

THE TRANSITION FROM THE SEMESTER TO THE QUARTER SYSTEM

By

Anthony Justin Zafra

A capstone project submitted for Graduation with University Honors

May 6th, 2021

University Honors
University of California, Riverside

APPROVED

Dr. Rebekah A. Richert
Department of Psychology

Dr. Richard Cardullo, Howard H Hays Jr. Chair
University Honors

ABSTRACT

This study examined how different academic calendars (semester vs. quarter) impact the experiences of students who transferred from a semester-based collegiate institution to the University of California, Riverside (UCR)'s quarter system. This population was compared with freshman enrolled students that transferred from high school and into their first year at UCR, excluding the optional summer sessions. About half of the participants were recruited from PSYC001 and PSYC002 via SONA (UCR Psychology Subject Pool) and were granted one research credit. Transfer students were mostly recruited through UCR's Transfers First Program and some through SONA as well. Participants were 18 years or older, and they were provided a link to Qualtrics (a survey tool) which measured participants' study time, academic motivation, and stress levels based on their transition. Results indicated that freshmen students had higher levels of stress than transfer students, yet no significant differences were found for motivation and study time. Results also indicated that freshman enrolled students who reported higher levels of study time experienced higher levels of stress and motivation and stress and motivation positively correlated with each other. In contrast, transfer students who reported higher levels of study time experienced higher levels of stress, but stress and study time were unrelated to motivation. These findings suggest that education experiences differentiate across students' social environment and this may shed light for preparing these populations for the challenges of higher education with respect to the academic calendars.

Keywords: Transferred, semester, quarter, transfer students, motivation, study time, stress

ACKNOWLEDGEMENTS

I would like to give my sincerest thanks to my mentor, Dr. Rebekah Richert. Having her immense guidance for this project by collaborating with me with the overall study by helping me with the paper, the IRB, teaching me SPSS, and Qualtrics has greatly helped me a lot and I thank her so much. I would also like to thank Shellee Stewart and Dr. Christina Acoff of the Transfer First program in UCR for helping me gather more participants necessary for this project. Your invaluable help meant a lot to me and I thank you for your support with this project. In addition, I would also like to thank Brianna Cabrera, a graduate student that is part of the Childhood Cognition Lab at UCR under Dr. Richert as well, for helping me with so much with this project. Your assistance with APA, interpreting results, and the PowerPoint you have gave me in regard to this has helped me out so much and I thank you for it! I would also like thank my family and my friends for cheering me on. Talking to them about my school and having their support was really appreciated and something that I will never forget! Lastly, I would like to give my thanks to the University Honors program for the opportunity to develop this capstone. It has allowed me to appreciate more on the field of research and made me answer my own questions about my own interests. I never thought that I would be able to do this, but this program was supportive and was well worth it! I will always be grateful for this opportunity especially in the untimely events that we have all gone through.

INTRODUCTION

Students in college/university go through a variety of different courses that are run at different paces based on the academic system. There is the common semester system (two 15-16 weeks terms (fall, spring)), the quarter system (three 10 weeks terms (fall, winter, and spring)), and the trimester system (three 12 weeks term (fall, winter, spring)). The aim of the current study is to examine the transition of transfer students from the semester system to the quarter system. According to Brown (1992), in the semester system, there is more time to study, thus students have an extra 15-20 hours a week to study for exams that could be scheduled months from now. The quarter system is faster; thus, procrastination is something that is not recommended.

There were three variables considered in the current study. First, motivation is one of them. How motivated are students to go through the faster quarter system pace in lieu of their experience in the semester system? Second, there is also study time. Study time is studying for an exam, presentation, a small quiz, etc. Do students have better or poor study time in the quarter system? Stress is the third variable. Stress could be physically or mentally and could come in a variety of ways (Eustress (Positive stress) vs. distress (negative stress)). Since the pace of the quarter system is perceived as faster, are students stressed out more?

To assess these variables, transfer students over the age of 18 were taken into consideration. Transfer students are those that transfer from a semester-based school to a quarter-based school. It is essential to assess transfer students primarily due to their transition from their semester-based school to the quarter system thus their experience is needed but could also be due to their overall transition as well. This population was compared with freshman enrolled students (over the age of 18) that transferred from a high school population to the quarter system and were also assessed based on their transition from their semester based high school experience to

the start of the quarter system. Based on this, a proposed question is that based on the pace of the quarter system, how does stress level, motivation level, and study habits impact transfer students' overall learning experience in the quarter system?

Prior Research

Bostwick, Fischer, and Lang (2018) examined the relationship of the transition from the quarter and semester system and graduation rate between 1991-2010 in postsecondary education. They hypothesized that switching from the quarter system to the semester system could negatively impact graduation rate. To test this, the researchers utilized data derived from the Integrated Postsecondary Education Data system and replicated this data by using administrative transcript data from the Ohio Longitudinal Data Archive at the student-level and analyzed delayed graduation rate. Supporting the hypothesis, the researchers found that students still graduate but in terms of direct and opportunity cost, they are delayed on their graduation rate.

One strength in this study was assessing trimester as well as quarter and semester system. This is a strength because trimester is also another academic system that runs 12 weeks in comparison with quarter (10 weeks) and semester (15-16 weeks). Researchers included this system as part of the quarter system. Since the common academic system is semester system, including trimester as part of the quarter system could have an impact on graduation rate since trimester and quarter are less common. A weakness though could be limits of including transfer students. This is a weakness because rather than including students only who were freshman enrolled, the study should have utilized transfer students as well since most likely, they come from a semester-based community college thus, graduation rate could have a different impact.

