


Spring 4-2012

# A Comparison of Hybrid/Online and Lecture College Courses

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## Recommended Citation

Paquin, Katelyn, "A Comparison of Hybrid/Online and Lecture College Courses" (2012). *Honors Projects Overview*. 67.  
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A Comparison of Hybrid/Online and Lecture College Courses

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### Abstract

The purpose of this research is to investigate relationships between online college courses and in-person courses with regard to student course completion rate and course grade averages. The personality characteristics of Introversion, Conscientiousness and Academic Self-Regulation, and professor student rapport were also examined in relation to performance of the students enrolled in online and in-person classes. This study was based on an integrative theory of self- and social regulation in learning contexts. A two-tailed t-test for independent samples found no significant difference between the end of previous semester cumulative GPAs (CGPAs) of students in the online/hybrid or in-person courses. The results of a Chi square test comparing the withdrawal rate of students in the lecture and online Social Psychology course was statistically significant. Students are much more likely to withdraw from a large online course than from a large lecture course. There was a significant correlation between scores on the Academic Self-Regulation Scale and (CGPA) in the online section of the Social Psychology course. No significant differences were found, however, between the other personality characteristics and GPA.

*Keywords:* Self-regulation, personality, drop-out rate, hybrid courses, GPA

The purpose of this research was to investigate relationships between online/ hybrid college courses and in-person courses with regard to student course completion rate and course grade averages. The personality characteristics of Introversion, Conscientiousness and self-regulation were also examined in relation to end of previous semester's cumulative GPA (CGPA) in online/ hybrid and in-person classes.

This study was based on an integrative theory of self- and social regulation in learning contexts, where self-regulation and co-regulation systems operate as collaborative learning (Volet, Vauras, & Salonen, 2009). The traditional classroom lecture and discussion is structured by the professor as is the online Blackboard, with the students required to self-regulate learning by going to class or accessing Blackboard as well as studying the materials, doing the assignments, and taking quizzes and tests. The extent to which the material is online, the frequency and structure of the assignments and the size of the class are examples of the professor's role in the co-regulation. The student's role in co-regulation is for example, the frequency of either accessing the material online, going to class, scheduling time to do the assigned reading and taking quizzes and exams and turning in any assignments on time.

College courses online or distance education as it is also called, is a rapidly growing form of education. Survey data by the U.S. Department of Education (2011) shows that 89% of four year public colleges offer online and distance based courses. The term distance education can be used to describe a wide variety of programs (Parker, Lenhart, & Moore, 2011). Students who take these courses are not required to be physically present in the classroom. Distance education makes use of video, audio, Power Points, discussion boards, online chat rooms and e-mail typically presented on class websites such as Blackboard. Students use these resources, as well as the traditional textbook, to teach themselves as an alternative to coming to a weekly lecture.

Many of these programs have very little, if any face-to-face interaction between students and the professor (Murphy, Levant, Hall & Glueckauf, 2007).

There is a limited amount of research about distance education. The most difficult part of the analysis of this literature is the wide variety of terms used to describe distance education, and the multiple possible combinations of various online resources. Online courses are taught completely online with no face-to-face interaction between the student and the teacher. The courses very often use online chat rooms in order for students to communicate with the professor as well as the other students. A hybrid course is a course that is only partially online. In hybrid courses, the students usually come into a classroom to take the tests. Other hybrid courses consist of a class that is partially taught on campus and partially taught online. In these courses, students may come in for one class a week and do an online assignment in lieu of the other class. The variety in these course combinations makes it very difficult to compare distance education as a whole with in person classes (Utts, Sommer, Acredolo, Maher & Matthews, 2003).

Distance learning options enable higher education to be less time restricted. Previously, fitting college into one's schedule was very difficult for an adult with a family or a full time job. Working adults are becoming an increasingly large percentage of the college population. Distance learning makes education much more accessible to a wide variety of students. It has made it possible to balance having a job, caring for a family, and pursuing higher education. It creates opportunities for much more flexible times and locations for those wishing to continue their education in a way that is convenient for them (Boling & Robinson, 1999).

A survey done at the State University of New York showed that 80% of students enrolled in distance education courses were also enrolled in on campus (Wang & Newlin, 2000). These data show that distance education may not just be a need but a preferred way of learning for

some students. As more students gain access to personal computers, the ease of being able to learn from home at whatever time is most convenient becomes increasingly appealing (Wang & Newlin, 2000).

Many students question whether online learning provides the same level of education and learning as the traditional classroom. Cooper (2001) looked at both students' perceptions of and performance in online courses. The online course in this study required students to have at least a 2.5 cumulative GPA to enroll in the course. Most students indicated that they took the course online for convenience and flexibility. Eighty percent of the students who worked full time jobs or had children reported that taking the course online allowed them to better manage school, work, and family and they liked being able to learn at their own pace. The drop-out rate in this online course was much lower than other online courses. The researcher concluded that this was a result of the required minimum GPA. Higher GPA is correlated with better self-regulation and conscientiousness. These factors are probably related to the lower drop-out rate. It is possible that a minimum GPA is the key to a lower drop out rate in online courses.

In traditional college courses, peers promote learning. In online courses the social interaction is removed from the course. Student motivation decreases when the social aspect is removed. Roseth, Saltarelli, and Glass (2011) looked at the difference between motivation and achievement in face-to-face and online courses. Their results showed that students' motivation was lower in the online courses as related to the removal of social interaction. This study also showed that the completion rate for online students was significantly less than the completion rate of the face-to-face students. One hundred percent of the face-to-face students completed the course while only sixty-three percent of the online students completed the course. Interestingly,

there was no significant difference in academic achievement between the students who completed either the online or face-to-face course.

