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Guided Path to Success

Does GPS Increase the Academic Success of Students?



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Guided Path to Success

Does GPS Increase the Academic Success of Students?

Introduction

What is Guided Path to Success (GPS)? GPS is Moorpark College’s program for first year students, targeted at students who are at risk for dropping out. This “first year experience” program is designed to help students succeed by giving them exposure to the college campus prior to school starting (summer-bridge); a few reduced cost or free items for class; encouragement; priority registration; and increased support during the semester.

The GPS program was designed based upon a review of other community college “first year experience” programs. Moorpark College faculty and administrators visited campuses with similar programs, such as that at Pasadena City College, in an effort to glean lessons learned. Based upon these lessons learned, a workgroup made up of three Deans, instructional faculty, counseling faculty, and staff, designed the GPS program to meet the needs of Moorpark College’s first year students. Like other colleges, the program is geared toward those who are first generation college students.

Recruitment

Recruitment for the first cohort of GPS was actively conducted by going out to each of the feeder high schools, explaining the program, and inviting students to sign-up. The vast majority of students who attend Moorpark College come directly from high school, hence, recruiting at local high schools.



Engaged GPS Student

Who is Eligible?

Students are eligible to participate in GPS if they are beginning their first semester of college. They must also agree to participate in all components of the program.

Program Requirements

The GPS program is made up of a variety of activities designed to support students and guide them through their first year of college. These components are intended to start students off on the “right track.”

Students are required to participate in the following ways in the GPS program or they are dropped from the program. The intention here is not punitive, but rather, encouraging adherence to the program.

In addition to the required participation, there is also an optional family orientation and tutoring

Required Participation	Time
Summer Kick-Off	2 days
Enroll in College Strategies	1 semester
Meet with Coach	1x/month
Respond to Coach within 24 hrs	Year 1
Meet with Counselor	1x/semester
Must maintain FT status (12+ hrs)	Year 1
Take math and English	Year 1
Complete at least 10 GPS activities	Year 1

is offered to students, if needed. GPS students also benefited from the priority registration that they receive as part of the program.

Research Questions

We wanted to know if the GPS program increases the academic success of students. Specifically, does GPS improve the retention of students? Do GPS students have higher GPAs than their counterparts?

Hypothesis 1: GPS participants will be more likely to be retained to the Spring semester.

Hypothesis 2: GPS participants will be more likely to be retained one year later.

Hypothesis 3: GPS participants will have higher Grade Point Averages (GPAs).

Academic Motivation

Student's high school GPA has long been established as a predictor of college success. Historically speaking, many community colleges have not regularly received GPA from high schools or it is often not reported by students applying to the college. While self-reported high school GPA has been shown to be highly accurate, it is not widely reported on Moorpark College applications. The application for California community colleges (CCCapply) is undergoing some changes in which high school GPA would be collected; however, at the time of this study it was only being piloted. Moreover, academic motivation has been found to be a reliable proxy for high school GPA.

The idea is that what makes high school GPA an important predictor is not so much sheer *ability* but the student's academic motivation, which impacts GPA and success in school. It would be necessary to include motivation in our research if only for its effect on GPA and retention; however, motivation could also differentiate who self-selected to participate in the GPS program. That is to say, academic motivation could be a driving force behind students choosing to participate in GPS. Those with greater academic motivation may be *more likely* to choose to participate, thus, it is important that we include measures of academic motivation not only as predictors of academic success, like we would GPA, but also to control for differences among students.

There are three main components established in the psychological literature on motivation—intrinsic motivation, extrinsic motivation, and amotivation. As Vallerand et al. (1999) explain, *amotivation* is believing one's behavior is caused by forces out of one's control; not being motivated intrinsically or extrinsically.¹ *Extrinsic motivation* is being motivated by external factors or "as a means to an end," not for the sake of the behavior specifically.¹ *Intrinsic motivation* is being motivated to do an activity for itself and/or for the pleasure derived from participation.¹ This is theorized as the most important factor in academic success.

Because we were not able to obtain high school GPA for our sample, we collected data on the Academic Motivation Scale (AMS) developed by Vallerand et al. to assess students' academic motivation.¹ The AMS was administered to students participating in GPS and other students entering Moorpark College at the beginning of the Fall semester 2016.

