status when the direct measure (in this case income) are much more difficult and hence expensive to measure.

<sup>3</sup> For the pilot implementation, the age criterion was relaxed to accommodate those up to the age of 35.

is also expected to maintain a satisfactory academic performance in accordance with the “policies and standards of the SUC”. The program intends to award the grant to those who are expected to be the first college graduate in their household. To achieve this, DSWD has to sift through the millions of eligible *Pantawid Pamilya* households available in the *Listahan* – the roster with some 10 million households that is the source of the *Pantawid Pamilya* beneficiaries. The selection process has also been made very open in order to accommodate even those who have been out of school for a long period and are married. Proportional regional allocation of slots were also considered.

The ESGP-PA has made some changes to the eligibility requirements for inclusion in the program. Potential grantees can only have been out of school for a maximum of 5 years, a cap that was not in place for the first batch. The age ceiling of 30 was also strictly enforced for the second batch of grantees.

## METHODOLOGY

---

### *Data collection*

PIDS collaborated with select SUCs to obtain data on the grantees and their peers. Eight SGP-PA-implementing SUCs and another eight ESGP-PA implementing SUCs were selected to collaborate with PIDS on the study. The SGP-PA SUCs were given a Php 300,000 grant to collect data for four semesters for selected subjects and the ESGP-PA SUCs were given a grant of Php 225,000 to collect data for two semesters for selected subjects. The SUCs were asked to submit data for both the grantees and their peers. Peers refer to the batch mates of the grantees in the same course. All SUCs were also asked to submit a report on the implementation and program issues and other experiences of the SUCs with regards to the SGP-PA and ESGP-PA.

SUCs were selected based on the total number of grantees, expression of interest to participate, and nomination of a collaborating faculty-researcher or department as certified by the school head. For the SGP-PA, collaborating SUCs are found in Table 1 and ESGP-PA collaborating SUCs are found in Table 2.

**Table 1. Selected SGP-PA SUCs**

	<b>HEI Name</b>	<b>No. of SGP-PA Grantees</b>
<b>1</b>	Davao del Norte State College (DNSC)*	204
<b>2</b>	Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST)*	123
<b>3</b>	Mindanao University of Science and Technology (MUST)*	204
<b>4</b>	Davao Oriental State College of Science and Technology (DOSCST)	254
<b>5</b>	Don Mariano Marcos Memorial State University (DMMMSU)	104
<b>6</b>	West Visayas State University (WVSU)*	246
<b>7</b>	Mindoro State College of Agriculture and Technology (MINS CAT)	241
<b>8</b>	Palawan State University (PSU)	97

**Table 2. Selected ESGP-PA SUCs**

	<b>HEI NAME</b>	<b>No. of ESGP-PA Grantees</b>
<b>1</b>	Capiz State University (CAPSU)*	863
<b>2</b>	Carlos Hilado Memorial State College (CHMSC)*	119
<b>3</b>	Guimaras State College (GSC)*	93
<b>4</b>	Western Visayas College of Science and Technology (WVCST)	472
<b>5</b>	West Visayas State University (WVSU)*	527
<b>6</b>	Visayas State University (VSU)	259
<b>7</b>	Caraga State University (CARSU)	364
<b>8</b>	Surigao del Sur State University (SDSSU)*	582

Due to delays in the processing of the Memorandum of Agreement (MOA) between PIDS and the SUCs, only four SGP-PA SUCs and five ESGP-PA SUCs will be included in the analysis presented in this report (marked with asterisk in Tables 1 and 2). Data from the rest of the SUCs will be utilized for further analysis once data collection is completed for all collaborating SUCs. Data collected by SUCs is summarized in Table 3.

**Table 3. Data submissions**

Wave	Data Submissions
SGP-PA	<ul style="list-style-type: none"> <li>• Profile data of grantees and peers</li> <li>• Entrance exam scores of grantees and peers</li> <li>• Semestral grades for grantees and peers for AY 2012-2013 and AY 2013-2014</li> </ul>
ESGP-PA	<ul style="list-style-type: none"> <li>• Profile data of grantees and peers</li> <li>• Entrance exam scores of grantees and peers</li> <li>• Semestral grades for grantees and peers for the AY 2014-2015</li> </ul>

Data cleaning is done by the PIDS team and any encoding errors found, duplicate entries or incomplete information are returned to the SUCs for correction.

### *Methods of analysis*

**Profile of students.** Selected demographic and socio-economic variables of the grantees and their households are compared with those of their peers. Test on difference of means are performed in order to ascertain whether there are differences that are statistically significant between the two groups. These differences are important because socioeconomic profiles are expected to affect academic performance.

**Entrance exam scores and semestral grades of students.** The means and the standard deviation of entrance exam scores and semestral grades are obtained for both groups. Similar to the profile analysis, test on difference of means are performed to determine whether any difference that may exist between the two groups are statistically significant. The test is done for the students' entrance exam scores and their semestral grades for score subjects in the Sciences, Mathematics and English. The entrance exam score are expected to provide an indication of their relative readiness for higher education at the point of entry. The semestral grades, on the other hand, provide an indication how are they faring in banner subjects.

**Relative academic performance controlling for entrance exam scores and other socioeconomic characteristics.** To provide evidence on the relative academic performance of grantees and their peers, regression analyses of semestral grades on banner courses controlling for entrance exam scores, which is expected to provide baseline academic preparation upon entrance, and other socioeconomic characteristics are done. These analysis are expected to provide richer analysis of relative academic performance

controlling for known important determinants which cannot be done with bivariate analyses. Four models are constructed and are specified as follows:

**Model 1:**  $Grade_{ij} = \alpha + \beta_1 EntranceExamScore_i + \varepsilon_{ij}$

**Model 2:**  $Grade_{ij} = \alpha + \beta_1 EntranceExamScore_i + \beta_2 Grantee_i + \varepsilon_{ij}$

**Model 3:**  $Grade_{ij} = \alpha + \beta_1 EntranceExamScore_i + \beta X_i + \varepsilon_{ij}$

**Model 4:**  $Grade_{ij} = \alpha + \beta_1 EntranceExamScore_i + \beta X_i + \beta_3 Grantee_i + \varepsilon_{ij}$

where

$Grade_{ij}$  is grade for individual  $i$  for subject  $j$   
 $j$  is the subject (Math, Science, and English);  
 $Grantee = 1$  if SGP-PA/ESGP-PA grantee, 0 otherwise;  
 $X$  is a vector of socio-economic and demographic variables;  
 $\varepsilon_{ij}$  is the error term

**Box 1. Vector of socio-economic and demographic variables**

- Age at entry into SUC
- Gender
- Civil status
- Household income
- Educational attainment of parents
- Gap between high school and college

The dummy for grantees is included in two of the models to capture any differences in academic performances between the two groups (grantees and peers) that are not explained by the entrance exam scores and socioeconomic characteristics. These socioeconomic variables can be found in Box 1.

## RESULTS AND ANALYSIS

---

### A. SGP-PA

Most SGP-PA grantees are female, are 19.7 years old on average, and have been out of school for two years. The complete profiles of the grantees and their peers are found in Table 4.

**Table 4. Profiles of SGP-PA Grantees and their Peers**

<b>Characteristics</b>	<b>Peers (%)</b>	<b>Grantees (%)</b>	<b>Significance</b>
<b>Gender</b>			
Female	53.1	60.42	***
<b>Civil Status</b>			
Married	0.73	1.81	
<b>Age at entry</b>			
Average (years)	17.1	19.7	***
15 to 18 years old	81.72	27.99	
19 to 22 years old	15.74	52.34	
23 to 26 years old	1.79	15.73	
27 years old and above	0.75	3.93	
<b>Father's education</b>			
None	0.34	0.16	
Elementary level or graduate	12.42	53.06	
High school level or graduate	38.57	39.87	
Vocational	1.89	0.16	
College level	19.8	4.87	
College graduate	26.98	1.88	
<b>Mother's education</b>			
None	0.05	0	
Elementary level or graduate	8.94	43.89	
High school level or graduate	38.18	46.52	
Vocational	0	0.31	
College level	17.05	5.56	
College graduate	35.77	3.71	
<b>Type of high school attended</b>			
Public	76.84	91.53	***
<b>Average annual income of household (Php)</b>			
Per capita	171965.3	51156.32	***
<b>Average household size</b>			
	5.7	9.3	***
<b>Year graduated from high school</b>			
Before 2008	4.81	13.75	
2008	3.11	7.17	
2009	4.91	11.75	
2010	13.09	17.13	
2011	8.96	17.13	
2012	65.12	33.07	
<b>Average gap between high school and college (years)</b>			
	0.94	2	***

\*\*\*Significant at the 1% level.



