JOURNAL OF PEER LEARNING

# Is Academic Support Only for Students Who "Need" It? An Analysis of Supplemental Instruction by GPA

JOURNAL ARTICLE

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VIRGINIA TECH PUBLISHING


## ABSTRACT

Universities invest a significant amount of money in funding academic support services such as Supplemental Instruction (SI) programs. Oftentimes these efforts are aimed at contributing to the success and retention of students who "need" extra support, defined by grade point average (GPA). To determine the value of university investments in SI programs open to all students enrolled in SI-supported courses, the goal of this study was to assess the impact of SI support on students by GPA level. A matched pairs analysis was conducted, in which students were randomly matched based on several criteria (i.e., enrolled in same section of the course, both first time at the university or transfer students, both new or continuing students, and same GPA category of four categories). One student in each matched pair was a non-SI attendee, and the other student in the pair was a regular SI attendee (i.e., attended five or more times). Course success rates of the students in the matched pairs were then compared using independent samples *t*-tests. Results between non-attendees and regular attendees indicate that SI contributed significantly to course success rates of all students regardless of GPA. However, the most significant gains were realized by students with the lowest GPAs.



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**TO CITE THIS ARTICLE:**
Jacobi, L. (2026). Is Academic Support Only for Students Who "Need" It? An Analysis of Supplemental Instruction by GPA. *Journal of Peer Learning*, *17*(1): 2, 1–11. https://doi.org/10.21061/jopl.127

"The students who don't need academic support are the ones using it—the ones who sit in the front row of my class and would earn an A anyway." This is a common sentiment among faculty who resist the adoption of Supplemental Instruction. This perception raises concerns about university funding and the allocation of resources. If all students benefit from programs like Supplemental Instruction, then it warrants funding; however, if only select groups of students benefit, universities may wish to allocate funding streams differently.

The need for academic support is often defined by GPA. It is assumed that students with high GPAs (i.e., above 3.0 in U.S. American universities) will succeed regardless of their use of academic support, and therefore, universities with limited resources should supply support services that target subpopulations of students. However, research shows that when a subpopulation of students is targeted for academic support, they are less likely to utilize that support, because targeting a group of students further marginalizes and stigmatizes them (e.g., Hodges & White, 2001). Additionally, years of research on Supplemental Instruction shows that all students who use the services benefit academically with higher course success rates (e.g., Bowman et al., 2023; Channing & Okada, 2020; Dawson et al., 2014; Gasiewski et al., 2012) and retention rates (e.g., Bowman et al., 2023; Channing & Okada, 2020; Crisp & Taggart, 2013; Dawson et al., 2014; Terrion & Daoust, 2011). Furthermore, the open-to-all-students approach of Supplemental Instruction programs has led to closing equity gaps and even greater benefits for underserved populations (e.g., Fresno State Supplemental Instruction, 2016; Grillo & Leist, 2013; Perez et al., 2022; Rabitoy et al., 2015; Summers et al., 2015). With that said, it is imperative that Supplemental Instruction programs find ways to successfully draw students who struggle academically to utilize their services since such students have the greatest potential to benefit from the support. However, given the methodological limitations and reliance upon correlational data of previous studies, questions still remain. Does GPA influence who attends SI? Who is best served by SI? Answering such questions will help to determine appropriate allocation of academic support resources such as SI on university campuses.

## LITERATURE REVIEW

### DOES GPA INFLUENCE WHO ATTENDS SI?

If "need" for academic support is often determined by GPA, then it is important to know the GPAs of students who attend SI. The extant literature on SI reveals that the majority of students (regardless of GPA) do not attend peer-facilitated academic support programs such as SI, or at least do not attend regularly (Cornelius et al., 2016; Dancer et al., 2007; Dancer et al., 2015; Duah et al., 2014; Harding et al., 2011; Paloyo et al., 2016; Rath et al., 2012). For example, Dancer et al. (2007) reported that just 29% of 926 students attended one or more times, and in Paloyo et al.'s (2016) study, students attended an average of 1.26 times in a 10-week quarter and 2.67 times in a 12-week semester, with most students not attending at all. Given the poor attendance at SI, universities funding SI programs may be concerned that the students who least "need" academic support (i.e., students with high GPAs) are the ones who use it most often.