#### Completion Rate and GPA

Non-completion of courses is a major problem for distance education (Kemp, 2002). In a study testing the factors that affected adults' success in the completion of courses in distance education, only 47% of 121 undergraduate students taking a distance education course for the first time successfully passed their course. There was a negative correlation between the demands of work and success in distance education. Students who worked more hours were much more likely to drop the course. Although distance education may make it easier for students to balance a job and higher education, it is still very difficult to do so successfully.

According to Bernard and Amundsen (1989), when online courses require students to log on each week to participate in course work and communicate with other students the drop-out rate is much lower. The drop-out rate in distance education with or without required participation was higher than the rate in the lecture courses. Distance education requires the students to have greater self-discipline and to motivate themselves to do their work. They do not have to worry about having to schedule time to go to their class, and as a result they may underestimate the amount of work still necessary for the course. Students in online courses are more likely to neglect the course without being aware of the probable consequences (Bernard et. al., 2004).

A comparison of students' quiz scores and final course grades in a traditional undergraduate management course and the same course online revealed that students' quiz averages and final course grades were significantly higher in the online section ( $p > .05$ ) (Daymont & Blau, 2008). The students in the online course were also more likely to have higher end of previous semester cumulative GPAs indicating that students who get better grades are

more likely to sign up for online courses. Lack of self-discipline may have a greater effect on the grades of those students in the online than the students in the lecture course.

Wilson and Allen (2011) looked at the difference in completion rates for online versus traditional courses. The study showed that students who had completed significantly more college credits were more likely to successfully complete the online course. This may be because these students needed this course to graduate or were going to be unable to retake it if they withdrew. The results showed that cumulative GPA was the greatest predictor of course grades in both the online and lecture course. GPA was also shown to be the most important predictor of student outcomes in online courses. (Gerlich and Sollosy, 2011). The study also showed that personal contact with the professor in the online class by way of discussion boards and online chat rooms led to an increase in completion rate.

### ***Personality and College Achievement***

Self-regulation has also been shown to be an important skill that leads to higher academic achievement and intellectual functioning. Self-regulation can be defined as the ability to continuously work on a task that may be difficult or boring (Nisbett et al., 2012). It can also be measured by looking at impulse control, organization, and resilience. Self-regulation has been shown to be related to higher SAT scores, IQ, and academic achievement. The ability to self-regulate is a predictor of greater academic success in a variety of different measures.

Self-regulation is one of the most important characteristics for successful learning and academic achievement (Wirth & Leutner, 2008). There are many different aspects that can be included in the definition of self-regulation which makes it very difficult to have one commonly accepted definition. Self-regulation involves learners who are able to plan, execute, and evaluate their learning process. They must be able to continuously be motivated and focused in their



learning. Self-regulated learners generally set goals and plan the process in which they will complete these goals. They must be able to control impulses and stay focused to keep themselves on track in reaching their goals (Wirth & Leutner, 2008).

One predictor of registration for online courses is introversion (Neuhauser, 2002). Introverts may take online courses so they do not have to worry about volunteering or being singled out in class. Introverted students who take online courses may however not become socially adept in an academic setting. When students take courses on campus, they are forced to be in social situations and interact with their peers and professors. This takes introverted students out of their comfort zone. The option of online courses allows these students to shut themselves off and become less integrated into society. When students remove themselves from the classroom they have fewer opportunities to be social. A decrease in social activities is linked with depression and loneliness which also leads to a decrease in motivation. As a result, lower grades and a higher dropout rate have been found for less integrated students taking only online courses in comparison to in-person courses (Wang, Newlin, 2000).

Research shows that The Big Five personality trait of Conscientiousness is a predictor of GPA (Trautwein, Ludtke, Roberts, Schnyder, & Niggli, 2009). In a study with 571 high school students, scores on the Conscientiousness subtest of the Big Five Personality Inventory were correlated with the student's academic achievement. The results showed that Conscientiousness was statistically significantly related to academic effort and achievement. Students who scored high in Conscientiousness also had significantly higher GPAs.

Noftle and Robins (2007) looked at the correlation between conscientiousness and higher GPA and SAT scores. This was a longitudinal study where college students were selected during the first week of their first semester of college and then tested annually throughout their college

career. The results showed that conscientiousness was associated with higher college grades. It was also shown that students who increased in conscientiousness throughout college achieved higher cumulative GPAs. Conscientiousness was also a predictor of better self-control. The results showed that the organization aspect of conscientiousness was most closely related to higher achievement in college students.

Students who wish to succeed in distance education courses must be disciplined and motivated in their studies. Self-regulated learners have various cognitive strategies that they can call upon to help increase their learning. They are able to control their learning behavior and are very aware of their learning processes. They can independently manage their time and study strategies for a variety of different courses at once (Wolters, 2003). Students taking distance education courses must be motivated enough to log on each week and complete the necessary course work. Time management and disciplined study habits are crucial in the successful completion of a distance education course.

Trapmann, Hell, Hirn, and Schuler (2007) looked at the correlation between The Big Five personality factors and academic success in college students. Academic success was measured by university grades. They found that conscientiousness is the main psychological resource in learning and a valid predictor of academic success. They also found that extraversion was positively correlated with academic satisfaction. This may be related to the fact that more extroverted students are able to socialize more easily both with their peers and professors creating a more positive environment. The results of this study showed that conscientiousness was the only personality factor positively related to academic achievement.

The Academic Self-Regulation Scale (ASRS) was developed as a predictor of cumulative GPA and graduation (Rollins, Zahm, Burkholder, & Merenda, 2006). This scale differs from

other self-regulation scales in including broader aspects of the students' lives, particularly money management. Overall explained variance (adjusted  $R^2$ ) in 5-year GPA by the five components of the ASRS was 13%. The Self-Regulation subscale was a strong predictor of GPA, predicting 10% of the variance in GPA of students 5 years after students had taken the scale. The ASRS was also a statistically significant predictor of graduation within 5 years.