The researchers suggest that students that transitioned from the quarter system to the semester system had a hindered effect on graduation rate. This is interesting because

transitioning could potentially cause a detrimental effect on graduation effect that students may falter into their education. This shows that studying in the quarter system could enable students to graduate faster which is beneficial for motivation to strive for success.

Caskey (1994) examined the learning outcomes in intensive courses (e.g., 10 weeks) in a university in comparison with traditional formatting (e.g. 16 weeks). She addressed the question if students' class grades in short term classes have significant differences than the traditional pace classes. She also addressed the question that if students complete their pre-requisites in an intensive format, do they perform differently in sequential courses than those that completed their pre-requisites in a more traditional format. Finally, she addressed enrollment if there were any significant differences in grades in intensive vs. traditional courses. To address these questions, Caskey (1994) measured accounting and algebra students' performance (in terms of their overall G.P.A and their age) after completing their class in intensive format vs. traditional format. Supporting the 3 proposed questions, the researcher found that students (specifically, older students) can perform well in intensive formatted classes as well in subsequent courses just as students tackling this in a traditional format.

One strength in this study was assessing classes based on common interests. This is a strength because accounting and algebra both involve mathematics and to assess subjects that have concepts relevant could ensure consistency and accuracy when measuring performance. A weakness however in this study was concentrating on quantitative skills. This is a weakness because in terms of format, other classes such as English, Psychology, etc. could differ in terms of pace. This study did mention English composition but only very briefly.

The researcher in this study suggests that students in intensive formatted classes can perform just as well in contrasts with traditional formatted class. This is interesting because

students in fast pace formats (i.e., quarter system in UCs) could perform well and pass their fast pace classes. Transfer students especially could get adjusted to the fast pace environment that may enable them to strive and motivate themselves to pass in comparison when they were in the semester system where everything was perceived to be slower.

Cejda, Kaylor, and Rewey (1998) examined the role of community college transfer students' discipline (e.g., mathematics, humanities) and their academic performance when they experience transfer shock in a four-year university. They hypothesized that there would be no significant difference between transfer students' mean GPA and the vast number of academic disciplines students choose to pursue. To test this, the researchers conducted an examination of transfer students with different majors based on their GPAs before transfer (i.e. in their community college) and after transfer into the university. Not supporting the hypothesis, the researchers found that there are statistically significant differences between transfer students' mean GPA and the vast amount of academic discipline such as those within the sciences and mathematics majors experience a decrease in their GPA whereas those in the fine arts and humanities experienced an increase in GPA.

A strength in this study was assessing a vast number of majors within the academic disciplines. This is a strength because students in different majors experience a different level of transfer shock due to certain disciplines requiring more than the other. A weakness in this study is assessing extracurricular activities such as holding a part time job and volunteerism. This is a weakness because transfer students may hold a job or volunteer during their extra time. Time management should be account for especially when assessing a transition from a community college to a university level institution where they take more upper division classes.

The researchers in this study suggest that transfer students' transition is based on the academic discipline they pursue and may have a significant impact on their GPA. This is interesting to see that transfer students could experience transfer shock based on the discipline they choose to pursue especially when transitioning to upper division classes. This shows that not just the transition to a different academic calendar (semester to quarter) but also, students' major could also impact the way they succeed in the quarter system (especially classes that have more labs in a faster pace system).

DeWine, Ludvik, Tucker, Mulholland, and Bracken (2017) examined the environmental support of community college (CC) students' transition into a research institution based on the academic and social transition of both transfer students and staff perspectives. They explored the following hypotheses that aim to question the environmental structures do CC students perceive significant to a successful transition. They also explored the university's environmental structure that faculty and staff describe as significant and crucial for transfer students' successful transition to a research institution. To test out these questions, the researcher conducted interviews that included university staff and CC transfer students that completed around three to four quarters and were based on the overall transition from a CC to a research university. Supporting the hypotheses, the researchers found that the university's environment influenced the transition process such as the semester to quarter process, lack of communication to faculty due to large class size, social support, university orientation, academic support (based on more time on studying, more late nights, time management, and handling the much faster pace of the quarter system), pre-enrollment programs, and university communication.

A strength in this study was assessing academic support as one of the measures. This is a strength because transfer students specifically are getting adjusted to the faster quarter system

thus measuring academic support may show how much more study habits that have, perceived stress, and amount of coursework that they do on a daily basis to succeed. A weakness in this study is assessing interviews way later (specially, three to four quarters) of their transition process. This is a weakness because transfer students by then may have well-adjusted to the transition system and it may be difficult to remember their overall transition. Researchers should have conducted their interviews during their transition phase (e.g. during fall or winter quarter when students just transfer or completed their first quarter).

DeWine et al. (2017) suggest that university environmental factors (especially the transition from the semester to quarter-based structure)) has a significant impact on transfer students' transition from their CC to a research university. This is intriguing to see because CCs' environment differs significantly to a research university especially on course curriculum, academic support from peers and professors, and the pace. This shows that transfer students that transition to a research university may have more challenges especially difficult communication with faculty due to immense class sizes, utilize skilled time management, the overall distress (and possibly, eustress to motivate themselves to do well), and more dedication to studying harder in the faster quarter system.