Some studies have examined the factors that influence attendance at SI. Interestingly, high GPA is not a factor found to influence attendance. For example, examining the relationship between course performance, high school GPA, and academic background, Achat-Mendes et al. (2019) found no significant differences in attendance at Peer Supplemental Instruction (PSI) sessions between students with varying high school GPAs, indicating that "high school GPA is not a good predictor of participation in the PSI program and that students who earned passing grades exhibited a range of high to low high school GPAs" (p. 19). If GPA is not a strong predictor of who will use SI, then what factors do influence attendance at SI?

A number of studies have found that students attend SI to better understand and retain course content (Etter et al., 2001; Marrone & Draganov, 2017; Parkinson, 2009; Peets et al., 2009), which would clearly benefit all students regardless of GPA. For example, in a study of 331 undergraduate students at a university in Australia, Marrone and Draganov (2017) analyzed the reasons why students attend SI sessions. They found that the three main reasons for attending SI were to

improve grades, receive extra help, and pass the unit. Additionally, although not significant for students with higher GPAs, announcements made by lecturers about SI in class were significantly associated with the motivation of students with lower GPAs to attend SI sessions. Marrone and Draganov (2017) conclude that "lecturers who make an announcement in class regarding SI will be able to better target students with lower GPAs" (p. 18). These findings are promising because they convey that SI draws students with lower GPAs who have the most to gain academically.

Other studies have applied Ajzen's (1991) Theory of Planned Behavior in examining the reasons students attend SI (Allen et al., 2017; Goldstein et al., 2014; Mergelsberg et al., 2021; White et al., 2011). According to this theory, the intention to engage in a behavior (predicted by attitudes, subjective norms, and perceived behavioral control) is the strongest determinant of behavior. Using the Theory of Planned Behavior as a theoretical foundation, White et al. (2011) used online questionnaires to assess the attitudes, subjective norms, perceived behavioral control, student role identities, in-group identification, and intention to attend peer-assisted study sessions of 79 undergraduate students at the start of the semester and of 46 of those students at mid-semester. Their findings indicate that students with positive attitudes toward the study sessions (at the beginning and mid-semester) and the belief that they have control over their attendance (at semester beginning only) were more likely to attend the peer-assisted study sessions. Additionally, the more students considered attendance at the sessions as part of their role as a student, and the more connected they felt to their classmates, the more likely they were to attend. Because these attributes are independent of students' academic abilities, it can be assumed that peer-assisted study sessions draw students with all GPA levels. In other words, regardless of a student's GPA, they may have positive attitudes about the study sessions, perceive that they have control over their attendance (since SI sessions are voluntary), perceive that attending the sessions is part of their role as a student, or feel connected to their classmates; therefore, it cannot be assumed that only students who don't "need" academic support are the ones who use it.

Goldstein et al. (2014) also used the Theory of Planned Behavior to examine the factors associated with the intentions of 74 undergraduate students to attend SI sessions. They found that positive perceptions of SI helpfulness and a low expected grade both contributed positively to student attitudes about SI, which had a significant positive effect on their intention to participate and ultimately on their actual participation. Similar to Marrone and Draganov (2017), Goldstein et al.'s (2014) findings reveal the potential for lower-performing students to be the students most likely to utilize SI.

In all, the evidence suggests that GPA is not a factor that prevents students from attending SI. In fact, there is even some evidence that students with lower GPAs are *more* likely to utilize SI. For example, using an Admissions Index (high school grade and admissions test information to predict first-year GPA), Gattis (2002) confirmed that there was no self-selection bias since the largest group of SI participants were students with the lowest Admissions Index. Despite the fact that a low GPA may not discourage students from using SI, students with the lowest GPAs may stand to benefit most from SI.

## WHO IS BEST SERVED BY SI?

Many studies confirm that students of *all* levels of prior academic achievement end with significantly better final course grades after attending SI (e.g., Arendale, 1997; Malm et al., 2011; Miller et al., 2004). For example, in a study assessing the benefits of SI for 643 weak, average, and strong first-year engineering students, Malm et al. (2011) found that attendance at five or more SI sessions significantly increased students' chances of passing calculus regardless of prior mathematical ability (measured with average math grades from high school). Malm et al. (2011) conclude that "independent of whether a student has a *weak*, *average*, or *strong* mathematics background from high school, he or she can increase his or her chances for success in the Calculus course by attending SI sessions. The more one attends SI, the more one is likely to benefit" (p. 286).