Methods

We employed a mixed-methods, quasi-experimental design for this research study. A quasi-experimental design includes a control group in contrast to the intervention/experimental group but does not have random assignment of subjects as in a traditional experimental design. For programs in which participants self-select into, something could be different about those who choose to participate. In this case, several factors could influence the student to self-select into the program: student's academic motivation, first generation status (nervousness about attending college when you are the first in your family to go), or low-income status (needing financial support).

To control for those differences that may affect self-selection we utilized Propensity Score Matching (PSM) to identify a matched sample on several characteristics. This gives us confidence that our control and intervention groups are as similar as possible and allows us to evaluate the intervention (in this case, GPS) for its effectiveness.

Additional methods included surveying students regarding their experience with the GPS program. We asked students what they liked best about the program at the conclusion of the Fall semester and again at the end of the academic year (2016-2017). We also asked them at the conclusion of the academic year *where they saw themselves in the next 5 years*.

Academic Motivation Scale

To assess student academic motivation we administered the Academic Motivation Scale (AMS) to first-time college students via paper in English or Spanish at the beginning of the Fall semester, 2016. The AMS was developed by Vallerand et al. to assess for academic motivation in college which has a well-established link to positive educational outcomes—persistence, learning, curiosity, and performance.¹ The AMS primarily measures intrinsic and extrinsic motivation, or “one’s perceived reasons for engaging in a given activity (the “why” of behavior)...for the activity itself or for reasons lying outside the activity”.¹ It is also the first scale which measures amotivation.

A total of 825 Moorpark College students enrolled in Fall 2016 completed the AMS. The scale measures 7 different factors on a scale of 1 to 7, from “does not correspond at all” to “corresponds exactly”. Below we explain each of the 7 different factors measured by the AMS.



Dean, Howard Davis inspiring GPS students

Intrinsic Motivation

Toward Accomplishments

As defined by Vallerand et al., intrinsic motivation Toward Accomplishments is “engaging in an activity for the pleasure and satisfaction when one attempts to accomplish or create something.”¹ One example provided by the developers is a student who extends their work beyond requirements for the satisfaction of trying to surpass themselves. The AMS measures intrinsic motivation toward accomplishments with 4 items.

To Know

Intrinsic motivation To Know is defined by Vallerand et al. as “performing an activity for the pleasure and satisfaction that one experiences while learning, exploring, or trying to understand something new.”¹ The AMS measures intrinsic motivation factor To Know with 4 items.

To Experience Stimulation

Another aspect of intrinsic motivation, to Experience Stimulation, is when one engages in an activity for the “stimulating sensations” one experiences during such as “sensory pleasure, excitement, or aesthetic experiences.”¹ The AMS measures intrinsic motivation to Experience Stimulation with 4 items.

Extrinsic Motivation

External Regulation

Extrinsic motivation External Regulation is explained as participating in an activity due to external forces, constraints, or rewards.¹ As mentioned earlier, extrinsic motivation is different than intrinsic motivation in that motivation is not for the activity *itself* but for external influences. The AMS measures extrinsic motivation External Regulation with 4 items.

Introjected Regulation

As explained by Vallerand et al., extrinsic motivation Introjected Regulation is being motivated to act by reflecting on past external contingencies.¹ The person begins to internalize reasons for their actions.¹ The AMS measures Introjected Regulation with 4 items.

Identified Regulation

Similar to Introjected Regulation, extrinsic motivation Identified Regulation is when the activity is valued or becomes important to the person, and the person has internalized the external contingency.¹ This is identification when the activity is *viewed as chosen by self*. The activity then “becomes regulated through their identification.”¹ The AMS measures Identified Regulation with 4 items.



Amotivation

Amotivation is an aspect of motivation, Vallerand et al. explain, in which “one perceives that their behavior is caused by something out of their control, i.e., they do not perceive contingencies between outcomes and their own actions.”¹ People high on Amotivation are not intrinsically or extrinsically motivated. As Vallerand et al. say, “they feel undecieved and start asking themselves ‘why in the world they go to school’.”¹ *It has been said that people high on amotivation will eventually stop participating in academic activities.*¹ Amotivation is measured with 4 items on the AMS.