Pintrich and De Groot (1990) looked at the correlation between self-regulation and academic performance. Students filled out a self-report measure of self-efficacy, test anxiety, and self-regulation. The results were correlated with academic performance which was measured by collecting data on student performance on tests, quizzes, homework, and in-class assignments. The results showed that high self-regulation was a significant predictor of higher grades. Self-regulation was also positively correlated with cognitive engagement in the classroom and persistence in difficult tasks.

Richardson, Abraham, and Bond (2012) looked at the relationship between a number of psychological correlates and academic performance in college students. They found that procrastination was negatively correlated with GPA. Conscientiousness, motivation and self-regulation were also positively correlated. All five-factors of the Big Five personality scale were looked at and conscientiousness was the only characteristic that was significantly related to GPA. Self-regulation was looked at in the context of learning styles. The scale specifically targeted organization, help seeking, peer learning, time management, concentration, critical thinking, and effort regulation. The aspects of the self-regulation that were most significantly correlated with GPA were strategies such as help seeking, time and study management.

### ***Professor- Student Rapport***

The Professor Student Rapport Scale was created to predict student outcomes with professor satisfaction. Students reported their attitudes towards the instructor, their motivation, and their perceived learning. The scale also contained questions about the student's relationship with their professor, how often they interacted, and if they felt that their professor was approachable and helpful. This scale is helpful in furthering our ability to predict student outcomes and attitudes towards the course in relation to their rapport with the professor. This scale was found to be a valid measure of students' satisfaction with their professor and higher satisfaction was related to a better outcome. Students who are more satisfied with and have a more positive relationship with their professor are more likely to succeed in the course. (Wilson, Ryan, & Pugh, 2010).

In order for courses to be completely comparable, the course experience should be the same regardless of whether the course is being taught as an online course or face-to-face. Classes that are being taught both ways should be designed so that the course is equally as effective in both environments. In order for students in an online course to have a comparable experience to students in face-to-face courses the professor must be available and respond to emails in a timely manner. In courses that utilized an open discussion board where the students were able to communicate with their professor, the students tended to be much more satisfied with their professor and perceived learning in the course (Ferguson & DeFelice, 2010).

If distance education is as effective as traditional in class learning, it can be a very beneficial option for those who have a difficult time balancing school and a career. It is important to look at what factors help to make teaching distance education as successful as possible.

### *Hypotheses*

Due to the limited research about distance education, null hypotheses will be used.

1. There will be no significant difference in the dropout rate between hybrid/ online courses and lecture courses. (A two tailed t-test for independent samples will be calculated.)
2. There will be no significant correlation between Conscientiousness and The scores on the ASRS in lecture courses. (A Pearson product moment correlation coefficient will be calculated.)
3. There will be no significant correlation between Conscientiousness and the scores on the ASRA in hybrid/ online courses. (A Pearson product moment correlation coefficient will be calculated.)
4. There will be no significant correlation between Introversion and the scores on the ASRS in lecture courses. (A Pearson product moment correlation coefficient will be calculated.)
5. There will be no significant correlation between Introversion and the scores on the ASRS in hybrid/ online courses. (A Pearson product moment correlation coefficient will be calculated.)
6. There will be no significant correlation ASRS scores with CGPA in hybrid/ online courses. (A Pearson product moment correlation coefficient will be calculated.)
7. There will be no significant correlation of ASRS scores with CGPA in lecture courses. (A Pearson product moment correlation coefficient will be calculated.)
8. There will be no significant difference between the scores on the Professor-Student Rapport Scale in the hybrid/online and lecture courses. (A two tailed t-test for independent samples will be calculated.)
9. There will be no significant correlation of Introversion with CGPA in hybrid/ online courses. (A Pearson product moment correlation coefficient will be calculated.)
10. There will be no significant correlation of Conscientiousness with CGPA in hybrid/ online courses. (A Pearson product moment correlation coefficient will be calculated.)

11. There will be no significant difference between CGPA scores in hybrid/ online or lecture courses. (A two tailed t-test for independent samples will be calculated.)

## **Method**

### **Participants**

Participants were 109 undergraduate students from an enrollment of 190 taking Social Psychology in a large lecture during spring semester 2011 and 56 students from an enrollment of 93 in the same course in an online section which met only for exams. Participants also were drawn from the course, Managerial Finance and Control. Participants were 15 of an enrollment of 22 in a small lecture course and 20 of an enrollment of 25 in a hybrid section, which met several times in a traditional class and the rest of the class was online.

### **Procedure**

Both sections of Social Psychology were taught by the same professor, and both sections of the Finance course were taught by the same professor. For each course, the textbooks and exams for the two sections were comparable. The college defines an online course as one that is online for at least 80% of the time. Based on this definition, the Social Psychology course can be defined as an online course and the Finance course can be defined as a hybrid course.

The Social Psychology online course only required students to go to class to take two exams plus the final exam. The lecture and hybrid courses were comparable using the same textbook and Power Points. The Power Points were posted online for both course sections, but the hybrid course Power Points had audio with a brief lecture embedded in each slide. There were about 44 slides per chapter for each class. Links to videos shown in the lecture course were not embedded in the Power Points posted online. The online and lecture courses each had their

own separate Blackboard website. The online course had an activated discussion board on Blackboard to allow the students to communicate with the professor as well as other students in the class.

The same learning objectives, practice questions, and matching exercises of key terms for each chapter were posted for both sections. iClicker quizzes were given in class and online quizzes were posted for the online students, the total score of which counted as half an exam grade in both the online and lecture course. There were two exams and a final exam, each consisting of sixty multiple choice questions. Students in each course also had the option of taking a cumulative final exam which would replace their lowest grade, in the event that the cumulative exam grade was higher. Students in both online and lecture sections took all exams on campus in the classroom.