Other studies found disproportionately greater benefits for lower-performing students (e.g., Achat-Mendes et al., 2019; Birkett et al., 2017; Cruickshank & Merica, 2013; Jacobi, 2022; Molina-

Gallo et al., 2022; Murray, 2006; Peterfreund et al., 2008). For example, in their pilot investigation, Cruickshank and Merica's (2013) results suggest positive benefits of SI participation among first-year students with lower high school core GPAs. In examining the final course grades of 1,239 PSI participants by level of attendance, Achat-Mendes et al. (2019) found significant improvement among the cohort of students with low (below 2.5) and intermediate (2.49–3.49) high school GPAs with participation in 10 or more sessions. They conclude "that students with low and intermediate high school GPAs who frequently participate in PSI sessions can perform at a similar standard as their peers with high school GPAs greater than 3.5, indicates that participation in the program may be particularly effective in supporting underprepared students as they transition from high school" (Achat-Mendes et al., 2019, p. 19). The authors even argue that their data "provide evidence to support the utility of our PSI model to surmount the value of high school GPA as a predictor of academic success" (Achat-Mendes et al., 2019, p. 19).

Jacobi (2022) examined mean final course grades of students who attended SI by frequency of attendance and by barrier level. The barrier level was determined by identification within marginalized groups (first-generation student, student of color, remedial enrollment). In Jacobi's (2022) study, of students who did not attend any SI sessions, those with three barriers (highest level) by virtue of identification in marginalized communities had the lowest average course GPA (1.56). At zero sessions, students with increasingly lower barrier levels had increasingly higher average course GPAs of 2.55 (two barriers), 2.71 (one barrier), and 2.92 (zero barriers). This finding is a clear indication that students from marginalized communities perform at lower levels without academic support. With academic support, especially with frequent attendance at SI sessions, students perform significantly better—and students with the most barriers (and likely the lowest corresponding overall GPAs) make disproportionately larger gains. With attendance at ten or more sessions across the semester, the average course GPA of students at every barrier level is above 3.0 (3.08, 3.07, 3.38, and 3.41 respectively), and the equity gap closes significantly; with attendance at ten or more sessions, there is only a 0.33 difference in average course GPA between students with the most and least barriers, whereas the difference is 1.36 (over a full grade) without SI support.

Finally, using a quasi-experimental, matched, two-group design, Birkett et al. (2017) matched 2,436 student SI participants and non-participants based on six covariates (high school core GPA, gender, ethnicity, in-state residency, Pell grant eligibility, and first-generation student status). Results indicate that SI participants in all GPA categories (2.03–2.98, 2.99–3.33, 3.34–3.67, and 3.68–4.0) earned significantly higher course grades than non-participants; the effect sizes suggested a moderate to large effect size of SI participation on the grade. Additionally, the participants in the lowest GPA category had the largest increase in course grade (+0.74) and the largest increase in passing rate (+25.3%), suggesting a disproportionate impact on lower-achieving students. In fact, SI participants in the lowest GPA category earned a full letter grade higher than non-participants with attendance at just two SI sessions.

In summary, the findings of the studies examined suggest that while all students benefit from attendance at SI, students with the lowest GPAs benefit most. Taken together with the findings suggesting that students with higher GPAs are *not* more likely to utilize SI, it is clear that SI is a valuable academic support resource that warrants funding because (1) all students consider the use of SI, regardless of GPA, (2) all students benefit from SI, and (3) the lowest-performing students benefit most from SI. With all of that said, replication of these sorts of studies would be valuable because similar findings would help to confirm the validity of previous results. Additionally, studies that accommodate for methodological concerns of previous studies should be conducted to strengthen the findings. For example, Birkett et al. (2017) did not account for different learning conditions, varying content or assessment difficulty, or grading standards considering that participants were not matched with others from the same course, section, or professor. Since the current study matched participants within the same section of the same course with the same professor, there is increased confidence that the comparisons in course GPAs are valid comparisons. Birkett et al. (2017) also suggested that the effect of the number of SI sessions attended should be considered in future studies. This study took that into account, as well.