Analysis

Data analysis was conducted using descriptive statistics, t-tests, and chi-squares with SPSS v24.1. Ordinary Least Squares (OLS) regression was used to analyze *student GPA* outcomes with student background predictors. We analyzed binary outcomes of being *retained* to the Spring 2017 semester, as well as *annual retention*, with logistic regression.

Due to problems with quasi-complete separation and complete separation, we completed the analysis of students being retained with Firth logistic regression. This is viewed as the gold standard for dealing with separation issues when one has a small sample and few observed events of the outcome.ⁱⁱ

Sample

We started with 141 students enrolled in the GPS program for Fall 2016. After considering complete data on academic motivation (AMS) and demographic variables, 106 GPS students were left in the sample and eligible for matching.

In order to obtain a control group for the GPS intervention, we performed Propensity Score Matching (PSM) using Nearest Neighbor with a 1:3 match ratio. PSM will not match a case if it is outside of the “proximity” to the intervention group you designate. Thus, not every case in the intervention group has 3 cases matched.

Student GPS participants were matched on key demographic variables and academic motivation factors: gender, age, race, first generation status, intrinsic motivation-to know, intrinsic motivation-to accomplish, intrinsic motivation-to experience stimulation, extrinsic motivation- external regulation, extrinsic motivation- introjected regulation, extrinsic motivation- identified regulation, and amotivation.

The resulting sample consisted of 362 cases: 99 in the intervention group and 263 in the control group.

Many students who participated in GPS were the first to go to college in their family (26% of GPS students)—first generation college students. Approximately 40% were classified as young, 18 years old. Nearly two-thirds (62%) were female, while just over half were non-white (56%). Of those who were non-white, 42% were Hispanic. The average amount of time that students received GPS counseling or coaching was 2.8 hours or 168 minutes. The table below shows how the GPS sample and the control group match up and the overall sample descriptive statistics.

	GPS (n = 99)		Control (n = 263)		Sample	St. Dev.
	Mean	St. Dev.	Mean	St. Dev.	Mean	
Age	18.66	.625	18.70	.770	18.69	.733
Young (18 yo.)	.39	.491	.43	.495	.42	.494
Female	.62	.487	.63	.484	.63	.484
Non-white	.56	.499	.55	.498	.55	.498
Black	.01	.101	.01	.108	.01	.106
Hispanic	.42	.497	.43	.496	.43	.495
Asian/Pacific Isl.	.08	.274	.08	.270	.08	.271
Other	.04	.198	.03	.176	.04	.182
Other Non-White (<i>excludes Hispanic</i>)	.13	.339	.12	.329	.13	.331
First Generation	.26	.442	.24	.426	.24	.430
Extrinsic Motivation						
External Regulation	23.69	4.20	23.66	3.90	23.67	3.98
Introjected Regulation	17.03	3.67	17.03	3.50	17.03	3.54
Identified Regulation	20.38	2.28	20.25	2.60	20.28	2.51
Intrinsic Motivation						
To Know	20.97	5.32	20.62	4.94	20.72	5.04
Toward Accomplishment	16.37	3.74	16.22	3.33	16.26	3.44
To Experience Stimulation	18.35	5.70	18.03	5.26	18.12	5.41
Amotivation	14.57	3.10	14.48	3.55	14.50	3.44
GPS Minutes Counseled/Coached	167.57	99.45	--	--	--	--

Results

Retention

Borrowing from the work of the RP Groupⁱⁱⁱ, for the purposes of this report **retention** is defined as continuing on to the following semester and attempting at least 12 units at Moorpark College. This is often referred to as “persistence.”

We looked at the effect that GPS has on the retention of students from fall to spring semesters. Statistical tests conducted showed there was *no statistically significant difference* between GPS and the control group in regards to the percent who were retained to the Spring semester.

“In five years...Hopefully going to grad school after graduating from my under grad of choice.”

“I loved the *positivity* from the GPS coaches and students, it made me as a student feel more optimistic. The thing I liked the MOST was the community we built, I developed *life-long friends* out of this program. Making best friends in the program makes school less stressful and more enjoyable because you have a support system and friends who can help you.”

Does GPS increase retention rates to the Spring semester?