Both sections of the Managerial Finance and Control course were taught by the same professor and used the same textbook, exams, and Power Points. The hybrid section of the course met for approximately six lectures throughout the semester and students were asked to log onto Blackboard to view the Power Points for the rest of the semester. Both sections received three comparable exams and they were all taken on campus in the classroom.

Research questionnaires were given mid semester in the Finance classes and two weeks before the end of the semester in the Social Psychology lecture course and at the time of the final exam in the online course. The participants were asked questions about how many hours they spend studying, reading, and looking at power points and other questions relating to hours worked at jobs and commuting times. They were also given three subscales of the ASRS, Self-Regulation, Impulse Control, and Resilience (Rollins, et. al, 2006) and two sub-scales of the Big Five Personality Scale, Introversion and Conscientiousness (Goldberg, 1992) (See Appendix A).

The Professor- Student Rapport scale was also given to the students in order to control for the confound that the social psychology professor is aware of the hypotheses. This scale is used to study the relationship between the professor and the students as well as the professor's effectiveness. It measures this using the professor's behaviors instead of the student's perceived quality of his/her teaching. This creates an unbiased representation of the professor's effectiveness and teaching style (Wilson, Ryan, & Pugh, 2010). For the present study, certain items that required face to face interaction were removed, these items included things like, "my professor maintains eye contact with me" and "my professor lectures the entire class without stopping."

The questionnaire, method, and procedure were submitted to the IRB for approval before testing began. The students in the classes responded to the questionnaires on a voluntary basis (Appendix B). Students in the social psychology lecture class had the option of filling out the questionnaire after class and receiving three points extra credit or writing a one to two page paper on altruism and receiving the three points extra credit. Students in the managerial finance and control courses were given the option of filling out another survey or completing the questionnaire for extra credit.

### **Results**

A two-tailed t-test for independent samples found no significant difference between the incoming cumulative GPAs of students in the hybrid/online or lecture courses. In the Social Psychology course, twenty (22%) students from an enrollment of 93 students withdrew from the online course, compared to 15 (8%) students who withdrew from an enrollment of 190 students in the lecture course. The results of a Chi square test comparing the withdrawal rate of students in the lecture and online Social Psychology course was statistically significant ( $X^2 = 113$ ,  $df = 1$ ,



$p > .001$ ). In the Finance lecture class one withdrew and two withdrew from the hybrid course. Students are much more likely to withdraw from a hybrid/online course than from a lecture course. There was no significant difference, however, between the mean class GPA of students in the Social Psychology online and inperson classes or the mean class GPA of students in the Finance hybrid and in person classes.

In the hybrid section of the Finance course there was a significant correlation at the .05 level between ASRS scores and Conscientiousness ( $r(20) = .472, p = .036$ ) and a significant negative correlation at the .01 level between Introversion and ASRS scores ( $r(20) = -.643, p = .002$ ). In the online section of the Social Psychology course there was also a significant negative correlation at the .01 level between ASRS scores and Introversion ( $r(59) = -.385, p = .003$ ). Students who are introverted are less likely to be self-regulated. A positive significant correlation was found between ASRS scores and self-reported cumulative GPA (prior to entering the course) in the online section of the Social Psychology course ( $r(59) = .367, p = .05$ ). No significant differences were found, however, between Introversion and cumulative GPA or Conscientiousness and cumulative GPA in any of the courses.

Two-tailed t-tests for independent samples were calculated to compare the scores on the Professor-Student Rapport scale in the lecture and online Social Psychology courses and the lecture and hybrid Finance courses. The results of this test showed that there was no significant difference in the scores on the Professor-Student Rapport scale between the lecture and hybrid/online courses for either the Social Psychology or Finance courses.

### **Discussion**

The results of this study found that students were significantly more likely to drop out of hybrid/online courses than lecture courses. A hybrid/online course requires students to come to

class a very limited amount of time. Students are required to log on to blackboard regularly and keep up on the work. If students are not self-regulated they can easily get behind in the course and miss exams and announcements which contribute to an increase in the drop out rate.

Students who take online courses may underestimate the amount of work involved. Online courses that require students to log on each week and complete assignments have a much lower dropout rate than courses that did not require the students to log on each week (Bernard et. al., 2004). The courses in the present study did not require students to log on each week which may have contributed to the high drop-out rate, however, students in the Social Psychology online course were required to take seven online quizzes that counted as half an exam grade that were spread throughout the semester.

The higher dropout rate in the online course may also be attributed to the fact that this course was offered at 5pm. Having a course at night changes the demographic of the students taking the course. Older students who work full time are more likely to take later classes so they can fit school into their schedule. These students must balance the course, work, and a family. This becomes very difficult for students who work long hours and do not have much time to devote to school work. Studies have shown that students who work more hours are much more likely to withdraw from their courses (Kemp, 2002).

In the hybrid section of the Finance course ASRS scores and Conscientiousness were significantly correlated. The research suggests that these two variables are related. This correlation was probably particularly strong in the hybrid course because the students need to be Conscientiousness and self-regulate in order to succeed in a hybrid course. Conscientiousness has been shown to be a predictor of better self-control and motivation which are both factors directly related to self-regulation (Nofle & Robins, 2007).

There was a significant negative correlation between Introversion and ASRS scores in both of the hybrid/online courses. This may be because the introverted students were too timid to approach the professor to ask to be withdrawn from the course. After a certain point in the semester students are required to get permission from the professor to drop a course. The students had only been given one exam at that point in the semester and probably waited until the second exam to decide to drop the course. The professor of the Social Psychology course had a policy that she would drop anyone up until the last week of the course who asked to be withdrawn, but they had to e-mail the professor and get her permission. It is likely that most students who scored low in self-regulation had dropped the course before the surveys had been administered. According to Bidjerano and Dai (2007) students who are more extraverted are more likely to be less self-regulated, but it is likely that the more extraverted had already dropped the courses at this point.