# METHODS

## PROGRAM STRUCTURE

The SI program at Minnesota State University, Mankato follows the core tenets of SI as defined by the International Center for Supplemental Instruction. Therefore, hired SI Leaders, students with demonstrated proficiency in the course they are hired to support, are trained upon collaborative learning strategies, core facilitation skills (i.e., checking for understanding, wait time, and redirecting questions), and inclusive environments. Using their training, the SI Leaders develop and facilitate weekly study sessions for interested students. The SI program supported 25 or more courses every semester during the time in which student data was collected: Fall 2022 through Spring 2024.

## DATA COLLECTION AND ANALYSIS

Student data were collected from the Office of Institutional Research, and because the data were deidentified prior to analysis, a waiver of consent was approved, and the data collection protocol was granted exempt status by the university's institutional review board (IRB Project 1459052-7). Using Microsoft Access as the database application, student data were drawn from the university database among the students enrolled in SI-supported courses from Fall 2022 through Spring 2024. With those data, random matched pairs were created because previous research revealed the significance of matched pairs in eliminating concerns about selection bias (i.e., Birkett et al., 2017; Guarcello et al., 2017). For example, using coarsened exact matching, Guarcello et al. (2017) found that the odds of passing the course (measured with a C grade or better) for any student who attended at least one SI session was 2.2 times higher than non-attendees ($n$ = 299), and students who attended two or more sessions were 2.8 times more likely to pass the course than non-attendees ($n$ = 196). In other words, "even when reducing selection bias, SI attendees still outperformed their non-SI attending counterparts" (Guarcello et al., 2017, p. 348). Birkett et al. (2017) found that SI participants in all GPA categories (2.03–2.98, 2.99–3.33, 3.34–3.67, and 3.68–4.0) earned significantly higher course grades than non-participants. With that said, there are methodological concerns with these studies. For example, as previously mentioned, Birket et al. (2017) did not account for different learning conditions, varying content or assessment difficulty, or grading standards. In addition to considering SI attendance level, the current study was structured as described above to fill that gap in the literature.

To account for learning conditions and SI session attendance level, random matched pairs were created utilizing the following criteria: (1) Matched pairs must include two students in the same section of the same course with the same professor so that learning conditions were exactly the same; (2) both students had to be either new or continuing students; (3) both students had to be first time at the university or transfer students; and (4) both students had to fall into the same GPA category (i.e., below 2.49, 2.5–2.99, 3.0–3.49, or 3.5–4.0). Where the two students in each matched pair differed was by their SI attendance; one of the students was a non-attendee (i.e., zero sessions) while the other student in the matched pair was a regular attendee (i.e., attended five or more sessions). First-time and transfer students were included in the study; non-degree-seeking students (i.e., students enrolled in dual-enrollment or Postsecondary Enrollment Options programs) were excluded from analysis. Using this process, 1,144 matched pairs were created among 2,288 students. With those matched pairs, independent samples $t$-tests at all GPA category levels were conducted to determine the relationship between SI attendance and course success by GPA category between non-attendees and regular attendees.

## PARTICIPANT DEMOGRAPHICS

Of the 2,288 undergraduate students included in the analysis, the majority of students were White (68%, $n$ = 1,552), while 17% ($n$ = 384) were domestic students of color (Black, Hispanic, Asian, American Indian, and two or more races), and 15% ($n$ = 342) were international students. Most students were freshmen (42%, $n$ = 956), followed by sophomores (36%, $n$ = 826), juniors (16%, $n$ = 357), and seniors (6%, $n$ = 149). Just over half of the students were female (56%, $n$ = 1,279).

Although most students were not first-generation students (65%, $n = 1,477$), there was still a fairly high percentage of first-generation students (32%, $n = 743$), with the remaining students' status unknown.

## RESULTS

Two-sample/independent samples *t*-tests were performed to compare the course success between non-attendees and regular attendees by GPA category. The goal was to see if attending SI sessions made a difference in how successful students at different GPA levels were in the course. Independent samples *t*-tests were used because such tests help to determine whether the difference between two groups is likely to be due to chance or not.