There is *no detectable difference in GPS increasing the retention of students to the following semester*, whether we consider group membership alone or the amount of GPS counseling/coaching received during the Fall semester. Additional analyses revealed that a fair amount of GPS counseling/coaching took place in the Spring rather than the Fall. This could mean that not enough counseling or coaching took place in the Fall to make an impact on semester to semester retention, or there was not enough variance in the data across GPS students to determine an effect. Based upon these data we must conclude that students who continued on to Spring *would likely have done so with or without the GPS program*.

Does GPS increase annual retention rates?

We also looked at whether or not participation in GPS improved retention to the Fall semester, 1 year later. The table on page 8 shows that when we just look at whether students were a part of the GPS program (Model 2), there is no increase in annual retention rates. However, Model 3 shows that when we look at **how much counseling or coaching students received through the GPS program**, *students are 1.8 times more likely to return in the Fall semester for every one standard deviation increase in minutes counseled/coached*, all other things being equal.

Some differences between students also become noticeable once we factor in the amount of time that GPS students are counseled or coached. For example, while there are no significant differences between Hispanic and white students in regards to retention, other non-white students were *less likely* to return one year later even after accounting for GPS counseling/coaching. The odds that other non-whites (Asians, Pacific Islanders, will be retained a year later are 85% lower than the odds for whites.



Motivation

"I loved that GPS was so accommodating towards first year college students. *If I had not done this program I feel like I would have been lost*, but now I know so much about Moorpark College. I feel much more prepared to know what kind of classes I want for myself and I know what resources are available to me."



Persistence

"One thing I liked best was the class *registration assistance*. It helped curb any anxiety about getting into my classes. Another aspect of the program I enjoyed was the amount of counselors ready and willing to help. Planning out my path in college was *daunting* until I met with multiple GPS counselors. I now have a comprehensive path to follow in school in a field that best suits me."



Support

GPS Effect on Fall Retention 1 Year Later, Controlling for Demographics and Academic Motivation, Using Logistic Regression

	Model 1 Odds Ratio	Model 2 Odds Ratio	Model 3 Odds Ratio
Intercept	2.212**	2.302**	1.460
Female	0.818	0.815	1.155
First Generation	0.578	0.581	0.389
Young (18 yos.)	1.448	1.443	3.815*
Hispanic	0.805	0.806	0.681
Other Non-White	0.534	0.536	0.154*
<u>Intrinsic Motivation</u>			
to Experience Stimulation (standardized)	1.140	1.147	3.134
to Know (standardized)	0.805	0.806	0.631
Toward Accomplishments (standardized)	1.361	1.358	1.317
<u>Extrinsic Motivation</u>			
External Regulation (standardized)	0.927	0.930	0.868
Introjected Regulation (standardized)	0.882	0.878	0.429*
Identified Regulation (standardized)	1.360*	1.361*	1.405
Amotivation (standardized)	0.984	0.984	0.631
GPS (vs. control)	--	0.864	xxx
GPS Minutes Counselor/Coached (standardized)	--	--	1.781*

Xxx: Not included in model due to collinearity with minutes counseled

**: p value < .01

*: p value < .05

Additionally, younger students (18 year olds) are 3.8 times more likely to return in the fall than students who are 19-22. Model 3 also shows us that Introjected Regulation (a part of external motivation) has a significant effect beyond what GPS has been able to address to date—for every one standard deviation above the mean on Introjected Regulation, the odds that students will return one year later are 57% less. Meanwhile, the extrinsic motivation factor of Identified Regulation is *no longer significant* in predicting students being retained one year later.

Despite these differences, Model 3 still shows us that *GPS students who received more time counseled or coached, compared to the average amount of time, were more likely to return one year later.* Holding all else equal, GPS students were 1.8 times more likely to be retained one year later for every standard deviation above the mean of GPS counseling/coaching received.

“Where I see myself in five years is that I will be in another university or actually grad school in five years getting my MA in Sociology. I can’t wait for the future *I have been inspired to achieve greater things from the GPS program.*”

Academic Success

Does GPS increase the academic success of students, as indicated by GPA?

Interestingly enough, GPS participation alone does *not* impact students' grade point average (GPA), nor does the time students spend receiving counsel from GPS coaches. However, what may be more important is that the time students are counseled/coached *eliminates* the differences between groups of students.

In order to show the distinct differences between race/ethnic groups we include both a Hispanic variable and a second variable called Other Non-White which combines all other non-white racial groups. The other non-white groups were too small to include in the models independently so this allows us to show the differences in relation to whites.