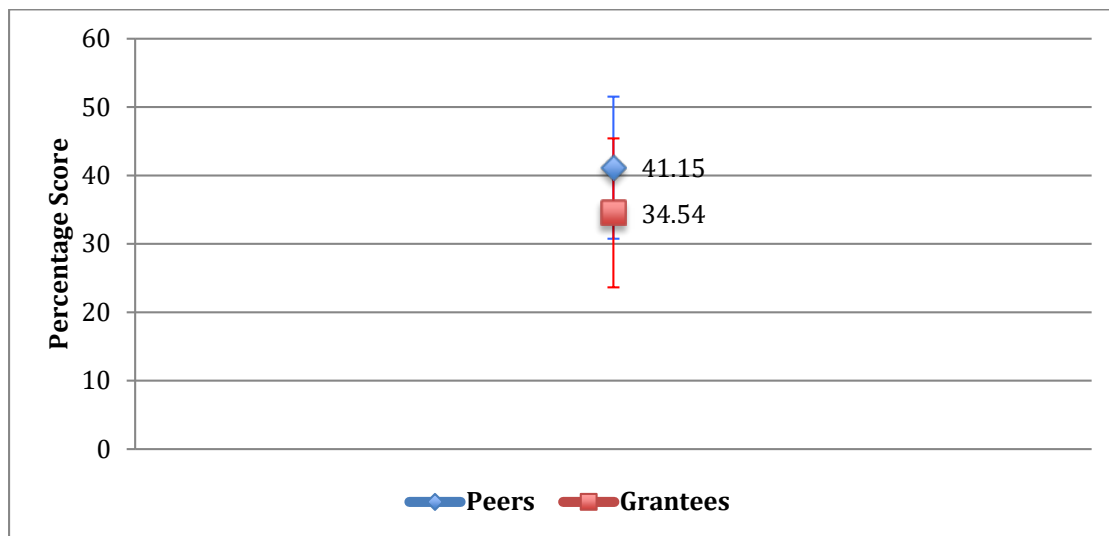
Table 4 shows the differences between grantees and peers, on average. As mentioned in the previous section, the selection process was made lenient in order to accommodate those who have been out of school longer and those that are married. This is reflected in the profile with the grantees having a higher proportion of married students compared to their peers. The grantees are also older, with almost 20% above the age of 22 as opposed to the peers' 2.5%. It follows that on average, the grantees have been out of school longer – twice the time the peers have been out of school. Disaggregation shows that 13.75% of the grantees graduated high school before 2008 meaning they have been out of school for five years or more. Unsurprisingly, most grantees graduated from a public high school.

The parents of the batch mates have higher educational attainment than the grantees' parents. 87% of the peers' fathers have had at least some high school education as opposed to only 47% of the grantees' fathers, while 91% of the peers' mothers have had at least some high school education as opposed to only 56% of grantees' mothers. Although the program was intended to cater to poor households that don't have any college graduates, 1.9% and 3.7% of the grantees' fathers and mothers, respectively, have completed college.

The profile also reflects the economic disadvantage of the grantees compared to their peers. The grantees came from substantially larger households with average household size of 9.3 while that of the peers' is only 5.7. On average, the annual income of a peer's household is three times that of a grantee's household.

The grantees for the first wave of the program are found to be academically behind their peers upon entry into the university or college. The entrance exam scores of grantees are 6.61 percentage points lower than the results of their batch mates. This is significant at the 1% level. Figure 1 shows the mean scores of both groups and their standard deviations.

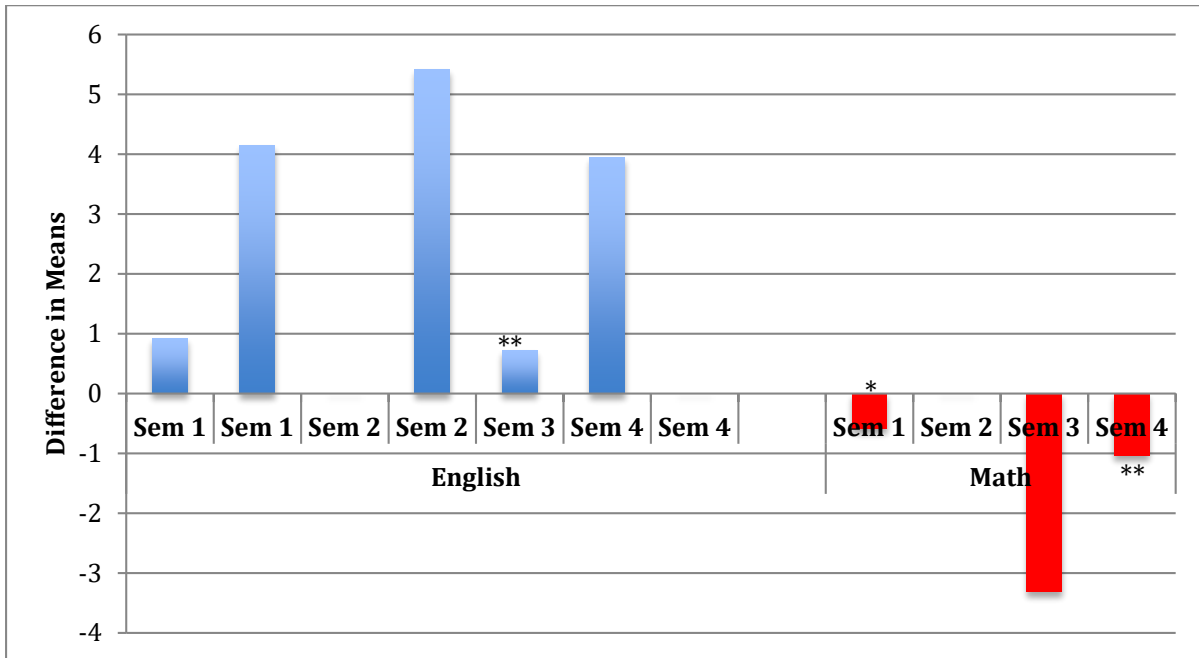
**Fig. 1. Entrance Exam Scores of SGP-PA Grantees and their Peers**



Despite the initial lag of the grantees behind their peers, they seem to be catching up by the first semester of the second year, except in English subject where a 4-point difference

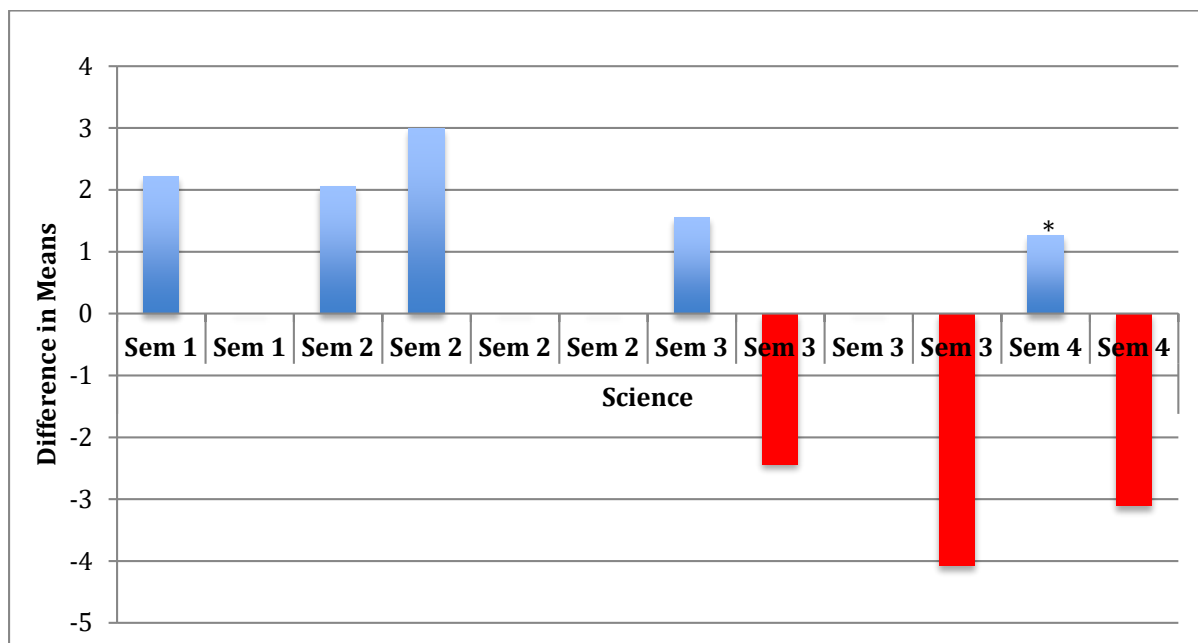
remains by the second semester of the second year<sup>4</sup>. Figures 2 and 3 illustrate the difference in means between the two groups for English, Mathematics and the Sciences. The blue bars denote that peers are performing better than the grantees and the red bars denote that the grantees are performing than the peers. The absence of a bar signifies that there is no statistically significant difference between the two groups, implying that both groups are performing equally. Graphs on means and standard deviations are available upon request.

**Fig. 2. Difference in means between SGP-PA grantees and peers for English and Math**



*Bars are significant at the 1% level, \*\* at 5%, \* at 10%, and no bar is statistically insignificant.*

<sup>4</sup> Raw grades were collected for grantees and peers, ranging from 50 to 100 with single point increments. Passing grade is 75.

**Fig. 3. Difference in means between SGP-PA grantees and peers for Sciences**

Bars are significant at the 1% level, \* at 10%, and no bar is statistically insignificant.

## B. ESGP-PA

Most ESGP-PA grantees are female and enter university at 18 years old, on average. Table 5 shows the differences in the profiles of grantees and peers, on average.

**Table 5. Profiles of ESGP-PA Grantees and their Peers**

Characteristics	Peers	Grantees	Significance
<b>Gender</b>			
Female	58.76	67.46	***
<b>Civil Status</b>			
Married	0.64	0.21	*
<b>Age at entry</b>			
Average (years)	17.6	18.1	***
15 to 18 years old	77.45	67.9	
19 to 22 years old	19.02	30.27	
23 to 26 years old	2.67	1.54	
27 years old and above	0.86	0.29	
<b>Father's education</b>			
None	1.34	0.31	
Elementary level or graduate	25.41	46.3	
High school level or graduate	45.51	44.11	

Vocational	0.9	1.41	
College level	13.22	5.05	
College graduate	13.62	2.81	
<b>Mother's education</b>			
None	0.4	0.1	
Elementary level or graduate	19.11	31.2	
High school level or graduate	50.63	54.83	
Vocational	0.21	0.46	
College level	15.04	8.64	
College graduate	14.61	4.76	
<b>Type of high school attended</b>			
Public	91.58	94.53	***
<b>Average annual income of household (Php)</b>			
Per capita	14402.99	7061.443	***
<b>Average household size</b>			
	6.08	7.2	***
<b>Year graduated from high school</b>			
Before 2010	4.08	1.68	
2010	3.53	5.5	
2011	4.4	7.22	
2012	9.87	10.17	
2013	22.11	26.98	
2014	56.01	48.45	
<b>Average time gap between high school and college (years)</b>			
	1.26	1.269	

\*\*\* Significant at the 1% level, \* at the 10% level.