There was a significant correlation between the self-regulation subtest of the ASRS scores and (CGPA) in the online section of the Social Psychology course. This may be attributed to a bivariate outlier, however, causing this correlation. Although this correlation is significant, if the outlier is removed the significance may be diminished as well. Previous research, nevertheless, has shown a significant correlation between CGPA and the ASRS scale (Rollins et al. 2006).

There was no significant difference between the hybrid/online and lecture sections in the scores on the Professor-Student Rapport Scale in the Social Psychology and Finance courses. This shows that the students perceived both of the professors to be equally as effective in both the lecture and hybrid/online course. In order for courses to be completely comparable, the

course experience should be the same regardless of if the course is being taught as an online course or face-to-face (Ferguson & DeFelice, 2010).

The major limitation of the study was that the data was collected in the middle of the semester in the Finance hybrid and lecture courses and on the day of the final exam in the Social Psychology online course and during the second to the last week of classes in the Social Psychology lecture class. Students who were not doing well in the course probably had dropped at this point. Another limitation was that the online section of the Social Psychology course was offered at 5 pm and the lecture course was offered at 11 am. This may have affected the demographic of students who registered for each course.

The third limitation is that the courses were not listed as hybrid/online courses when the course bulletin was printed, although in the online registration there was indication that it was a hybrid course. Some students registered for the course not knowing that it was a hybrid/online course.

Further research should be conducted in the beginning of the semester, with the IRB permitting student IDs to be collected. The CGPA and personality characteristics of students who drop out of the course could then be compared with students who completed the course as well as a comparison of individual student's class GPA.

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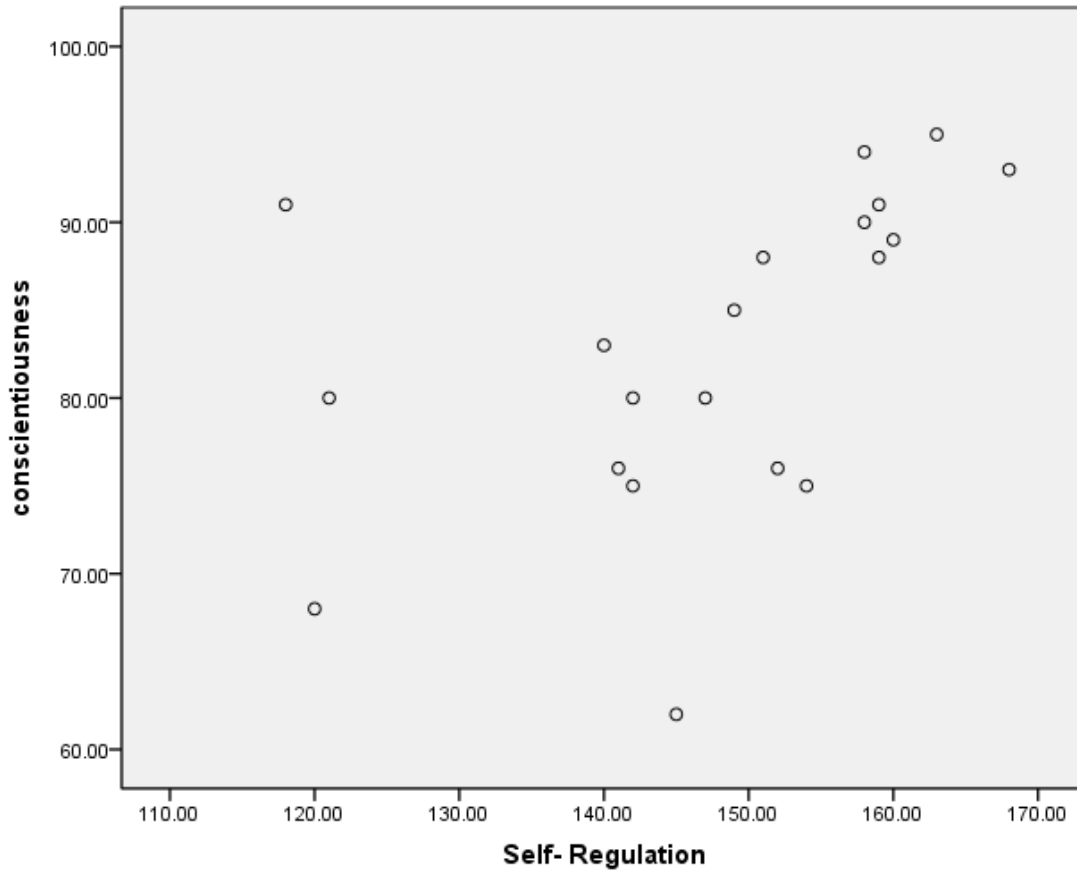