The table below, in Models 1 and 2, shows there are clear and persistent differences between groups of students. Consistently, Hispanic students have lower GPAs than whites, females have higher GPAs than males, and younger students have higher GPAs than older.

What is Amotivation?

Amotivation is not being intrinsically or extrinsically motivated but believing your behavior is caused by something out of your control.

- Vallerand et al. (1992)

GPS Effect on Cummulative GPA, Controlling for Demographics and Academic Motivation, Using OLS Regression

	Model 1 (R2 = .128)	Model 2 (R2 = .137)	Model 3 (R2 = .266)
Intercept	3.004**	3.032**	1.112
Age (standardized)	-.162*	-.168*	-.359
Female	.257*	.251*	.237
Hispanic	-.327**	-.330**	-.167
Other Non-White	-.105	-.103	-.349
First Generation	-.031	-.024	.005
External Motivation			
External Regulation	-.007	-.006	-.033
Introjected Regulation	-.001	-.003	.006
Identified Regulation	-.016	-.015	.093
Internal Motivation			
to Experience Stimulation	-.008	-.007	.005
to Know	.001	.001	.002
Toward Accomplishments	.072**	.072**	.070
Amotivation	-.054**	-.053**	-.088*
GPS (vs. control)		-.191	xxx
GPS Minutes Counseled/Coached			.002

Xxx: eliminated from model due to collinearity with minutes counseled

** : p value < .01

* : p value < .05

Students who score higher on the intrinsic academic motivation factor Toward Accomplishments also have *higher* GPAs, while those who score higher on Amotivation have *lower* GPAs.

The largest differences in GPA exist between Hispanics and whites (.33) and females and males (.26). Other controls, such as Amotivation, also have a notable effect in that students with higher Amotivation consistently have lower GPAs (Models 1 and 2) and, in fact, *the difference actually increases* when we factor in the amount of time that GPS students were counseled or coached (Model 3). Looking at Model 3, for every increase in 10 points on the Amotivation scale, on average, students have GPAs which are lower by 0.90 points—nearly 1 point on GPA! This indicates that students' Amotivation has a persistent negative effect on GPA that is beyond what GPS counseling/coaching has addressed.

As seen in the table on page 9, once we include the time students are counseled or coached by GPS staff (Model 3), *the differences between special population groups are completely eliminated!* This model explains 27% of the variance in GPA. In regards to students' academic motivation factors, one factor has a persistent *negative* effect on GPA: Amotivation.

*In essence, the counseling and coaching that students receive through the GPS program actually **equalizes the playing field** when it comes to age, race, gender, first generation college students, and most academic motivation factors!*

This is a powerful statement about the work of the GPS counselors and coaches—empowering and motivating students to reach their potential.

Discussion

Our analysis shows that GPS is quite effective in improving educational outcomes for students. While we cannot say that just being a part of the GPS group improves the chances that students will return one year later, we can say that *the more counseling/coaching students receive, the more likely they are to be retained.*

What is quite notable about the GPS program is that the counseling/coaching it provides students actually **washes out group differences in GPA between special population groups**. Specifically, there were no differences in GPA between females and males; Hispanics and whites; other non-Whites and whites; first generation students and non-first generation, once we factored in the time GPS students received counseling or coaching. In essence, the attention that GPS provides students through coaching and counseling eliminates the differences in GPA that we work so hard to achieve!

Another important observation to make is that programs like GPS *may* be unable to eliminate performance and retention problems due to a students' Amotivation. Our



analysis highlights the significance of the negative effect of Amotivation persisting despite coaching and counseling. Students who score higher on the Amotivation factor perceive that outcomes are not a result of their actions or believe things are out of their control. It is unknown whether or not it is possible to change this in a person.

In future years, the GPS program may want to work to target these types of paradigms in their students in an effort to help shift student thinking and lower Amotivation. By coaching students in this targeted way, Amotivation may lower and subsequently improve grades, retention, graduation and transfer rates.

What Students Like Best About GPS

In the follow-up we conducted with students, a key theme was that they loved the **family-like atmosphere created by GPS**. Students loved having a place they could come to and know that they “belonged.” It may be like the atmosphere of a fraternity, where one makes friends and builds memories, or it may be a cohort effect, being around the same group of students going through college for the first semester, sharing similar experiences.