Ewer, Greer, Bridges, and Lewis (2002) examined two introductory accounting courses (ACC 201 and ACC 211) that compared students' performance based on the 4-week compressed pace format vs. 16-week traditional format. The purpose of this study was to see if the compressed pace format for introductory accounting would affect the way students would be able to master the concepts in comparison with the traditional format. To test this, Ewer et al. (2002) examined student performance from the 4-week summer introductory accounting and the 16-week traditional format class and its prerequisites (ACC 211) in the 4-week summer class and

16-week traditional class with the same professors teaching the traditional format (spring) and compressed format (summer). Supporting the hypothesis, the researchers found that students that took the 4-week compressed formatted introductory courses tend to fare just as well as those in the traditional format.

A strength in this study was consistency. By utilizing the same professors for the traditional and compressed formats, students will be able to learn concepts that are taught based on the same teaching methods by the professor. A weakness in this study was not assessing students' extracurricular activities such as work and volunteerism. This is a weakness because students may have other extracurriculars such as a part time job that could impact their studying habits and academic motivation.

The researchers in this study suggests that students can perform just as well in the compressed 4-week format in comparison with the traditional 16-week format. This is intriguing because the transition from a traditional format to a faster pace balanced students' academic performance. This could show that transfer students from the semester system that transitioned to the quarter system still perform just as well even when the pace is faster. The transition for these transfer students could maintain their daily study habits and overall motivation despite when the pace is faster and when there could be a midterm for instance just around the corner.

Gibbens, Willimas, Strain, and Hoff (2015) examined students' performance (specifically in Biology) due to the transition from the quarter system to the semester system. They aim to investigate the change in student performance two and half years before the transition and two and a half year after the transition and if it had an unbalanced effect on students' performance in a specific topic (in this case, Biology). To assess this, the researchers measured students' exams results two and a half year before transition vs. two and a half year after transition based on

grade distribution, point total, and overall scores. Supporting their claim, Gibbens et al. (2015) found that students that studied under the quarter system performed slightly better in Biology exams than those that were taught under the semester system.

One strength in this study was utilizing multiple choice questions rather than open ended questions. This is a strength because by utilizing a multiple-choice formatting, this could be a control variable that could ensure that instructors are grading fairly and not based on open ended questions that could result in conformation biases. A weakness in this study was solely measuring students' performance based on exam questions. This is a weakness because students' performance may also be affected based on participation, motivation, procrastination, extra homework, etc. These factors could be third variables thus could alter the way students' performance could be measured.

Findings from this research suggest that students that were in the quarter system performed slightly bad due to the transition into the semester system. This is interesting because students in the quarter system did better in terms of performance than the semester. In terms of transfer students, those that transition from the semester system could experience a change in their study habits, their motivation to strive, and engage in study groups to ensure that they are academically striving in the fast pace environment. This shows that students in the semester system may had a decrease in academic performance perhaps due to procrastination especially since it is a slower pace.

Goldring (2012) examined the structure of the workload of the quarter system and its impact on depression based on the school's student body. The researcher hypothesized that the prevalence of high levels of depression is linked to systematic external stress based on self-reported measures of schoolwork, exams, and applicable extracurricular activities rather than

tendencies or traits of individuals. The researcher also hypothesized that based on mental health situation in college in comparison with the general population from the National Survey of Adolescent Health, students lean toward higher depression scores. To test these two hypotheses, Goldring (2012) had Stanford University students complete a continual self-report measure based on their mental states (i.e., external stressors and depressive symptoms) in the spring quarter of the academic year 2008-2009. Supporting the two hypotheses, the researcher found that based on the quarterly structure, there is a strong relationship with depressive symptoms in terms of occurrences with midterms and major assignments and tend to vary not on time constraint.

A strength in this study was using self-reported measures. This is a strength because students are the ones that know about their selves and by utilizing self-reported measures rather than experimental design where manipulation occurs, students are able to learn about themselves and see how they are coping with the fast pace. A weakness could be failing to assess internal stress as well. This is a weakness because it may be that external stressors may make students stress (such as the pace of the quarter system or the environment of academia), internal stressors may also be useful especially assessing students potential fear of failing.

The researcher suggests in this study suggest that the quarter system correlates with higher level of depressive systems based on the occurrences of essential exams and assignments. This is very interesting because in the quarter system, midterm and major assignments come up fast. This contributes to the fact that students may have a higher stress level due to the quarter system (especially if there is a midterm at week 3 and then another at week 5). This may not include tedious essay or projects that may be due close to the end as well piling work, extracurricular activities (volunteerism, clubs), family, and other classes.

Lutes and Davies (2018) examined the role of workload that students go through in a regular semester-based format (15 weeks) vs a more time-compressed term format (17.5-week term). Their purpose of conducting this study was to see if general education courses in the faster pace format maintain the same workload compared to the regular semester format, the modification of a semester course in a compressed format by the instructor, and how do these changes affect the way students learn and handle the workload. To assess this, the researchers utilized an explanatory mixed method strategy where they gathered quantitative data from students' course evaluations through different courses such as writing, physics, history, mathematics, etc. Supporting their purpose, Lutes and Davies (2018) found that certain courses specifically reading and writing courses are not well suited when offered in a term format and a significant difference based on instructors' way of assigning these workloads.

A strength in this study was assessing syllabus comparisons in a regular vs. time compressed format. This is a strength because a syllabus shows the expectations the instructors want from their students and by doing a comparison of syllabus in a course that is regular or fast, it could show the amount of workload it offers. A weakness is not assessing more variety of different general education courses. This is a weakness because majority of general education courses consisted of humanities such as writing, history, communication, psychology however, showed little STEM courses and failed to assess general Chemistry, Computer science, and engineering.