**Appendix**

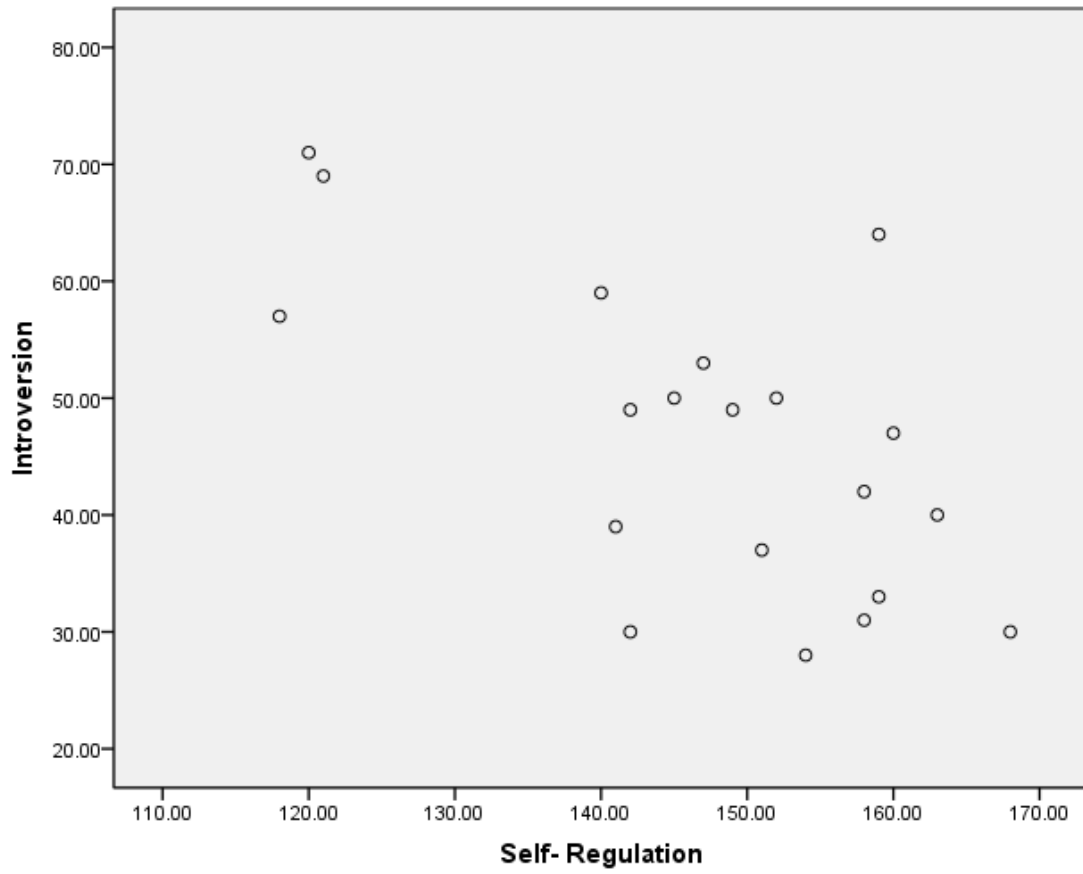
Table 1. Summary of Significant Correlations

Variables Correlated	r	p<
Hybrid- ASRS/ Conscientiousness	.472	.036
Hybrid- ASRS/ Introversion	-.643	.002
Online- ASRS/ Introversion	-.385	.003
Online- ASRS/GPA	.367	.050

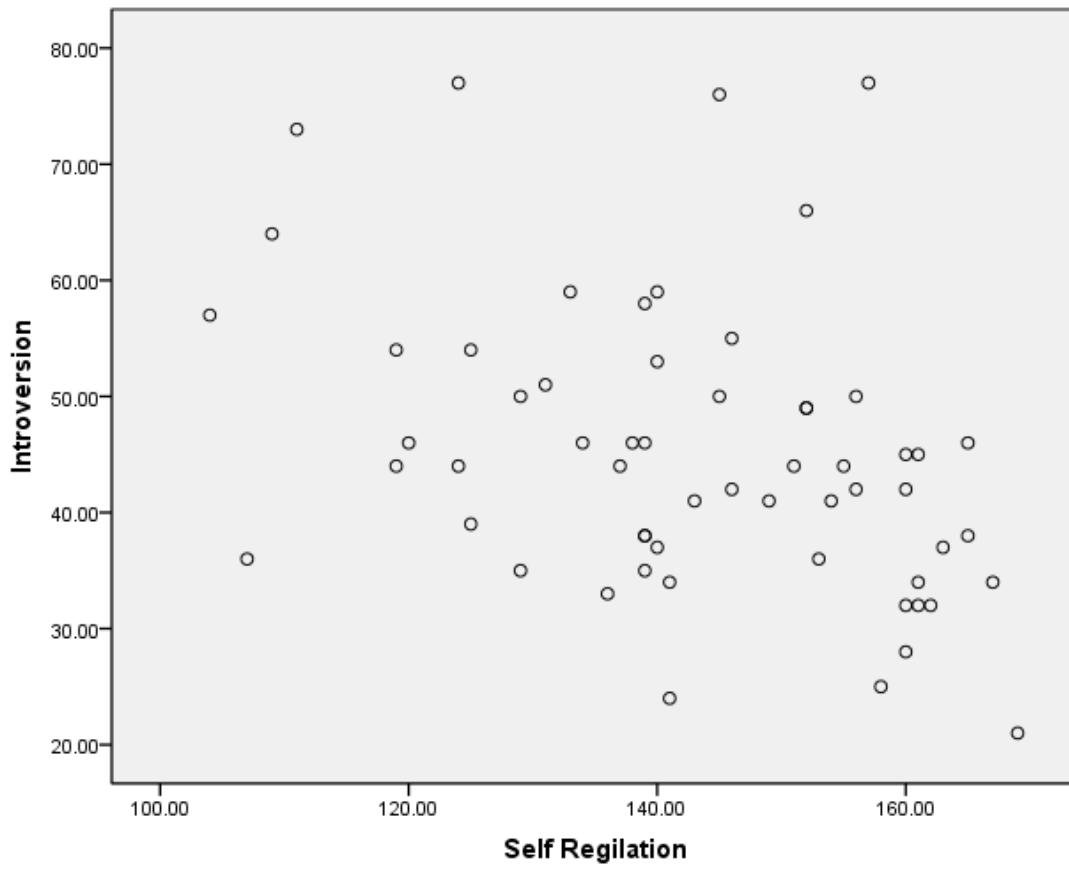
**Figure 1. Correlation of Conscientiousness/ Self-Regulation in Finance Hybrid Course**