ESGP-PA grantees are older by half a year on average compared to their peers. However, the average time gap between high school and college between the two groups are approximately the same. Upon disaggregation, a bigger percentage of the peers compared to the grantees have graduated college five or more years before entering university. Changes were made to the program guidelines for the second wave, only allowing potential grantees that were at the most 30 years of age<sup>5</sup>.

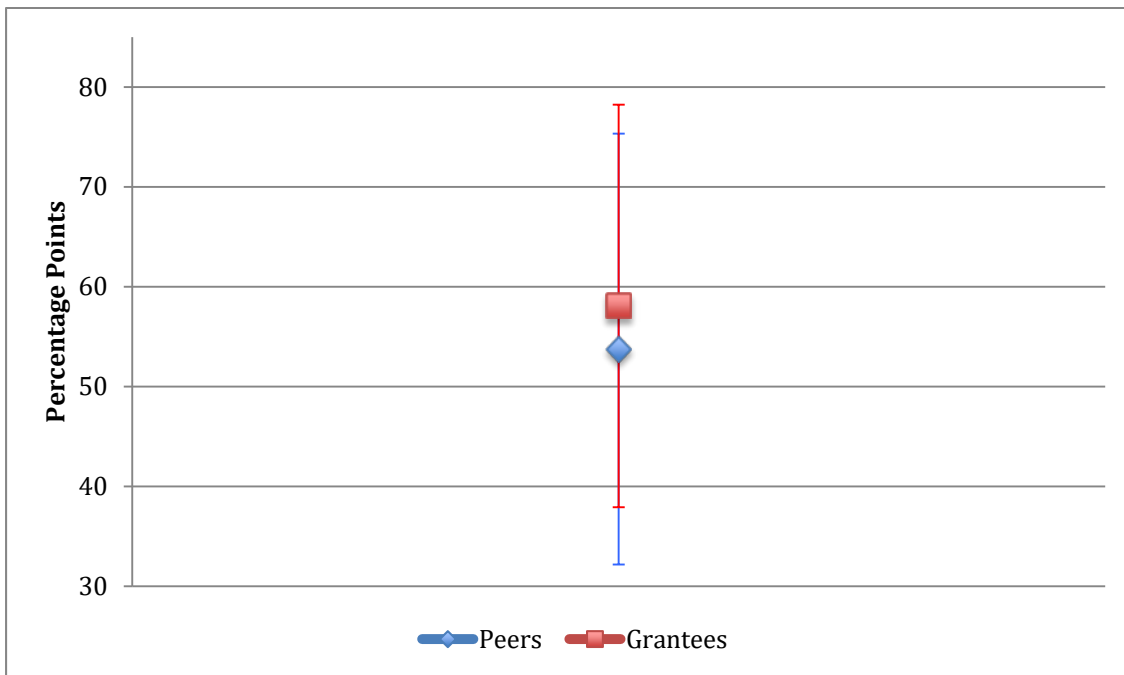
The economic disadvantage of the grantees vis-à-vis their peers as expected still persist. The average annual household income of the peers is 1.6 times higher than that of the grantees', with the per capita income of the grantees' households only half of the peers'. The grantees typically come from a bigger household with 7.2 members, on average, compared to their peers' households that have an average of 6 members.

The peers' parents are more highly educated compared to the grantees' parents, with 73% of their fathers and 80% of their mothers having had at least some high school education compared to the grantees' 53% and 68% respectively. Just like the first wave, a small percentage of the grantees' parents have completed college.

<sup>5</sup> Age range in the data for ESGP-PA grantees is from 15 to 30.

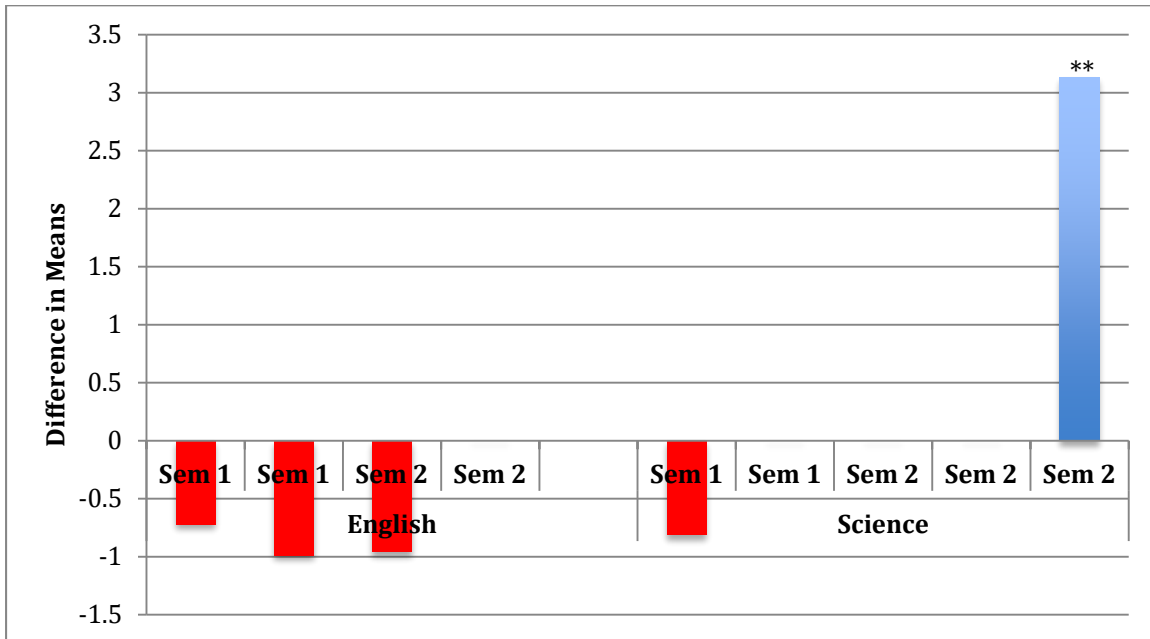
The grantees' disadvantage compared to their peers is mainly of an economic nature. Not only do they enter university at around the same age, they also do not have a disadvantage in terms of the length of time they may have been out of school between high school and college. Academically, the grantees are competitive with their peers upon entry into the university, even scoring higher in the entrance exams, on average (Figure 4). The grantees, on average, scored 4.3 percentage points higher than their peers. This is statistically significant at the 1% level.

**Fig. 4. Entrance Exam Scores of ESGP-PA Grantees and their Peers**



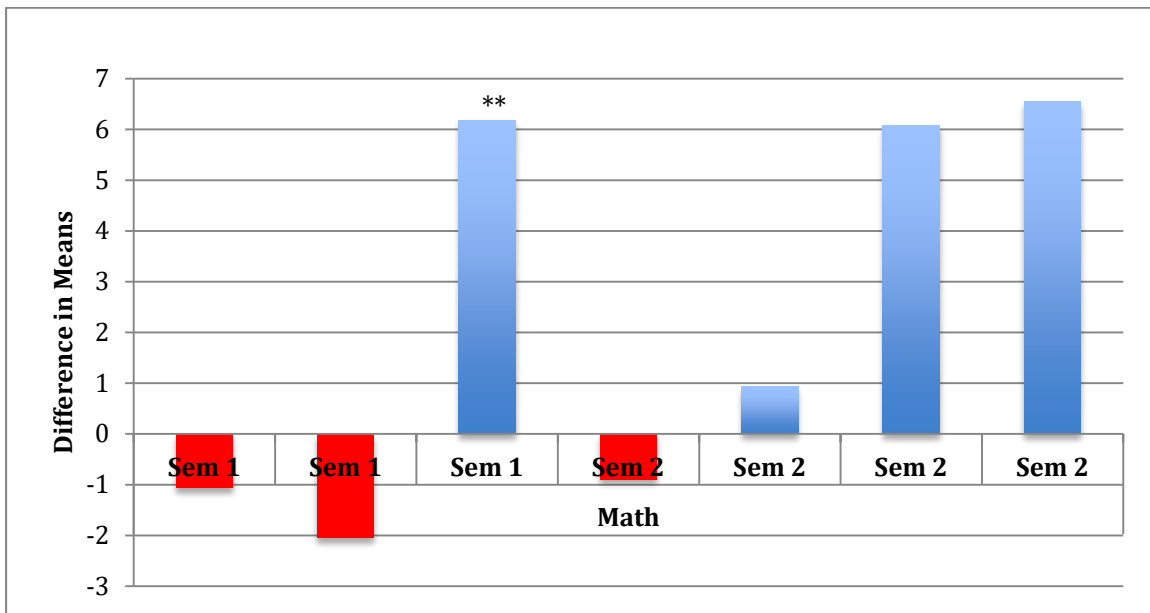
The academic advantage of the grantees over their peers remains during the first year of studies except for some subjects in Mathematics where the grantees fall behind their peers in the second semester (Figures 5 and 6). Graphs on means and standard deviations are found in Appendix B.