The researchers suggest that workload in a semester vs time-compressed format is based on the type of class that students are taking and the instructors as well. This is interesting because students take a variety of classes in university to meet requirements to graduate. Universities are taught in different academic system (semester vs. quarter). Transfer students in the quarter

system are subjected to a faster pace format (10 weeks) in comparison to their semester-based format which shows that students in the quarter system may study more and keep up with the workload that it offers such as having midterms every two weeks, papers due earlier, and final projects as a consideration.

Sheldon and Durdella (2009) examined the relationship between course success and course length in developmental education courses with academic and social background controlled. They hypothesized that there would be no significant difference on success rate when taking compressed courses (i.e. five to nine weeks) versus regular (i.e. 15 to 18 weeks) courses in the development courses. They also hypothesized that there would be no significant difference on success rate when students' academic and social background are controlled. To test this hypothesis, the researchers gathered data from historical enrolment records of community college students that were enrolled in a developmental course (i.e. English, reading, or math) in either a compressed or regular length format. Not supporting the hypothesis, the researchers found that students that enrolled in developmental courses in a compressed format are more likely to succeed than students in a more traditional format.

A strength in this study was assessing this study by using historical records between 1998-2001. This is a strength because researchers are able to have a huge array of data of students' course progress and by doing this, they can see progress between a compressed vs traditional format over a longer period of time (more like a cross sectional study or longitudinal). A weakness in this study was not assessing different array of classes. This was a weakness because students in different courses such as STEM could have different level of success rate depending on how the courses are structured in a compressed vs. traditional format.

The researchers suggest that students that are taking compressed courses are more likely to succeed than those that are taking traditional. This is interesting because students in faster pace courses are succeeding more than those in traditional (especially when considering semester to quarter transitioning where semester is 15 to 16 weeks and quarter is 10 weeks). This may show that students in the faster pace are more motivated to study harder and longer, have less procrastination skills, and have eustress (and a consideration for distress as well) due to keeping up with the faster pace and wanting to succeed.

Sutton, Muller, and Lagenkamp (2013) examined the role time of high school transfer students to university level institution. They addressed two questions which are does the misalignment of time of a transfer student and the structure of a school year affect their selectivity of the college they attend in comparison with non-transfer students? Also, do the disruption of extracurricular and curriculums explain a negative impact of a midyear or summer high schoolers' transfer of college enrollment in comparison with non-transfer students? To test these research questions, the researchers utilized pre-existing data from the Education Longitudinal Study that offers high school transcript information and standardized test scores based on the sophomore level. Supporting the two research questions the researchers found that midyear transfer students are shown to suffer the most postsecondary matriculation penalty and are less likely to attend four-year colleges whereas high schoolers that transfer in the summer are more selective on which schools to go to.

A strength in this study was assessing extracurriculars as a measure. This is a strength because high schoolers engage in a variety of extracurriculars such as sports and even a job and this could affect their method of transferring. A weakness in this study is using pre-existing data based on 10th grade. This is a weakness because high schoolers during this time may take

standardized testing however, utilizing them when they actually transfer into the university and then compare the overall GPA from high school vs in their first semester/quarter would be more ideal.

The researchers in this study suggest that the timing of high schoolers transferring to a university could shape their transition with the structure of the school year such as midyear high school transfers are the ones that suffer more than summer transfers. This is interesting to see that the timing itself could affect the way high schoolers transition to a university. This could contribute especially if they were to transfer from a semester based high school to a university quarter system institution especially around midyear where things are picking up. This is intriguing to see that transfer shock could potentially affect high schoolers' transition as well as community college students' transition.

Concluding Paragraph

The article findings suggest that the pace of the academic calendars has an impact on students' learning outcomes. Sutton et al. (2013) found that freshman enrolled students' transition into higher institution based on the time they enrolled (i.e., enrolling in the summer vs. enrolling in the winter) correlated with higher levels of transfer shock. In addition, Gibbens et al. (2015) found that students that study under the quarter system have a slight increase in their academic performance thus indicating that they study more in the quarter system than in the semester system. Transitioning into the quarter system could be a scary transition (specifically, due to the faster pace). Many students are used to the common semester system (especially its slower pace); yet the faster pace quarter system could be daunting to those that just started transitioning. Academic calendars overall could have a positive or negative impact in students

(freshman enrolled students vs. transfer students) on their learning outcome and affect the way they are motivated, how much they study, and if they experience overall stress.

Research Question

Does transferring from a semester system have an effect on students' overall learning due to the quarter system in higher education?

Hypotheses

Hypothesis 1: Transfer students and freshman enrolled students would have different levels of stress levels

Hypothesis 2: Transfer students would have higher levels of motivation than their freshman enrolled counterparts

Hypothesis 3: Transfer students would have higher levels of study time than their freshman enrolled counterparts.