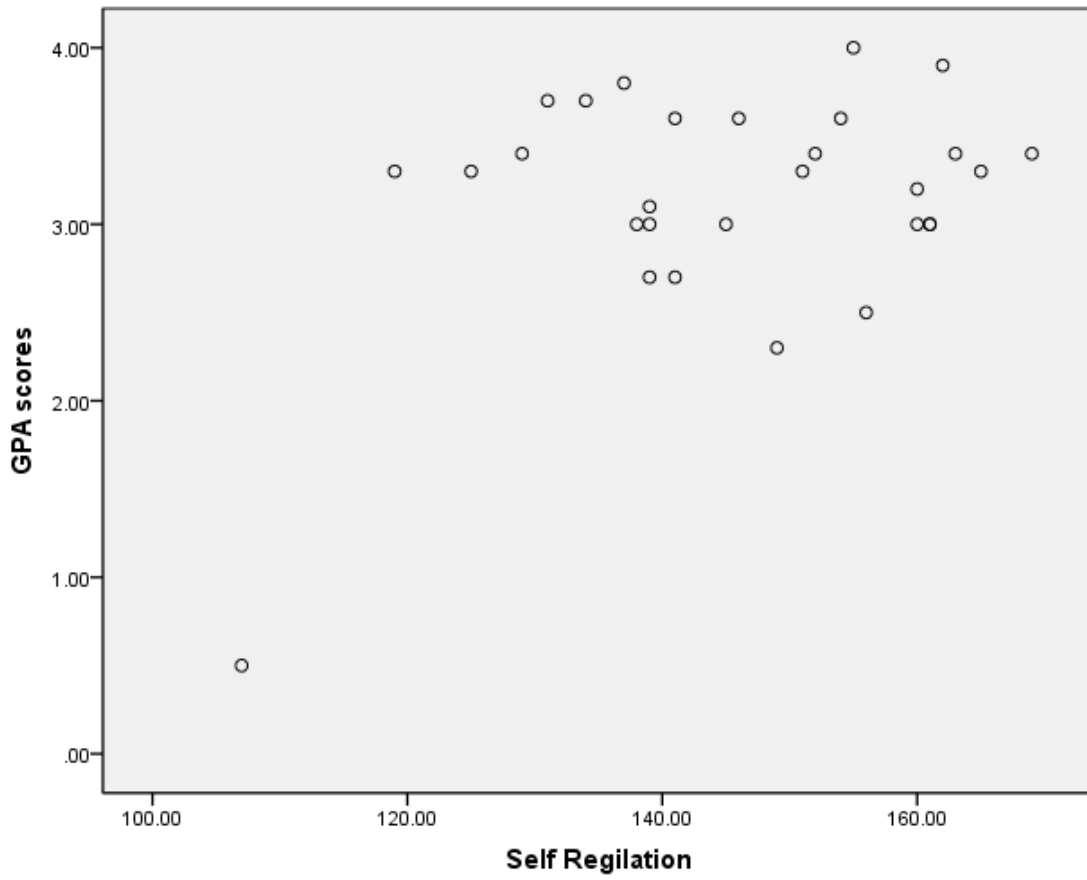
**Figure 2. Correlation of Introversion/Self-Regulation in Finance Hybrid Course**



**Figure 3. Correlation Introversion/Self-Regulation in Online Psychology Course**



**Figure 4. Correlation of Cum. GPA/Self-Regulation in Online Psychology Course**



**Appendix A**

Thank you for agreeing to respond to the following questionnaire. We are interested in personality and social cognitive factors affecting the academic achievement of students in different types of courses at Rhode Island College.

**Indicate whether the thought feeling or behavior is characteristic of you: A) Never B) Rarely C) Sometimes D) Frequently E) Always**  
**Circle the most appropriate answer.**

1. I dislike myself a lot.

A B C D E

2. I love myself.

A B C D E

3. I feel inadequate and miserable.

A B C D E

4. I feel that I am a loser.

A B C D E

5. I feel that I am a winner.

A B C D E

6. I think that I am boring.

A B C D E

7. I like myself a lot but see a few weaknesses.

A B C D E

8. I feel angry.

A B C D E

9. I maintain an optimistic attitude.

A B C D E

10. When things go wrong in my life, I feel too tired and depressed to work at anything.

A B C D E

11. I am disorganized.

A B C D E

12. I schedule my time.

A B C D E

13. I feel capable of handling money.

A B C D E

14. I have difficulty managing money.

A B C D E

15. I schedule and organize my weekly activities.

A B C D E

16. I make a habit of doing the most important things first rather than putting them off.

A B C D E

17. I have self-discipline.

A B C D E

18. I put things off that I don't feel like doing.

A B C D E

19. I prioritize items on my to do list in accordance with my own values.

A B C D E

20. I try to do things perfectly.

A B C D E

21. I budget my resources to achieve my goals.

A B C D E

22. I put off doing homework until the last minute.

A B C D E

23. I am always borrowing money from people.

A B C D E

24. If I think I can get away with cheating someone out of money I do.

A B C D E

25. I binge eat and then purge.

A B C D E

26. I lose my temper with a friend.

A B C D E

27. I have difficulty reading and writing English

A B C D E

28. I use drugs to help improve my mood.  
A B C D E
29. I plan to improve my life by winning the lottery.  
A B C D E
30. I think that I have a learning disability.  
A B C D E
31. I can't control my reaction to the behavior of others.  
A B C D E
32. I work well under pressure.  
A B C D E
33. I try to live with integrity.  
A B C D E
34. I don't give up easily.  
A B C D E
35. I am not as smart as most other college students.  
A B C D E
36. I have a genuine regard for most people.  
A B C D E