**Fig 5. Difference in means between ESGP-PA grantees and peers for English and Science**



*Bars are significant at the 1% level, \*\* at 5%, and no bar is statistically insignificant.*

**Fig. 6. Difference in means between ESGP-PA grantees and peers in Mathematics**



*Bars are significant at the 1% level, \*\* at 5%.*

### C. Difference between SGP-PA and ESGP-PA Grantees

Changes have been made to the selection process from the implementation of the first wave of the program to the second wave. Table 6 shows how the profiles of the grantees have changed from the first batch to the second.

**Table 6. Profiles of SGP-PA and ESGP-PA Grantees**

Characteristics	SGP-PA	ESGP-PA	Significance
<b>Gender</b>			
Female	60.42	67.46	***
<b>Civil Status</b>			
Married	1.81	0.21	***
<b>Age at entry (years)</b>	19.7	18.1	***
<b>Father's education</b>			
None	0.16	0.31	
Elementary level or graduate	53.06	46.3	
High school level or graduate	39.87	44.11	
Vocational	0.16	1.41	
College level	4.87	5.05	
College graduate	1.88	2.81	
<b>Mother's education</b>			
None	0	0.1	
Elementary level or graduate	43.89	31.2	
High school level or graduate	46.52	54.83	
Vocational	0.31	0.46	
College level	5.56	8.64	
College graduate	3.71	4.76	
<b>Type of high school attended</b>			
Public	91.53	94.53	***
<b>Average annual income of household (Php)</b>	51156.32	47622.77	*
Per capita	4489.132	7061.443	***
<b>Average household size</b>	9.3	7.2	***
<b>Average gap between high school and college (years)</b>	2	1.3	***

\*\*\* Significant at the 1% level, \* at the 10% level.

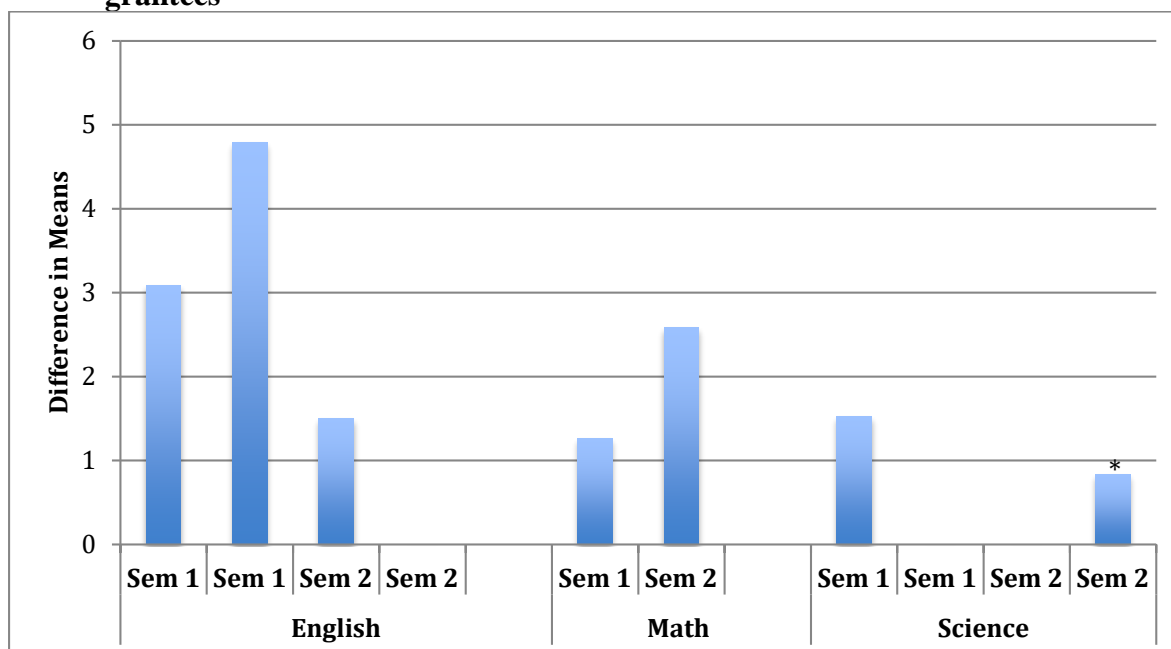
The changes in the profiles are notable. For the second batch, there is a higher percentage of female grantees and a considerably smaller share of married grantees. The ESG-PA grantees are 1.5 years younger when they enter university compared to their SGP-PA counterparts and have a smaller gap between high school and college. More of the second batch of grantees graduated from public high schools compared to the first batch.

Economically, the second batch is better off than their earlier counterparts in terms of average annual per capita income. They also come from smaller households, with the SGP-PA household having, on average, two more people than the ESGP-PA household.

The parents of the ESGP-PA grantees have a higher level of educational attainment with 53% of fathers and 68% of mothers having at least some high school education, compared to 47% and 56%, respectively, for the SGP-PA parents.

Academically, the second batch appears to be able to compete better academically with their peers compared to the first batch. They have better entrance exam results, scoring 23 percentage points higher, on average, than their SGP-PA counterparts. This is significant at the 1% level. In their first year of studies, the ESGP-PA grantees obtain higher marks than their SGP-PA counterparts. The difference decreases during the second semester (Fig. 7).

**Fig. 7 Difference in means of semestral grades between SGP-PA and ESGP-PA grantees**



*Bars are significant at the 1% level, \* at 10%, no bar is statistically insignificant.*

#### D. Relative Academic Performance Controlling for Entrance Exams Scores and Socioeconomic Characteristics

The objective of the program is to increase the number of higher education graduates among poor households and to employ them in high value-added occupations. Critical in successful completion of the program is academic performance in specific courses. We compare the relative performance of grantees and their peers in banner courses to gauge



the likelihood of completion of grantees. We do so by comparing the performance of the grantees and their peers controlling for entrance exam scores and socioeconomic characteristics. Entrance exam scores indicate the baseline academic preparation when they enter the university. The socioeconomic characteristics indicate the kind of likely support they can expect from home.

Analyzing the role of entrance exams in academic performance has an independent importance. Administering admission exams is the easiest way of gauging a student's ability and likelihood to complete the degree. For some fields of study, for instance, entrance exams have been found to predict both graduation and the number of study credits taken (Häkkinen, 2004).

In order to assess the relationship between entrance exam scores and academic performance, a regression was run with end of year grades (first and second year) for English, Math, and Sciences as dependent variables. The subjects are analyzed separately as different preference and aptitude may factor in the performance for the different subject categories. Four models are constructed as described in the previous section. Table 7 shows the results for the first year and Table 8 for the second year for Models 2 and 4. Complete results for all models are found in Appendix C.

Table 7. OLS results for first year academic achievement

Dependent variable	Mathematics					Science					English			
	Model 2		Model 4			Model 2		Model 4			Model 2		Model 4	
Independent variables	Coeff.	SE	Coeff.	SE	SE	Coeff.	SE	Coeff.	SE	SE	Coeff.	SE	Coeff.	SE
Entrance exam score	0.04 ***	0.02	0.06 ***	0.01		0.06 ***	0.00	0.10 ***	0.01		0.05 ***	0.00	0.04 ***	0.01
Grantee	0.22	0.17	-0.78 **	0.33		-0.24	0.21	-0.86 **	0.37		-0.16	0.16	-0.72 **	0.28
Age			0.11	0.08				0.42 ***	0.10				-0.24 ***	0.07
Log of HH income			0.34 **	0.18				1.07 ***	0.22				0.46 ***	0.15
Married			-0.70	2.12				2.25	2.43				0.28	1.94
Female			0.40	0.34				0.86 **	0.40				1.58 ***	0.29
Father had at least some HS			0.06	0.35				0.33	0.37				0.67 **	0.30
Mother had at least some HS			0.37	0.38				0.49 *	0.41				0.39	0.32
Gap between HS and college SUC			-0.10	0.10				-0.36 ***	0.12				0.16 *	0.09
			-0.49 ***	0.14				0.73 ***	0.14				0.36 ***	0.11
Program wave	0.37 *	0.22	2.32 ***	0.39		-2.84 ***	0.39	-2.43 ***	0.46		-0.95 ***	0.22	-1.03 ***	0.36
Constant	80.41 ***	0.43	73.66 ***	2.90		86.11 ***	0.78	61.94 ***	3.43		84.64 ***	0.41	82.24 ***	2.48
No. of observations	3519		1028			2581		635			4069		384	
Adj. R-squared	0.0273		0.0901			0.0621		0.2202			0.0365		0.213	

Significant at the \*10%, \*\*5%, and \*\*\*1% levels.

**Table 8. OLS results for second year academic achievement**

Dependent variable	Mathematics						Science						English					
	Model 2		Model 4				Model 2		Model 4				Model 2		Model 4			
Independent variables	Coeff.	SE	Coeff.	SE	SE	SE	Coeff.	SE	Coeff.	SE	SE	SE	Coeff.	SE	Coeff.	SE	SE	SE
Entrance exam score	0.10	***	0.02	0.13	***	0.04	0.07	*	0.04	0.37	***	0.09	0.16	**	0.1	0.21	***	0.07
Grantee	0.78		0.52	0.57		0.79	0.24		1.1	5.72	**	2.45	1.58		1.3	3.75	**	1.59
Age				0.29	**	0.12				0.05		0.23				-0.18		0.22
Log of HH income				-0.67	**	0.41				-0.47		0.59				-0.47		0.46
Married				-1.94		4.50				0.00	(omitted)					2.39		3.09
Female				0.76		0.60				-0.33		0.88				2.45	***	0.80
Father had at least some HS				-0.44		0.70				-0.94		1.22				0.62		1.09
Mother had at least some HS				-0.90		0.70				0.39		1.27				0.38		1.10
Gap between HS and college SUC				-0.11		0.16				0.02		0.31				-0.26		0.28
Constant	80.41	***	0.4	78.12	***	5.03	80.59	***	1.9	67.50	***	9.11	79.9	***	3.2	82.90	***	7.31
No. of observations	335		184				116		63				129		120			
Adj. R-squared	0.079		0.1547				0.0174		0.1904				0.0443		0.1428			

Significant at the \*10%, \*\*5%, and \*\*\*1% levels.