Students like feeling known. They like being able to walk into a single room, see their friends, and be greeted warmly. Most of all they love the relationships they made and will carry with them for a long time.

“I love the sense of family on campus within the GPS Center. Each staff member really helped me feel like they were trying to guide me on my path to success. The other thing that I really enjoyed was the monthly check ups, it helped me vent out feelings of frustration with my teachers and find amicable solutions that benefited my teacher and myself.”

*“The GPS Program helped me *meet friends* in the beginning of the year that I’ll be friends with for a very long time. The GPS coaches we’re some of the nicest people that I’ve ever met and we’re always ready to help. *The GPS center was always a safe fun and comfortable place to be* at before in between and after class.”*

Second, GPS students felt **the support they received from GPS staff was invaluable**. It was invaluable to them to have someone/people who believed in them and was always there to support them on their journey. As one student put it “I really liked...the meetings with our coaches because every time I needed help, they would help me and also gave me a lot of advice.”

*“One thing that I really liked was the *meetings with our coaches* because every time I needed help, they would help me and also gave me a lot of advice. ...another thing that I liked was the environment and all the people involved in the GPS program. Everything. *They made me feel welcome and comfortable* and of course they helped me a lot during my first year in college. Sincerely, without the GPS program I don’t know how I would have passed my first year in college.”*

Some students appreciated the accountability and the extra support that a required meeting with their coach provided.

Students truly felt that the GPS staff genuinely cared, assisted them with the logistics of college, answered their school-related questions, offered advice, and overall, guided them on their path to

“GPS was super helpful with everything having to do with school. All the coaches and staff were there whenever I had a question. You can tell they 100% care about each student and their futures.”

success! As another student says, “...you can tell they 100% care about each student and their futures.”

Finally, several students also commented that they **liked the assistance they receive with**

registration—the priority registration and hands-on assistance with registering for classes through GPS counselors. Many students who are the first in their family to go to college don’t have the parental knowledge/support on how to complete the necessary steps to get started with college, like registration. This makes the process very intimidating. It seems that the priority registration and assistance with registration takes some of the anxiety away that many students have when starting college or beginning a semester—how to register, will they get the classes they need, and at the times that work for them.

“One of the things I liked best about the GPS program is that you get priority registration and the counselors put the classes in for you, then later on they show you how to register yourself. I think this really takes extra stress off of students and helps them familiarize themselves with the registration process. Another thing I liked were the events that were held all year. They really helped me realize that Moorpark College and college in general is not as scary as I thought it would be.”

Where Students See Themselves in 5 Years

Most students who participated in GPS have a clear sense of where they are going. The majority are motivated, confident, and clearly directed. They have hope and see themselves happy. Only a select few still exhibit fears about the future and/or are uncertain about where they will be.

When we asked them where they saw themselves in the next 5 years the vast majority said they saw themselves finishing up their *bachelor’s degree* with a major they have picked out. Many GPS ‘graduates’ also said they saw themselves going on to begin a *master’s degree*. While many have plans to continue their education and pursue a graduate degree, some see themselves *starting their own business* or beginning their *career* after graduating with their bachelor’s degree. Few mentioned they saw themselves working a regular job.

For many first year college students, they don’t know what they want to do in their life and are just beginning to explore. At the conclusion of their first year and completing the GPS program, these students have direction. They have identified what their interests are and have picked a career. Overall GPS ‘graduates’ have a clear vision, are hopeful, and believe in themselves! **Maybe the most important gift that the GPS staff have given to their students—a belief that they can achieve their dreams and helping students map out their plans to do so!**

Conclusion

In conclusion, our results show that GPS is a successful program, improving annual retention rates and eliminating differences in GPA across special population groups. Although some differences still show up in annual retention (see young students, other non-whites, and Identified Regulation), GPS still improves annual retention rates the more that students receive GPS counseling or coaching from GPS staff.