Method

Participants

A total of 312 college students participated in this study (21.8% Male; 76.3% Female; 1.3% Gender Fluid; .6% decline to state/other), which included freshman enrolled students ($n = 151$), transfer 2nd year/3rd year students ($n = 132$), quarter to quarter ($n = 7$), and other ($n = 22$). Out of these 312 college students, 40 of them were excluded due to not meeting demographic criteria and/or incomplete data (i.e., incomplete survey responses or validity check) thus, only 272 college students were assessed. The age range for these students (including those that were excluded) were between 18-24 ($n = 259$), 25-34 ($n = 33$), 35-44 ($n = 13$), 45-64 ($n = 4$), 55-64 ($n = 2$), and decline to state ($n = 1$). In addition, the college students in this study had a large diverse ethnic population as well: 13.8% were White/Caucasian, 39.1% were Hispanic/Latino/a, 6.1%

were Black/African American, 34.3% were Asian/Pacific Islander, 5.8% were Other, and 1% Decline to state. The college students in this study were recruited from the University of California, Riverside.

Measures

Academic Self Scale

Students completed the Academic Self Scale (Flowers, Raynor, & White, 2013), a 40-item scale designed to measure students' academic aptitude in a particular academic field (e.g., "Being a student is a very rewarding experience" or "All in all, I feel I am a capable student"), as well as their motivation and study time. Students responded to questions on a 5-point scale from strongly disagree (1) to strongly agree (5). *Motivation* is a continuous variable that is based on students' level of motivation in the quarter system (1 = strongly disagree; 5 = strongly agree); and *study time* is a continuous variable that is based on the amount of time students' study in the quarter system (1 = strongly disagree; 5 = strongly agree).

Academic Stress Scale

Students were also asked questions based on stress. Stress was assessed with the Academic Stress Scale (Bedewy & Gabriel, 2015), an 18-item scale designed to measure students' perception of academic stress (e.g., "I fear failing my courses" or "I am confident that I am a successful student"). Students responded to questions on a 5-point scale from strongly disagree (1) to strongly agree (5). *Stress* is a continuous variable that is based on if students have higher or lower level of stress in the quarter system (1 = strongly disagree; 5 = strongly agree).

Procedure

Participants in this study were recruited starting in Fall Quarter 2020 until Week 8 of Winter Quarter 2021 via SONA in the Introductory psychology courses PSYC001 and PSYC002

and through email in the Transfer First program. Participants took an online survey through Qualtrics and incentives were involved for PSYC001 and PSYC002 participants (specifically, research credits) and none for Transfer First. Identifying information that was collected was participants' SID number for PSYC001 and PSYC002 (for credit distribution) and was deleted. The survey took approximately 15-30 minutes, and participants had the ability to skip questions they did not want to answer.

Results

Independent Samples t-test. To test our hypothesis, we used the independent samples t-test to examine the relationship between freshmen students and transfer students. The t-test results showed that freshman enrolled students have higher levels of stress than transfer students [$t(270) = 2.873, p = 0.004, \text{Cohen's } d = 0.59$] (*Fig. 1*), yet no significant differences were found for motivation [$t(270) = -.256, p = 0.798, \text{Cohen's } d = 0.30$] (*Fig. 2*) and study time [$t(270) = -.424, p = 0.672, \text{Cohen's } d = 0.44$] (*Fig. 3*).

Correlations. We conducted exploratory analysis by using Pearson's Bivariate Correlations to examine the relationship between study time, motivation, and stress level for freshman enrolled students. There was a positive correlation between study time and stress ($r = 0.710, p < 0.001$). This indicated that the more time they study, they experienced higher levels of stress. There was also a positive correlation between study time and motivation level as well ($r = 0.351, p < 0.001$) where the more time they study, they experienced higher levels of motivation. Finally, there was a positive correlation between stress and motivation ($r = 0.274, p = 0.001$). This indicated that the higher the stress levels, the higher their motivation levels thus indicating eustress. (Table 1)

Another Pearson's bivariate correlation examined the relationship between study time, motivation, and stress level for transfer students. Results showed that transfer students who reported higher levels of study time experienced higher levels of stress [$r = 0.566, p < 0.000$], but there were no significant relationships between stress and motivation [$r = -0.084, p = 0.348$] and between study time and motivation [$r = 0.158, p = 0.077$] (Table 2)

Discussion

The purpose of this study was to gain a better understanding of students (specifically transfer students) transitioning into the quarter system. Taken together, the findings did support a hypothesis and indicated some key points as well. Our study highlights the importance of transfer students' transition into a different academic system. We first hypothesized that stress levels would be different between freshman enrolled students and transfer students. Our findings seemed to support this hypothesis, such that freshman enrolled students had higher stress levels than the transfer students. The higher level of stress may be due to freshman enrolled students transferring immediately to a higher education level institution in the fall (around September), whereas transfer students having preexisting knowledge of higher education through their community college. This explanation is supported with Sutton, Muller, and Lagenkamp (2013), who found that transitioning from high school into a four-year university at midyear may have enduring effects on the transition to college.

In addition, we also hypothesized that transfer students would have higher levels of study time and motivation in the quarter system than freshman enrolled students. We found no support for this hypothesis. Motivation and study time levels between transfer students and freshman enrolled students may have not been different due to the pace of the quarter system (i.e., 10 weeks vs. semester's 16 weeks). To support this explanation, Goldring (2012) assessed stress in

the quarter system as well and found higher levels of stress and depressive symptoms in the quarter system due to approaching due dates for midterms and essential assignments faster. Of course, the overall student body in the quarter system may not experience higher levels of motivation and study time when due dates are approaching fast for midterms, projects, assignments, and final exams. They would feel more stressed regardless if they are transfer students or any other type of student (i.e., freshman enrolled, second year, third year non transfers).