The relationship between entrance exam scores and the semestral grades of students is positive for all subjects and statistically significant for most models. For Mathematics, the relationship is consistently strong and statistically significant for both models and for both years. In the first year, every percentage point increase in entrance exam score leads to a 0.04 to 0.06 increase in the end of year semestral grade. The impact of entrance exam scores is larger for the second year increasing semestral grades in Math by 0.10 to 0.13 points for every point increase of the entrance exam scores.

For Sciences, the effect is significant for both models in the first and second years. The magnitude of the impact is considerably higher for the Sciences in the second year, ranging from a 0.07 to 0.37 point increase for every percentage point increase in entrance exam scores.

The significant effect of entrance exam scores on English grades persists for all models of both years. Magnitude of the coefficient for the second year is higher than the effects during the student's first year of education, ranging from 0.16 to 0.21 for every percentage point increase of entrance exam score.

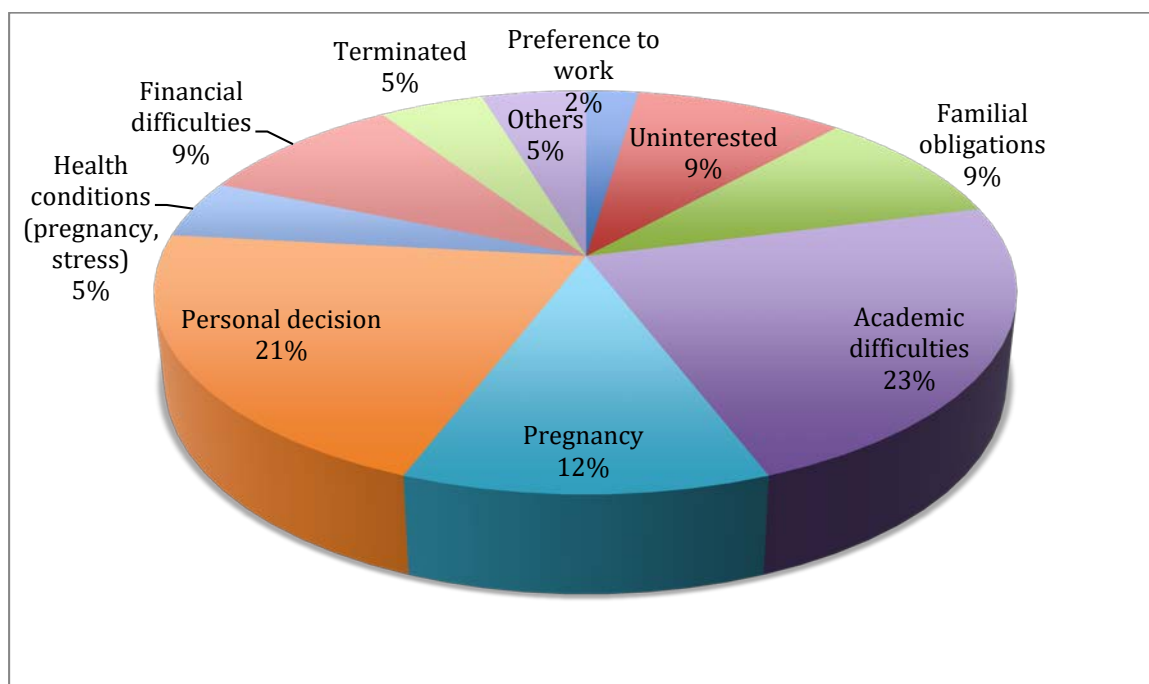
Turning on to relative performance of grantees and peers, the regression analyses results reveal no significant difference in first year academic performance only for entrance exam scores are controlled for. However when the other socioeconomic characteristics are also controlled for, there is a significantly poorer performance for grantees compared to their peers. The performance in the second year, however, tells a completely different story. While no significant difference is still found when controlling for entrance exam scores only, the grantees are shown to perform better in Science and English when other socioeconomic are controlled for as well and no significant difference for Math. It appears that while the grantees did not perform as well during the first year, they are able to overcome whatever deficiency they have in the second year and even surpassed the average performance of their peers in Science and English and perform at par in the case of Math. The results seems to indicate that their poor socioeconomic status and entrance exams only affected their initial performance in the initial year and these are no longer a disadvantage in the second year.

## E. Program Dropouts

Data for dropouts are only available for three SGP-PA SUCs. Grantees who drop out are referred to DSWD for case management before their grant is terminated. The failure rate of the program is determined by the number of grantees who did not complete their degrees. The distribution of reasons for dropping out can be found in Fig. 8.

The most often cited reasons for dropping out include academic difficulties, pregnancy, and disinterest in pursuing further education. 21% of the dropouts from the three SUCs cited personal reasons. This needs further decomposition.

Financial difficulties were also an often-cited reason. Due to some birthing pains of the program, there was a delay in the release of funds to the SUCs. This meant that grantees had to wait for their stipend and in the meantime, spend out of pocket. Given that there was no longer any problems with fund release for the second wave and that the grant is intended to cover the full cost of education, this reason should no longer be cited for the second batch of grantees.

**Fig. 8. Reasons cited for dropping out**

*N*=43

Around 39% of those who dropped out can be attributed to the chosen grantees being unprepared for tertiary education (preference to work, uninterested, terminated, and academic difficulties). This figure might be higher if the “personal decision” is decomposed.

Other reasons specified for dropping out include pregnancy, health issues, and familial obligations. There are aspects to the program that go beyond the academic realm. The cultural change experienced by the grantees from being relocated to a more urbanized setting than what they have been accustomed to is a legitimate issue in the universities that were visited. These are issues to take into account when designing interventions for the program.

## SUC EXPERIENCES WITH PROGRAM HANDLING

The SUCs were asked to document any implementation or programmatic issues they encountered with the first and second waves of the program, as well as any interventions they may have implemented. The documentation serves to identify any bottlenecks in implementation as well as recognize strength and weaknesses in program design. Some of the recurring issues

### A. Programmatic and Implementation Issues

Some of the recurring issues brought up by the SUCs in terms of bottlenecks, programmatic and implementation issues include the following:

- 1. Compromising university regulations in order to accommodate the grantees.**

SUCs found that they had to relax some university regulations in order to take in or use up the slots allocated to them. The CHED Memorandum Order No. 9, series of 2012, which contains the guidelines used for the pilot states that SUCs are to “administer admission examination or other appropriate admission requirements in line with the objectives of the DAP” (Annex A). However, SUCs have had to waive entrance exams or lowering the passing score for the entrance exams in order to allow more potential grantees to qualify. The guidelines have been relaxed for the ESGP-PA with section 8.4.3 of the Joint Memorandum Circular No. 2014-1 stating that SUCs must “administer flexible admission policies at no cost to students” (Annex B).

For the second batch, late provision of the list of grantees made it difficult for the SUCs to stick to their admission policies.

**2. Lack of staff for program management and capacity to handle additional problems.**

Some SUCs have maintained that the 3% allocation of the total grant intended to cover administrative expenses is often not enough to hire extra staff or specialized staff to deal with the special needs of the grantees. These needs range from academic support to individualized counseling. Some SUCs have encountered behavioral problems with the grantees that they are not equipped or trained to handle. For most SUCs, no guidance counselors are especially assigned to the grantees. The SUCs stress that the SGP-PA cases are unique and require special attention and training for the counselors to handle.

**3. Academic difficulties experienced by grantees.**

Most SUCs signified the need for a bridging program for the grantees – prior to the school start as well as in between terms in order to help them cope academically. This was particularly true for the first batch of grantees. As can be seen from the SGP-PA profile, majority of the grantees have been out of school for years and would need refresher courses even for basic learning techniques.

**4. Health concerns of the grantees.**

Medical and laboratory tests are typically part of the admission requirements of the SUCs. This requirement had to be waived by some schools as this would entail grantees incurring out-of-pocket expenses, which they could not afford. Some SUCs noted that some of their grantees had undiagnosed illnesses, which manifested itself later on in the term. Those who required medical attention and hospitalization often sought help from the SUC (usually from the program coordinator) to settle any medical bills. Some of the grantees were found to be suffering from tuberculosis (TB) and worms. Those who had TB were allowed to go home in order to avail of the free TB-DOTS program at their rural health units (RHUs), which then meant that they had to be excused from classes for at least another month.

**5. Budget allocation for out-of-term scholastic activities.**

The SUCs remark that there is no budget allocation for summer courses, on-the-job trainings, national competency exams, field trips, and for the completion of their thesis. All these activities, some of which are conducted outside of ordinary term time, are necessary for the students to complete their degree. Summer courses are often required between the third and fourth year of studies. Furthermore, the grant allocation only covers four years of education. Those who take longer to complete or take 5-year courses (engineering courses are included in the priority courses the grantees can choose from) will have to pay out-of-pocket.

Another issue that occasionally arises is when a grantee drops out and has to be replaced. The replacement can only use the remaining allocation not used by the one who dropped out. This entails that the SUC has to find a replacement at the same year level; otherwise, the replacement will have to pay the fees for years beyond the remaining allocation.