A two sample/independent samples *t*-test was performed to compare course success between non-attendees and regular attendees with GPAs below 2.49. There was a significant difference in course success between non-attendees ($M = 0.21$, $SD = 0.17$) and regular attendees ($M = 0.77$, $SD = 0.18$); $t(140) = -8.069$, $p < 0.001$. The result indicates that the difference between non-attendees and regular attendees is very unlikely to be due to chance. In other words, regular attendance appears to be strongly linked to better course success for students with a GPA below 2.49.

A two sample/independent samples *t*-test was also performed to compare course success between non-attendees and regular attendees with a 2.5–2.99 GPA. The result reveals a significant difference in course success between non-attendees ($M = 0.48$, $SD = 0.25$) and regular attendees ($M = 0.80$, $SD = 0.16$); $t(296) = -6.119$, $p < 0.001$. The result also indicates that the difference between non-attendees and regular attendees is very unlikely to be due to chance, and that regular attendance appears to be strongly linked to better course success for students with a GPA between 2.5 and 2.99.

A third two sample/independent samples *t*-test was performed to compare course success between non-attendees and regular attendees with a 3.0–3.49 GPA, which again resulted in a significant difference in course success between non-attendees ($M = 0.60$, $SD = 0.24$) and regular attendees ($M = 0.90$, $SD = 0.09$); $t(646) = -9.299$, $p < 0.001$. As with the previous tests, the result indicates that the difference between non-attendees and regular attendees is very unlikely to be due to chance, and that regular attendance appears to be strongly linked to better course success for students with a GPA between 3.0 and 3.49.

A two sample/independent samples *t*-test was performed to compare course success between non-attendees and regular attendees in the highest GPA category (3.5–4.0 GPA). This test also resulted in a significant difference in course success between non-attendees ($M = 0.82$, $SD = 0.15$) and regular attendees ($M = 0.95$, $SD = 0.04$); $t(1192) = -7.572$, $p < 0.001$. Again, the difference between non-attendees and regular attendees is very unlikely to be due to chance. In other words, regular attendance appears to be strongly linked to better course success for students with a GPA between 3.5 and 4.0.

Finally, a two sample/independent samples *t*-test was performed to compare course success between non-attendees and regular attendees across all GPA categories. There was a significant difference in course success between non-attendees ($M = 0.67$, $SD = 0.22$) and regular attendees ($M = 0.91$, $SD = 0.09$); $t(2286) = -14.222$, $p < 0.001$. The result indicates that the difference between non-attendees and regular attendees is very unlikely to be due to chance, suggesting that regular attendance appears to be strongly linked to better course success for students in all GPA categories.

In summary, the results of the *t*-tests indicate strong evidence to reject the null hypothesis that there would be no difference between the 1,144 matched pairs for students in SI-supported course sections who did not attend an SI session and those who attended five or more sessions. The *t*-statistics and the extremely small *p*-values in these two-tailed tests suggest a significant difference between the means of Zero Sessions and Five or More Sessions. Five or More Sessions has a higher mean and less variability compared to Zero Sessions, indicating a significant difference between the two variables. See Table 1 and Figure 1.

| GPA CATEGORY | NON-ATTENDEES | | ATTENDEES | | *t* | *p* |
|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | | |
| Below 2.49 | 0.21 | 0.17 | 0.77 | 0.18 | –8.069 | 0.001 |
| 2.5–2.99 | 0.48 | 0.25 | 0.80 | 0.16 | –6.119 | 0.001 |
| 3.0–3.49 | 0.60 | 0.24 | 0.90 | 0.09 | –9.299 | 0.001 |
| 3.5–4.0 | 0.82 | 0.15 | 0.95 | 0.04 | –7.572 | 0.001 |
| All GPA categories | 0.67 | 0.22 | 0.91 | 0.09 | –14.222 | 0.001 |