Finally, we conducted exploratory analyses to assess correlations between motivation, study time, and stress levels in transfer students and freshman enrolled students. We found that for freshman enrolled students, there was a positive correlation for all three variables where the more time they study, the more motivated and stressed they are in the quarter system and the more motivated they are, the higher levels of stress they indicate in the quarter system. To support this explanation, Ewer et al. (2002) assessed the role of compressed courses (4 week) and traditional formatted courses (16 week) in introductory accounting courses. They found that those in the four-week courses did just as well in comparison to those in the 16-week courses (Ewer et al., 2002). Based on this, freshman enrolled students may want to succeed during their first quarter in UCR such that they want to study harder and make sure that they are catching up.

In contrast, we found for transfer students that there was a positive correlation between study time and stress where the more they study, the higher levels of stress they experience. But there was no significant relationship between from motivation and stress or motivation and study time. To support this explanation, DeWine et al. (2017) examined the role of the university environment and how it impacts the transition of transfer students into the quarter system. DeWine et al. (2017) found that the university environment affects transfer students' overall

transition due to the change of academic calendars, class size, approaching faculty. Based on this, transfer students do have preexisting knowledge of collegiate workload due to them being in the community college before transferring. This knowledge that they have may have been applied to their experience with the quarter system at UCR.

Limitations

There were two limitations in this study. The first limitation was not assessing different majors. This is a limitation because majors differ (i.e., Psychology vs. Biology) depending on the curriculum; thus, levels of motivation, study time, and stress may have differed. The current study did have different majors, yet participants were only recruited from PSYC001 and 002 classes as well as only within the CHASS college (from Transfer First). Another limitation that this study had was not assessing extracurriculars. This is a limitation because students may work or volunteer. Analyzing extracurriculars could be a potential variable that could affect motivation, study time, and stress levels.

Future Directions

Future research should examine COVID-19 and its impact on transfer students and freshman enrolled students. Even ongoing events (i.e., Black Lives Matter, Trump presidency) may have an impact on students' transition into the quarter system. In addition, future research could test if students in different majors have different experiences transferring to the quarter system. For example, the survey from the current study could be sent via email to different students across the university rather than sticking to two platforms: the SONA researcher system (which only concentrated on those in the PSYC 1 and 2 classes and Transfer First (which only concentrated on those within the CHASS department)). Aside from these two future research ideas, another future direction is to assess resources. Measuring the number of resources

available to students in the quarter system (such as assessing if workshops on time management are helpful) may show differing effects, especially on motivation and stress level. Additional questions could ask about study groups and approaching peers/faculty for help. Another future direction could be assessing the trimester system as well. Some students come to UCR from this system, and it would be interesting to see its impact.

Conclusion

To conclude, the current study provided insights on students' (specifically transfer students) transition into the quarter system with their preexisting knowledge of their semester system curriculum. The present study uncovered the role of the pace of the quarter system and its impact on the motivation level, stress level, and study time of transfer students and freshman enrolled students. The findings from this study may be of use for community college students and high school students who are curious about the quarter system (especially when they learned from the semester system for majority of their educational journey). The original research question aimed on transfer students in a community college setting, yet the findings in this study also suggest that the quarter system have an impact in freshman enrolled and transfer students' transition regardless of being in a community college or high school environment due to stress. The findings open up further research into this topic and into understanding the roles of academic calendars and their impact on students' learning outcomes.

Further research is required to better understand the role of the transition from the semester to the quarter system and perhaps, other measurement tools to measure the transition should be considered when following up with this study. Ultimately, the current study offers a glimpse into the quarter system and its impact on transfer and freshman enrolled students' learning outcomes based on their motivation, study time, and stress levels.

REFERENCES

- Bedewy, B., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The perception of academic stress scale. *Health Psychology Open*, 1-9. doi: <https://dx.doi.org/10.1177/2055102915596714>
- Bostwick, V., Fischer, S., & Lang, M. (2018). Semesters or quarters? The effect of the academic calendar on postsecondary graduation rates. *Institute of Labor Economics*, 2-57.
Retrieved from <http://ftp.iza.org/dp12429.pdf>
- Brown, R. T. (1992). Helping students confront and deal with stress and procrastination. *Journal of College Student Psychotherapy*, 6(2), 87-102. doi: https://dx.doi.org/10.1300/J035v06n02_09
- Caskey, S. R. (1994). Learning Outcomes in Intensive Courses. *The Journal of Continuing Higher Education*, 42(2), 23-27. doi: <https://dx.doi.org/10.1080/07377366.1994.10400901>
- Cejda, B., Kaylor, A. J., & Rewey, K. L. (1998). Transfer shock in an academic discipline: The relationship between students' majors and their academic performance. *Community College Review*. 26(3). 1-13. doi: <https://dx.doi.org/10.1177/009155219802600301>
- DeWine, P. R., Ludvik, M. B., Tucker, M., Mulholland, S., & Bracken, W. (2017). Exploring a successful community college student transition to a research-university environment. *Community College Journal of Research and Practice*, 41(12), 809-822. doi: <https://dx.doi.org/10.1080/10668926.2016.1232669>