## B. Implemented Interventions

### 1. Academic services

SUCs provided additional academic services for grantees to help them cope with their lessons, especially in the Sciences and Mathematics. The JMC for the second wave includes the provision of remedial and mentoring programs in the list of responsibilities of the SUCs. This was already implemented by some SUCs in the first wave. Some of the academic services they provided included bridging programs for those who scored poorly in the entrance exams, remedial and tutorial classes, review classes for those undergoing removal exams, and peer mentoring.

### 2. Social services

The most recurrent behavioral problems encountered by SUCs are tardiness, absenteeism, and violation of dorm and school policies. Counseling is offered to address these problems. Counseling and monitoring are also done for problems related to bullying. The SUCs, usually in collaboration with DSWD field offices, conduct personality development activities and other social activities to help the grantees adjust to university life. Some SUCs even conduct financial literacy seminars to help the grantees properly manage their stipend.

### 3. Basic necessities

Most grantees come from areas far from the SUC where they enroll, at times coming from other provinces. SUCs facilitate finding accommodation for the grantees, either through dormitories or accredited boarding houses. For SUCs that have dormitories, often times, there are not enough slots to accommodate all the grantees. SUCs often have to stand in as guarantors as advance payment or deposit is often required to secure a room in a boarding house. Some SUCs have also arranged so that food services are already taken care of for the grantees by arranging with the school canteen. In this case, the grantees have prepared meals three times a day, 30 days a month during school term, and the cost is directly taken out of their stipend.

### 4. Health services

Provision of financial assistance for grantees who have fallen ill or gotten into accidents differs from SUC to SUC. Some SUCs have resorted to “passing the hat”, with faculty and other students contributing at times. Other SUCs have offered medical coverage through their school insurance.

## RECOMMENDATIONS

---

### 1. **Enforcement of entrance exams**

The relationship between entrance exam scores and academic performance has been established in literature and from the SGP-PA and ESGP-PA data. Given the thrust of the program, it is important that the grantees that are selected have a relatively high likelihood of completing their degrees. Enforcing admission exams is one way of achieving this objective. Conducting the admission exams will also serve as a good baseline for the grantees, when monitoring their progress over time. The regression analysis shows strong correlation between entrance exams scores and academic performance in core subjects underscoring the importance of entrance exams scores in future performance in the program.

### 2. **Importance of data keeping**

Monitoring the progress of the grantees and being able to compare them to their peers over time is essential when assessing the efficacy of the program. Good data is needed to monitor and evaluate. Creating a database and regularly updating it will warrant a faster and sounder evaluation process. It will also allow the SUCs to track their grantees as well as their regular students and design necessary interventions when and where needed.

### 3. **Designing the selection process and interventions for the program**

The failure rate of the program is determined by the number of grantees who did not complete their degree (dropped out). There is a need to probe deeper into the reasons why these grantees have dropped out. The data collected from three SUCs indicates at least 39% of the dropouts were unprepared for tertiary education, 11% of which were uninterested or preferred to work. This has an important implication for the selection process. It reiterates the need to identify those who are actually willing to partake in tertiary education. Other reasons specified for dropping out include pregnancy, health issues and familial obligations. There are aspects to the program that go beyond the academic realm. The cultural change experienced by the grantees from being relocated to a more urbanized setting than what they have been accustomed to is a legitimate issue brought up by the SUCs. These are issues to take into account when designing interventions for the program.

### 4. **Cooperation with other government agencies**

A recurring problem brought up by SUCs is the health concerns of the grantees during term time, especially when they end up hospitalized. Being members of a *Pantawid* household, the



grantees are supposed to be covered by the national health insurance, PhilHealth. Some grantees are not even aware of the program and the coverage they are entitled to. It is important that they are made aware of this and if necessary, ensure that they have a membership card that enables them to avail of benefits without needing any additional documentation from the principal member. Guidelines on membership need to be clarified by PhilHealth, especially for grantees that are over the age of 21 and no longer qualify as dependents.

The implementing agencies also need to partner with the Commission on Audit (COA) to set guidelines and properly advise on how the grant can be utilized more efficiently. For instance, for most SUCs, the tuition fee is below the allocated Php 10,000. SUCs usually have to return the remaining balance instead of utilizing it for other school-related expenses necessary for the student to complete their degree. As mentioned in the previous section, students incur additional expenses that are not covered by the grant. The savings from tuition can be used for the other expenses if these can be allowed by rules of the program and authorized by COA.

##### **5. Grantees need additional academic support**

SUCs have noted that grantees, especially from the first batch, need academic support outside of regular scheduled classes. Universities observed that the grantees should have partaken in a bridging program before school start in order to acclimatize them again to a learning environment as well as catch up on basic theory and learning techniques. Tutorials are also needed which can be devised through a “buddy system” between senior students and grantees within the same degree program. These academic support systems need to be integrated into the program design to ensure that all SUCs involved are able and will provide them to those who need it.

## REFERENCES

---

- Alon, S., Tienda, M. (2005). "Assesing the "mismatch" hypothesis: Differences in college graduation rates by institutional selectivity", *Sociology of Education*, Vol. 78(4), pp. 294-315
- Arcidiacono, P. (2005). "Affirmative Action in Higher Education: How do Admission and Financial Aid Rules Affect Future Earnings?", *Econometrica*, Vol. 73(5), pp. 1477-1524
- Aubel, M. (2011). "Affirmative Action in Higher Education and Afro-Descendant Women in Bahia, Brazil" MA Thesis, University of Kansas, United States of America
- Bertrand, M., Hanna, R., Mullainathan, S. (2007). "Affirmative Action in Education: Evidence from Engineering College Admissions in India", Bureau for Research in Economic Analysis of Development Working Paper No. 015
- Chakravarty, S., E. Somanathan, (2008). "Discrimination in an Elite Labour Market? Job Placements at IIM-Ahmedabad", *Economic and Political Weekly*
- Desai, S., Kulkarni, V. (2008). "Changing Educational Inequalities in India in the Context of Affirmative Action", *Demography*, Vol. 45(2), pp.245-270
- Fryer, R., Loury, G, (2005). "Affirmative Action and Its Mythology", *Journal of Economic Perspective*, Vol. 19(3), pp. 147-162
- Greenberg, J. (2002). "Affirmative Action in Higher Education: Confronting the Condition and Theory", *Boston College Law Review*, Vol. 43(3)
- Häkkinen, I. (2004). "Do University Entrance Exams Predict Academic Achievement?" Working Paper, Department of Economics, Uppsala University, No. 2004:16
- Holzer, H., Neumark, D. (2005). "Affirmative Action: What Do We Know?", *Journal of Policy Analysis and Management*,

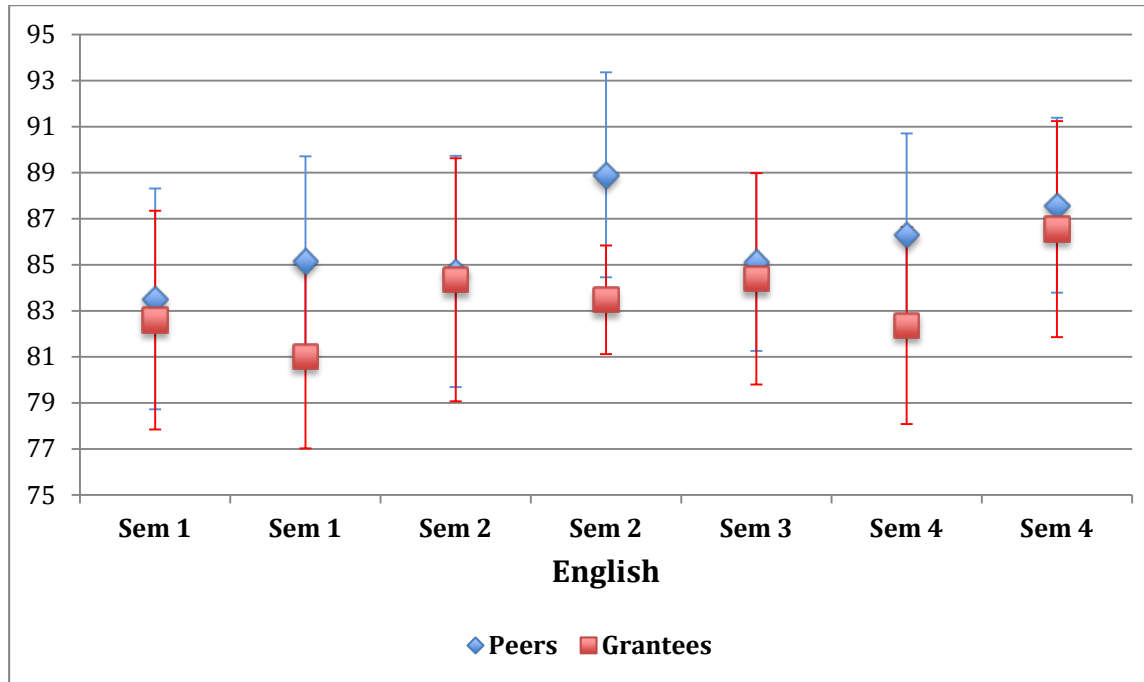
Lee, HA. (2012). "Affirmative Action in Malaysia: Education and Employment Outcomes since the 1990s", *Journal of Contemporary Asia*, Vol. 24(2), pp. 230-254