**Table 1** Independent Samples *t*-Test Results for SI Non-Attendees and Attendees.

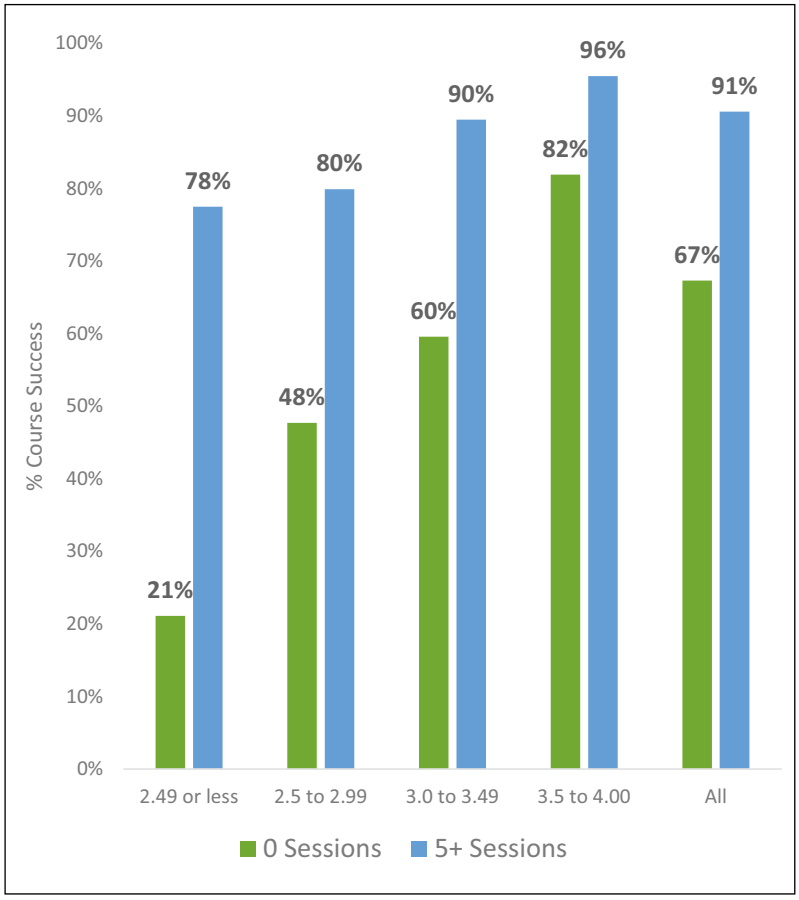


**Figure 1** Course Success by GPA of Matched Pair Non-Attendees vs. Regular SI Attendees from 2022–2024.

## DISCUSSION

The purpose of this study was to assess the impact of SI support on students per GPA category. Course success rates of students in randomly matched pairs of SI attendees and non-attendees were compared. Findings suggest that regular attendance at SI is associated with the success of all students, regardless of GPA. However, students in the lowest GPA category (2.49 or less) realized the most significant gains.

Findings of this study confirm previous research, which suggests that all students benefit from regular participation in SI (e.g., Bowman et al., 2023; Channing & Okada, 2020; Dawson et al., 2014; Gasiewski et al., 2012) and that the largest benefit is received by students who struggle the most (e.g., Fresno State Supplemental Instruction, 2016; Grillo & Leist, 2013; Perez et al., 2022; Rabitoy et al., 2015; Summers et al., 2015). Although students with the lowest GPAs earn the greatest gains, the findings of this study reveal significantly higher course success rates for *all* students who participate in SI regardless of their pre-term GPA. This confirms previous research that reveals a positive benefit of SI regardless of pre-term GPA (e.g., Birkett et al., 2017; Guarcello et al., 2017; Jacobi, 2022; Micari et al., 2016). For example, Jacobi (2022) found that without

academic support, 17.4% of White, non-first-generation, non-remedial-enrollment students and 23.8% of those with just one barrier (i.e., first-generation student, a student of color, or a remedial enrollment student) earned a D or F or withdrew from their course. It can be assumed that the students in these two groups had higher overall GPAs since students who do not face societal barriers typically struggle less academically and have higher overall GPAs. Yet, a high percentage of these groups of students still did poorly or withdrew from the class. These results suggest that support is warranted for students at *all* GPA levels. Similarly, findings of the current study reveal that 18% of students with a 3.5–4.0 GPA and 40% of students with a 3.0–3.49 GPA earned a D or F or withdrew from the course (see Figure 1). Again, that is a high DFW rate (i.e., percentage of earned D's, F's, and course withdrawals) among students that many argue don't "need" academic support. This provides evidence that it is beneficial for universities to provide academic support to all students, regardless of GPA.