- Ewer, S., Greer, O., Bridges, W., & Lewis, B. (2002). Class length and student performance: An extended study. *International Advances in Economic Research*, 8(2), 160–168. doi: <https://dx.doi.org/10.1007/bf02295347>
- Flowers, L. O., Raynor, J. E., & White, E. N. (2013). Investigation of academic self-concept of undergraduates in STEM courses. *Journal of Studies in Social Sciences*, 5(1), 1-11. Retrieved from <http://www.infinitypress.info/index.php/jsss/article/view/292>
- Gibbens, B., Williams, M. A., Strain, A. K., & Hoff, C. D. (2015). Comparison of biology student performance in quarter and semester systems. *College and University*, 90(3), 12. Retrieved from <https://search.proquest.com/openview>
- Goldring, M. A. (2012). Cycling through the blues: The impact of systemic external stressors on student mental states and symptoms of depression. *College Student Journal*, 46(3), 680-696. Retrieved from <https://search.proquest.com/docview/1122599334?accountid=14521>
- Lutes, L., & Davies, R. (2018). Comparison of workload for university core courses taught in regular semester and time-compressed term formats. *Education Sciences*, 8(1), 34. doi: <https://dx.doi.org/10.3390/educsci8010034>
- Sheldon, C. Q., & Durdella, N. R. (2009). Success rates for students taking compressed and regular length developmental courses in the community college. *Community College Journal of Research and Practice*, 34(1-2), 39–54. doi: <https://dx.doi.org/10.1080/10668920903385806>
- Sutton, A., Muller, C., & Langenkamp, A. G. (2013). High school transfer students and the transition to college: Timing and the structure of the school years. *American Sociological Association*, 86(1-2), 63-82. doi: <https://dx.doi.org/10.1177/0038040712452889>

Figure 1

Independent Sample T-test for Stress (Freshman vs. Transfer)

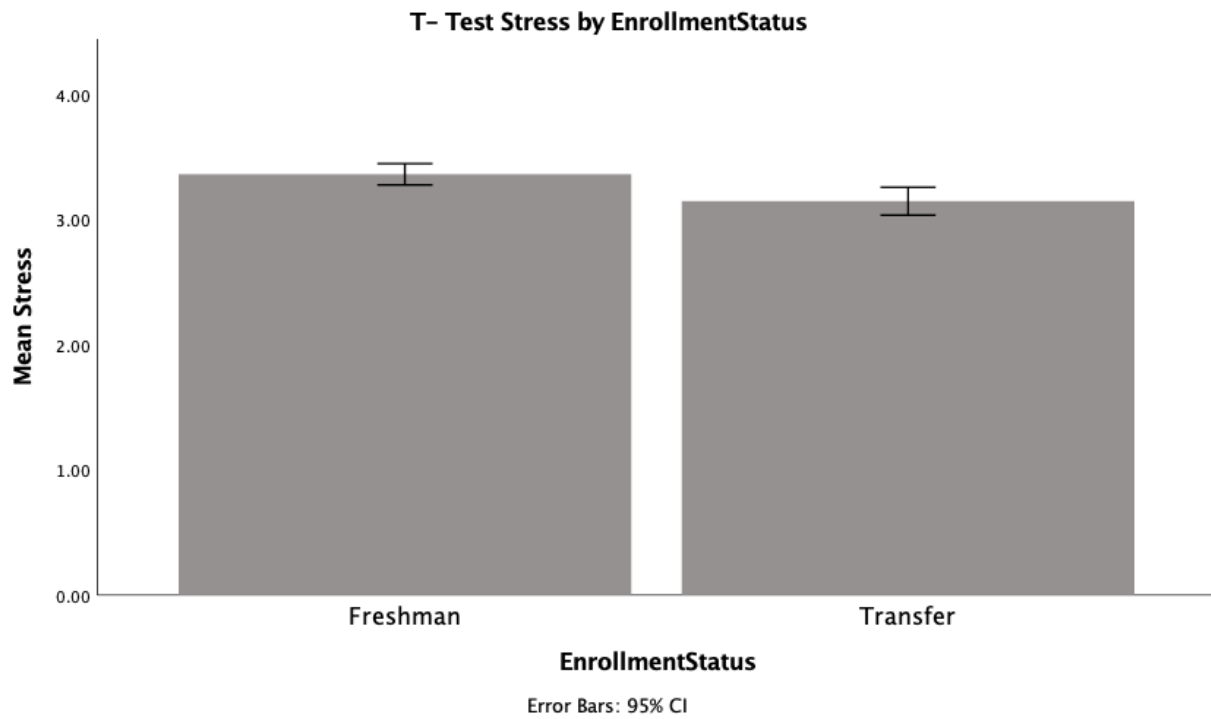


Figure 2

Independent Sample T-test for Motivation (Freshman vs. Transfer)