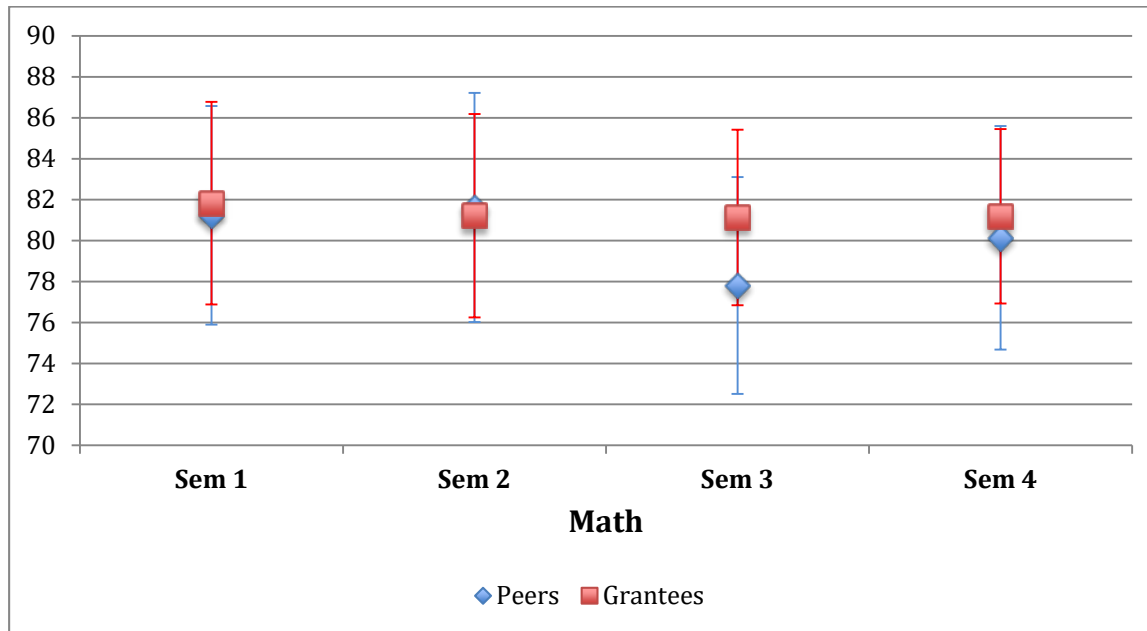
Mare, R.D. (1981). "Change and Stability in Educational Stratification", *American Sociological Review*, Vol. 46, pp. 72-87

Paqueo, V., A. Orbeta, and J. Albert (2012) "A Critical Look at the Education Sector: Achievements, Challenges, and Reform Ideas," in Albert et al Education for Development PIDS 2011 Economic Policy Monitor.

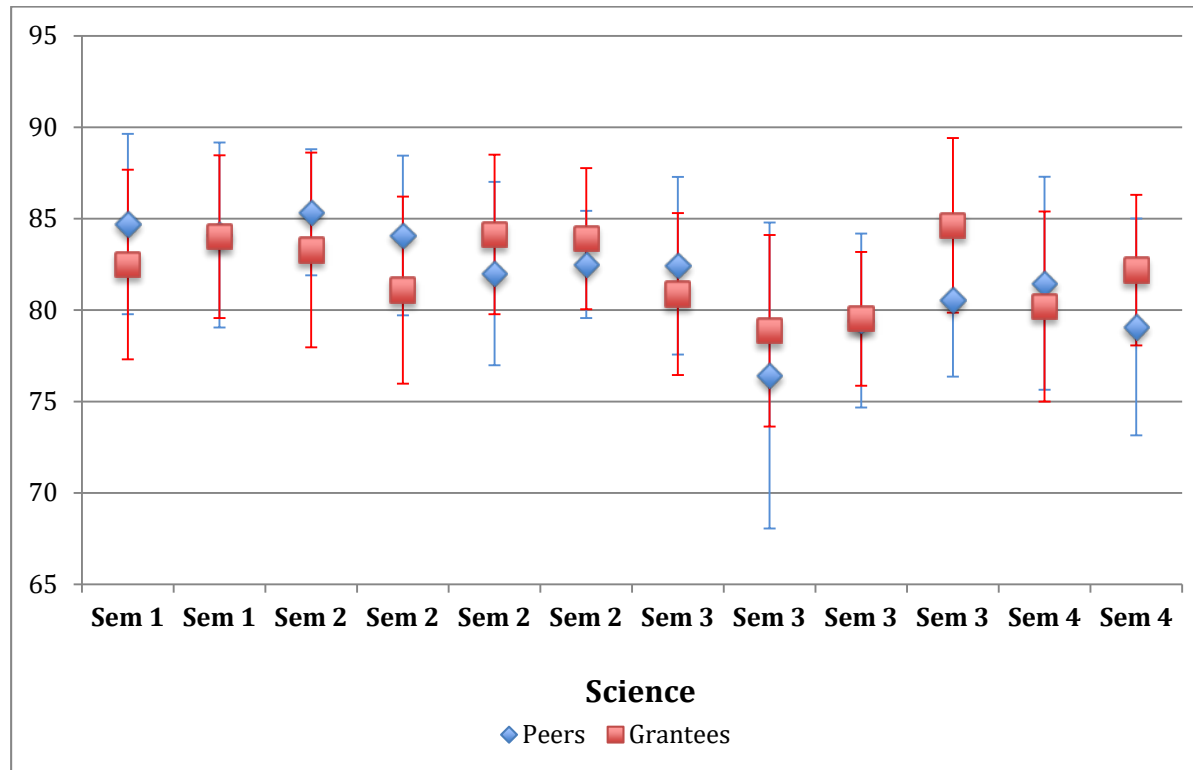
Pedrosa, R., N. Dachs, R. Maia, C. Andrade, B. Carvalho, (2007). "Academic Performance, Students' Background and Affirmative Action at a Brazilian University", *Higher Education Management and Policy*, Vol. 19(3), pp. 1-20.

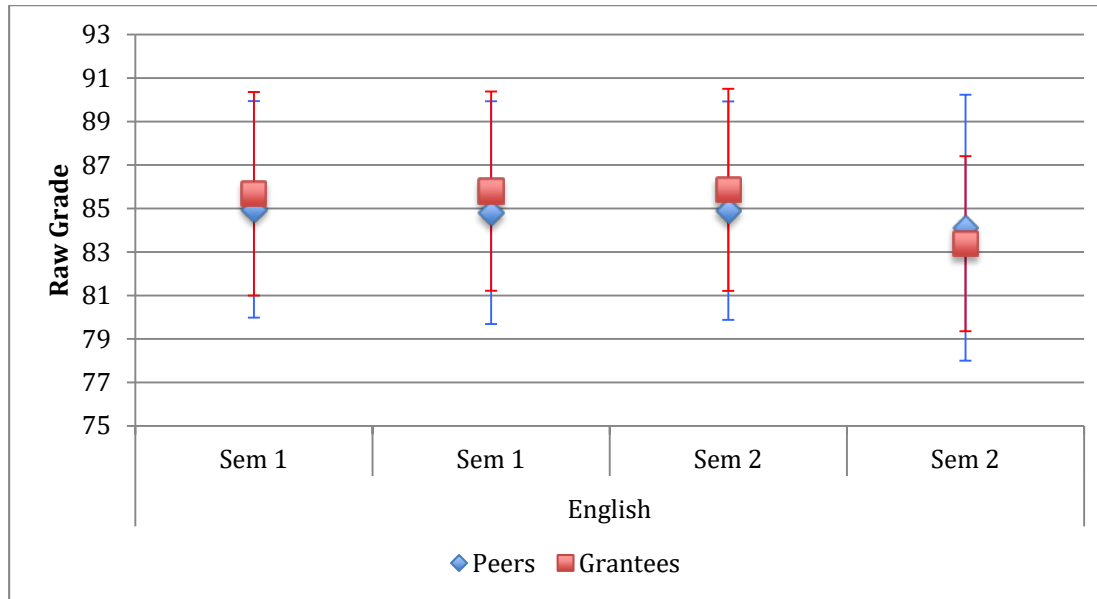
Orbeta, A., V. Paqueo, K Gonzales, S. Cortes and A. Adona (2016) "A Review of Student Financial Assistance Programs for Higher Education" Processed.

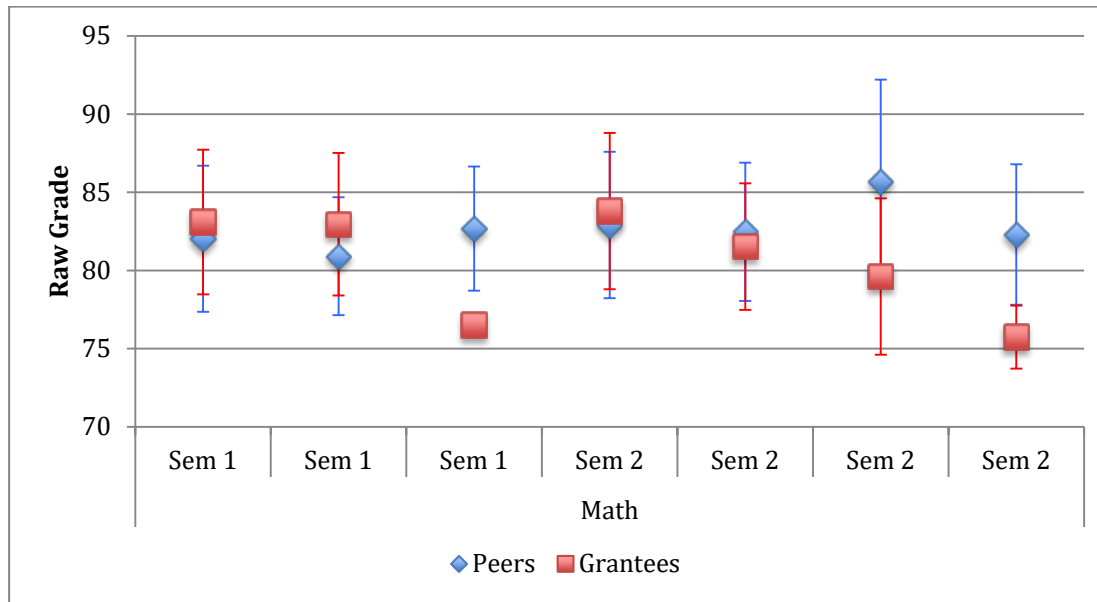
**APPENDIX A. SEMESTRAL GRADES OF SGP-PA GRANTEES AND PEERS****Fig. 1. Means and deviation for English**