Given the findings of this study and the aforementioned studies, SI appears to be a valuable resource to fund. However, the vast majority of studies on SI rely on correlations between SI attendance and course success rates to draw their conclusions. Although correlations reveal strong patterns to reinforce the association of regular SI attendance and course success, the results of this study offer a unique contribution to the literature, which may help to provide stronger advocacy for the inclusion of SI programs across universities.

The matched pairs analysis used in this study offered a unique way to understand the significant differences between non-attendees and attendees because it removed learning conditions, level in school, and student type as factors that many argue contribute to student success, and it confirmed with strong methodology that regular SI attendance contributed to course success at all GPA levels. Students were randomly paired with students from the same course, section, and professor, which meant that variations in difficulty level of content or assessments and grading standards did not contribute to differences in course success between non-attendees and regular SI attendees. Additionally, because students were matched by level in school (as new or continuing students) and by type (as first-time or transfer students), familiarity with the university department, classes, or professors can be ruled out as influencing differences in course success between non-attendees and regular SI attendees.

Additionally, the findings suggest that the nature of SI sessions with active participation among students with varying GPAs may be particularly beneficial to students with the lowest GPAs who attend SI regularly. As shown in Figure 1, 78% of the regular SI attendees in the lowest GPA category (below 2.5) in this study succeeded in this course (compared to just 21% of non-attendees), revealing a 57% gap between regular attendees and non-attendees. Students in the highest GPA category show just an 18% difference in course success between attendees and non-attendees (96% vs. 82%). Additionally, the gap between regular attendees in the lowest and highest GPA categories narrowed significantly—from 61% for non-attendees to 18% with regular attendance at SI sessions.

Universities have limited budgets, requiring them to make choices about how to allocate resources. As a result, academic support programs such as SI may be perceived as an extra or even unnecessary expense because of the assumption that most students can find ways to succeed on their own. Results of this study provide evidence that regular SI attendance benefits all students regardless of their pre-term GPAs. This enhanced student success has the potential to benefit universities with both recruitment and retention efforts. Therefore, aligned with previous studies, the results in this manuscript help to provide an argument for the support and funding of SI on university campuses.

## FUTURE RESEARCH

One thing that is not clear from the findings of this study is *why* regular SI attendees in the lowest GPA category have the most significant gains in course success. One possibility is the nature of mixed-performance SI attendees. The mixed groups may allow for students who are less academically prepared to learn from those who have a stronger grasp on the content. For example, Micari et

al. (2016) assessed the academic benefits of participation in mixed-performance, peer-facilitated study groups and found that while all students benefitted, the lowest-performing students benefitted most. Another possibility is the nature of the methods used in SI sessions. SI Leaders use active learning techniques, which engage students with active participation and critical thinking. Such techniques may help in closing the gap between higher-performing and lower-performing students enrolled in the same course. Future scholars may conduct studies to explore.

## LIMITATIONS

Although a number of factors not accounted for in other studies were accounted for in this study (i.e., GPA, learning conditions, level in school, and student type), there are other factors that could contribute to differences in course success that were not considered (e.g., ethnicity and gender). Additionally, the data examined in this study were from one Midwestern regional comprehensive four-year university, and other university types or sizes may produce different results. Future studies may consider accounting for the limitations of this study.

## CONCLUSION

Is there value in funding academic support for all students? In short, yes. Providing academic support for all students and portraying it as a platform for regular studying and practice with course content helps to normalize the use of such services. Normalizing academic support helps to draw students from marginalized populations, which ultimately helps universities serve the population they wish to serve most.

## ACKNOWLEDGEMENTS

The author would like to acknowledge Jerry Oman from Institutional Research at Minnesota State University, Mankato, who ran the matched pairs analysis for this study.

## COMPETING INTERESTS

The author has no competing interests to declare.

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**TO CITE THIS ARTICLE:**
Jacobi, L. (2026). Is Academic Support Only for Students Who "Need" It? An Analysis of Supplemental Instruction by GPA. *Journal of Peer Learning*, *17*(1): 2, 1–11. https://doi.org/10.21061/jopl.127

**Submitted:** 18 December 2024
**Accepted:** 17 March 2026
**Published:** 17 July 2026



*Journal of Peer Learning* is a peer-reviewed open access journal published by VT Publishing.