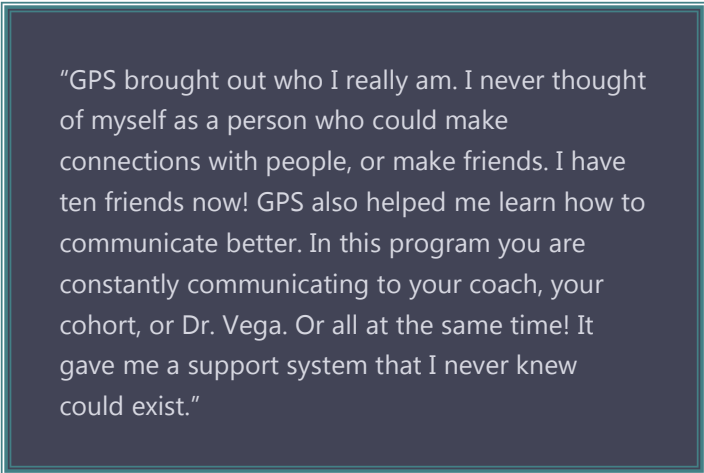
GPA differences are also eliminated for every special population group due to GPS counseling/coaching. This cannot be discounted despite Amotivation having a persistent negative effect on student GPA.

Taken together with the qualitative data collected, it is the whole package of GPS which is effective—quality, well-trained staff; effective counseling and coaching; and fostering a positive atmosphere and environment conducive to building relationships. Students love the family-like atmosphere, building life-long friendships; having staff who believe in them and who “show them the way;” and a place to regularly come to do homework and “hang-out”. In many regards to relationships, this program is similar to what one experiences when they go away to college, live in close proximity to other freshman (dorms), and build relationships. Not only do they build friendships with peers but they build relationships with mentors who believe in them.

It would be worth considering moving the GPS program or expanding its location—students also reported that they thought the program would benefit from more space. Students frequently shared that they loved having a place to go do their homework and hang-out with the rest of their cohort. More space would be needed to do this with an expanded program.

The GPS program could also potentially grow by targeting Amotivation and Identified Regulation feelings and thought patterns in students. It is unknown if there are already established methods or programs to do so.

Finally, we conclude with the statement that we think sums up the effectiveness of this program:



“GPS brought out who I really am. I never thought of myself as a person who could make connections with people, or make friends. I have ten friends now! GPS also helped me learn how to communicate better. In this program you are constantly communicating to your coach, your cohort, or Dr. Vega. Or all at the same time! It gave me a support system that I never knew could exist.”

"I see myself reaching towards my career."

"I see myself graduated from college and finding a job that makes me happy."

"I hopefully see myself in 5 years having completed my bachelors and getting started with graduate school. I hope I go to UCLA or USC to complete my degree and begin working in the medical field soon after."

Graduated Working
Master's Degree

Hope

"In 5 years, I see myself already have worked as an EMT, and have a degree in Fire Tech. I would be enrolled in the Oxnard Fire Academy. After graduating from the Fire Academy, I will work as a firefighter in the Forest Service, where I will gain experience of fighting, wild, brush, and forest fires. After working on Forest Service, I hope to eventually work for Los Angeles or Santa Barbara County Fire Department."

"In the next 5 years I see myself graduating with a BSN and ready to apply to hospitals as a nurse."

"In five years I see myself... In my bakery. Maybe brushing up on a couple law books."

"In 5 years I see myself at CSUN working on my masters in Criminal Justice. I know it won't be an easy path, but I've worked too hard to quit anytime soon, so I won't stop until I have accomplished my goals."

Business

Graduate school

Career

Happy

"I see myself graduated from Moorpark, and two years into my University. I don't know what I necessarily want to do with my life quite yet, but the GPS program helped me with that and put me through a workshop to help me figure it out. I want to be happy with my life, and hopefully a better-rounded person. I believe Moorpark will prepare me for this."

"I will have my bioengineering degree and be working for a company."

Congratulations GPS Cohort 2016-17!



References

ⁱ Vallerand, Robert J., Pelletier, Luc G., Blais, Marc R., Briere, Nathalie, M., Senecal, Caroline, Valleires, Evelyne F. (1992). The Academic Motivation Scale: A Measure of Intrinsic, Extrinsic and Amotivation in Education. *Educational and Psychological Measurement*, 52, 1003-1017.

ⁱⁱ <https://statisticalhorizons.com/logistic-regression-for-rare-events>

ⁱⁱⁱ <https://rpgroup.org/Institutional-Research-Operational-Definitions>