**Fig. 2 Means and deviation for Mathematics**

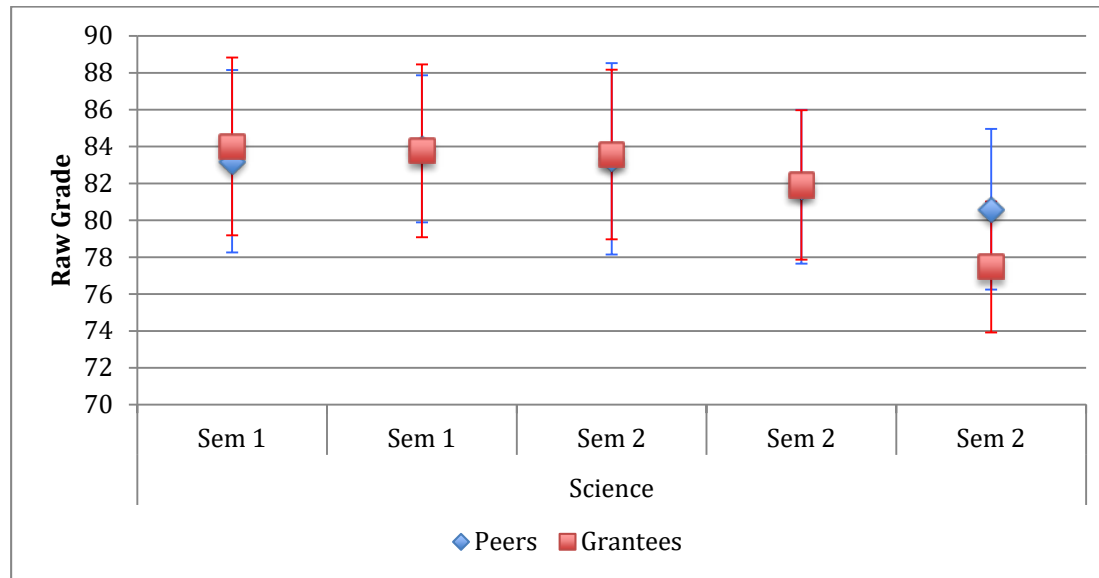
**Fig. 3. Means and deviation for Sciences**



**APPENDIX B. SEMESTRAL GRADES OF ESGP-PA GRANTEES AND PEERS****Fig. 1. Means and deviation for English**

**Fig. 2. Means and deviation for Mathematics**



**Fig. 3. Means and deviation for Sciences**

## APPENDIX C. OLS RESULTS FOR ALL MODELS

**Table 1. OLS results for first year Mathematics**

Dependent variable: Mathematics	Model 1			Model 2			Model 3			Model 4		
	Coeff.		SE	Coeff.		SE	Coeff.		SE	Coeff.		SE
Entrance exam score	0.04	***	0.00	0.04	***	0.02	0.07	***	0.01	0.06	***	0.01
Grantee				0.22		0.17				-0.78	**	0.33
Age							0.03		0.07	0.11		0.08
Log of HH income							0.36	**	0.18	0.34	**	0.18
Married							-0.29		2.16	-0.70		2.12
Female							0.47		0.34	0.40		0.34
Father had at least some HS							0.17		0.35	0.06		0.35
Mother had at least some HS							0.69	*	0.38	0.37		0.38
Gap between HS and college							-0.10		0.10	-0.10		0.10
SUC										-0.49	***	0.14
Program wave				0.37	*	0.22				2.32	***	0.39
Constant	81.08	***	0.22	80.41	***	0.43	75.47	***	2.69	73.66	***	2.90
No. of observations	3519			3519			1028			1028		
Adj. R-squared	0.0269			0.0273			0.0551			0.0901		

Table 2. OLS results for first year Sciences

Dependent variable: Science	Model 1			Model 2			Model 3			Model 4		
	Coeff.		SE	Coeff.		SE	Coeff.		SE	Coeff.		SE
Entrance exam score	0.05	***	0.00	0.06	***	0.00	0.10	***	0.01	0.10	***	0.01
Grantee				-0.24		0.21				-0.86	**	0.37
Age							0.51	***	0.10	0.42	***	0.10
Log of HH income							1.24	***	0.22	1.07	***	0.22
Married							3.44		2.47	2.25		2.43
Female							1.09	***	0.41	0.86	**	0.40
Father had at least some HS							0.35		0.37	0.33		0.37
Mother had at least some HS							0.29		0.42	0.49	*	0.41
Gap between HS and college							-0.40	***	0.12	-0.36	***	0.12
SUC							0.52	***	0.14	0.73	***	0.14
Program wave				-2.84	***	0.39				-2.43	***	0.46
Constant	80.83	***	0.26	86.11	***	0.78	54.64	***	3.21	61.94	***	3.43
No. of observations	2581			2581			635			635		
Adj. R-squared	0.0436			0.0621			0.1836			0.2202		

Table 3. OLS results for first year English

Dependent variable: English	Model 1			Model 2			Model 3			Model 4		
	Coeff.	SE		Coeff.	SE		Coeff.	SE		Coeff.	SE	
Entrance exam score	0.04	***	0.00	0.05	***	0.00	0.03	***	0.01	0.04	***	0.01
Grantee				-0.16		0.16				-0.72	**	0.28
Age							-0.18	***	0.07	-0.24	***	0.07
Log of HH income							0.55	***	0.15	0.46	***	0.15
Married							0.71		1.94	0.28		1.94
Female							1.58	***	0.29	1.58	***	0.29
Father had at least some HS							0.78	***	0.30	0.67	**	0.30
Mother had at least some HS							0.40		0.32	0.39		0.32
Gap between HS and college							0.11		0.09	0.16	*	0.09
SUC							0.22	**	0.10	0.36	***	0.11
Program wave				-0.95	***	0.22				-1.03	***	0.36
Constant	83.09	***	0.21	84.64	***	0.41	78.62	***	2.33	82.25	***	2.48
No. of observations	4069			4069			1158			384		
Adj. R-squared	0.0325			0.0365			0.0938			0.213		

**Table 4. OLS results for second year Mathematics**

Dependent variable: Mathematics	Model 1		Model 2		Model 3		Model 4	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Entrance exam score	0.09 ***	0.02	0.10 ***	0.02	0.12 ***	0.04	0.13 ***	0.04
Grantee			0.78	0.52			0.57	0.79
Age					0.29 **	0.12	0.29 **	0.12
Log of HH income					-0.69 *	0.41	-0.67 **	0.41
Married					-2.91	4.29	-1.94	4.50
Female					0.76	0.60	0.76	0.60
Father had at least some HS					-0.46	0.70	-0.44	0.70
Mother had at least some HS					-0.94	0.70	-0.90	0.70
Gap between HS and college					-0.07	0.15	-0.11	0.16
SUC					0.00	(omitted)	0.00	(omitted)
Constant	77.94 ***	0.68	77.10 ***	0.88	79.07 ***	4.85	78.12 ***	5.03
No. of observations	335		335		184		184	
Adj. R-squared	0.0755		0.079		0.0628		0.1547	

Table 5. OLS results for second year Sciences

Dependent variable: Science	Model 1		Model 2		Model 3		Model 4	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Entrance exam score	0.06 **	0.03	0.07 *	0.04	0.21 ***	0.06	0.37 ***	0.09
Grantee			0.24	1.09			5.72 **	2.45
Age					0.08	0.24	0.05	0.23
Log of HH income					-0.67	0.61	-0.47	0.59
Married					0.00	(omitted)	0.00	(omitted)
Female					-0.33	0.92	-0.33	0.88
Father had at least some HS					-0.86	1.27	-0.94	1.22
Mother had at least some HS					-0.48	1.26	0.39	1.27
Gap between HS and college SUC					0.23	0.31	0.02	0.31
Constant	80.91 ***	1.39	80.59 ***	1.98	78.98 ***	7.98	67.50 ***	9.11
No. of observations	116		116		63		63	
Adj. R-squared	0.0256		0.0174		0.1247		0.1904	

**Table 6. OLS results for second year English**

Dependent variable: English	Model 1		Model 2		Model 3		Model 4	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Entrance exam score	0.25 ***	0.04	0.17 ***	0.04	0.26 ***	0.09	0.12	0.10
Grantee			-5.35 ***	0.81			-5.15 ***	1.84
Age					-0.15	0.31	0.08	0.31
Log of HH income					0.16	0.58	-0.20	0.56
Married					4.25	3.19	5.28 *	3.04
Female					3.05 *	1.53	1.70	1.53
Father had at least some HS					0.86	1.36	0.04	1.32
Mother had at least some HS					0.10	1.32	-0.88	1.30
Gap between HS and college					-0.93 **	0.38	-0.78 **	0.36
SUC					0.00	(Omitted)	0.00	(Omitted)
Constant	75.60 ***	1.86	81.85 ***	1.79	73.51 ***	9.10	83.73 ***	9.34
No. of observations	87		87		65		65	