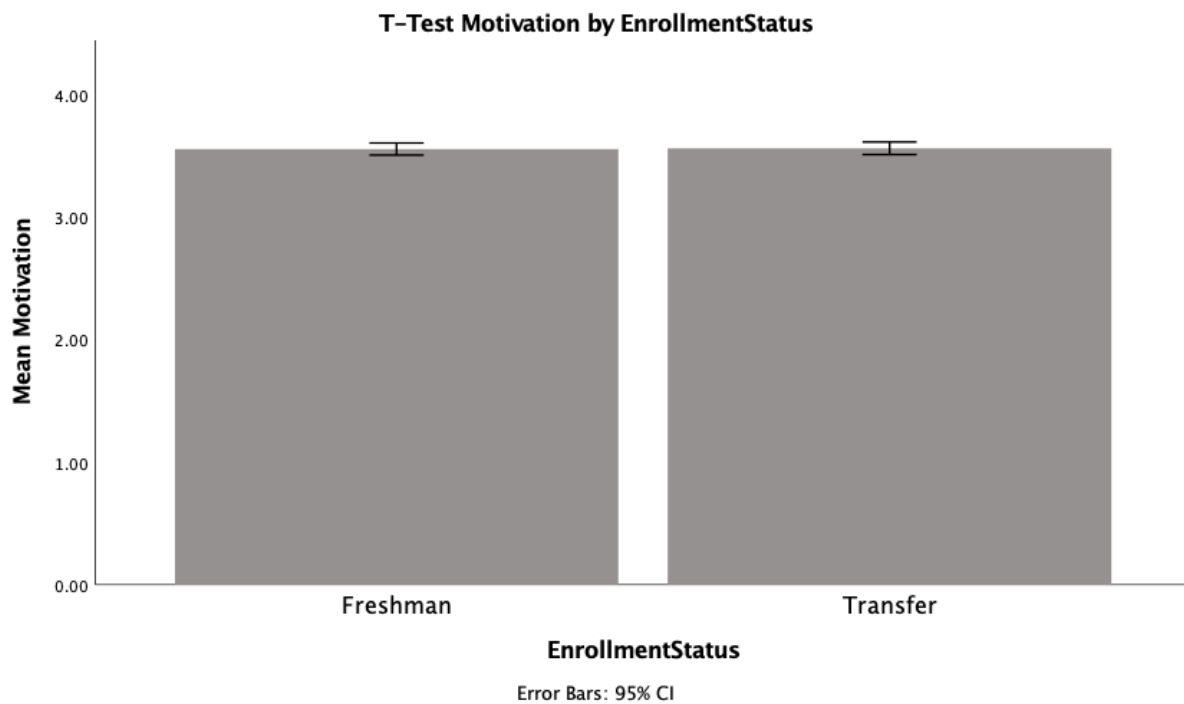


Figure 3

Independent Sample T-test for Study time (Freshman vs. Transfer)

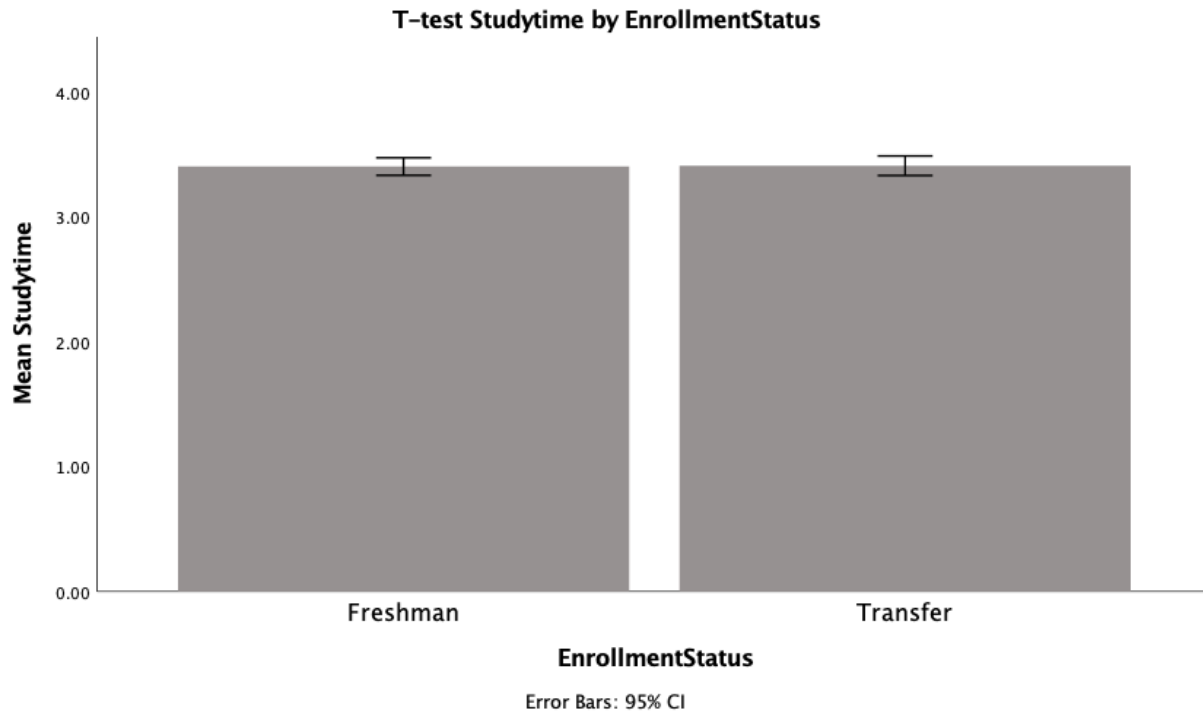


Table 1

Freshman Enrolled Students Pearson Bivariate Correlation Analysis

	<i>Stress</i>	<i>Motivation</i>	<i>Studytime</i>
<i>Stress</i>	1		
<i>Motivation</i>	.274**	1	
<i>Studytime</i>	.710**	.351**	1

*Note: ** Correlation is significant at the 0.01 level (2-tailed)*

Table 2

Transfer Students Pearson Bivariate Correlation Analysis

	<i>Stress</i>	<i>Motivation</i>	<i>Studytime</i>
<i>Stress</i>	1		
<i>Motivation</i>	-.084	1	
<i>Studytime</i>	.566**	.158	1

Note: ** Correlation is significant at the 0.01 level (2-tailed)