**The following questions have to do with your study strategies. Please circle the option that best fits your answer.**

37. How Much time per week to you spend studying for this course?

- 9. 0-30 minutes
- 30 minutes- 1 hour
- 1-2 hours
- d) 2+ hours

38. Do you read the textbook chapters

- a) never
- b) rarely
- c) sometimes
- d) frequently
- e) always

39. Do you wait until the last minute to look at the power points?

- a) never
- b) rarely
- c) sometimes

- d) frequently
- e) always

40. How much time per week do you spend looking at the power points for this course?

- 0-30 minutes
- 30 minutes- 1 hour
- 1-2 hours
- d) 2+ hours

41. Do you learn best by:

- a) working in small groups
- b) doing hands on activities
- c) listening to the professor
- d) reading the chapter
- e) viewing PowerPoints

42. Do you need a Structured learning environment?

- Yes
- b) no

**The following Questions are about your general background.**

43. Gender?

- a) male
- b) female

44. Age?

- 18-24
- 25-39
- c) 40+

45. GPA?

\_\_\_\_\_ (Cumulative GPA as of last semester)

46. What is your living situation?

- a) On campus
- b) Off campus with roommates
- c) Off campus and live alone
- d) With family
- e) With Spouse or significant other

47. How long is your commute?

- a) 0-30 minutes
- b) 30 minutes- 1 hour
- c) 1-2 hours



48. Do you have a Job?

- a) yes
- b) no

49. If yes, how many hours/ week do you work?

- 0-15
- 15-30
- c) 30+

50. Are you Married?

- a) yes
- b) no

51. Do you have children?

- a) yes
- b) no

**The following questions have to do with your Computer Use. Circle the appropriate response.**

52. Do you own a computer?

- a) yes
- b) no

53. How many hours/ day do you spend on the computer?

- a) 0-30 minutes
- b)30 minutes- 1 hour
- c) 2-3 hours
- d) 3-4 hours
- e) 4 or more hours

54. How many hours/ day do you spend on facebook?

- a) 0-30 minutes
- b)30 minutes- 1 hour
- c) 1-2 hours
- d) 3-4 hours
- e)4 or more hours

55. How many emails do you usually send per day

- a) 1-2
- b) 2-4
- c) more than 4

56. Do you consider yourself technically adept?

- a) yes
- b) no

57. When problems with your computer occur are you usually able to fix them yourself?

- a) yes
- b) no

**Please skip Question #57 if you are not currently enrolled in a hybrid course.** (A hybrid course is one in which face to face interaction occurs only for exams or for a few lectures).

58. Why did you decide to take this hybrid course? Please check all that apply.

- a) Don't have to commute
- b) Convenient with my work schedule
- c) I'm able to make my own schedule
- d) other \_\_\_\_\_

59. Have you ever had experience with an online course? (A hybrid course is one in which there is no face to face interaction with the professor or other students.)

- a) yes
- b) no

60. If yes, how many online courses have you had?

- a) 1
- b) 2
- c) 3
- d) 4 or more

61. Have you ever had experience with hybrid courses? (A hybrid course is one in which face to face interaction occurs only for exams or for a few lectures).

- a) Yes
- b) No

62. If yes, how many hybrid courses have you taken?

- a) 1
- b) 2
- c) 3
- d) 4 or more

**The following questions have to do with your personality characteristics. Indicate whether each is a characteristic of you. A) Strongly agree B) Agree C) Neither agree nor disagree D) Disagree E) Strongly disagree. Circle the most appropriate answer.**

I am:

63. Organized

- A   B   C   D   E

64. Systematic  
A B C D E

65. Thorough  
A B C D E

66. Practical  
A B C D E

67. Neat  
A B C D E

68. Efficient  
A B C D E

69. Careful  
A B C D E

70. Steady  
A B C D E

71. Conscientious  
A B C D E

72. Prompt  
A B C D E

73. Disorganized  
A B C D E

74. Careless  
A B C D E

75. Inefficient  
A B C D E

76. Undependable  
A B C D E

77. Impractical  
A B C D E

78. Negligent  
A B C D E

79. Inconsistent  
A B C D E

80. Haphazard  
A B C D E

81. Sloppy  
A B C D E

82. Talkative  
A B C D E

83. Assertive  
A B C D E

84. Verbal  
A B C D E

85. Energetic  
A B C D E

86. Bold  
A B C D E

87. Active  
A B C D E

88. Daring  
A B C D E

89. Vigorous  
A B C D E

90. Unrestrained  
A B C D E

91. Shy  
A B C D E

92. Quiet  
A B C D E

93. Reserved  
A B C D E

94. Untalkative  
A B C D E

95. Inhibited

A B C D E

96. Withdrawn

A B C D E

97. Timid

A B C D E

98. Bashful

A B C D E

99. Unadventerous

A B C D E

**The following questions have to do with your perceptions of your professor. Indicate whether you A) Strongly agree B) Agree C) Neither agree nor disagree D) Disagree E) Strongly disagree with each statement.**

100. My professor and I get along.

A B C D E

101. I e-mail my professor often.

A B C D E

102. I visit my professor during his or her office hours.

A B C D E

103. My professor replies to my e-mails often.

A B C D E

104. My professor is not helpful.

A B C D E

105. My professor is inconsiderate.

A B C D E

106. My professor is understanding.

A B C D E

107. My professor is thoughtful.

A B C D E

108. My professor is disrespectful.

A B C D E

109. I feel uncomfortable letting my professor know I need help.

A B C D E

110. I understand what my professor expects of me.  
A B C D E
111. My professor is aware of the amount of effort I am putting into this class.  
A B C D E
112. I respect my professor.  
A B C D E
113. My professor is a mentor to me.  
A B C D E
114. I feel I do not belong in my professor's class.  
A B C D E
115. My professor encourages questions and comments from students.  
A B C D E
116. My professor is not friendly.  
A B C D E
117. My professor is approachable.  
A B C D E
118. I dislike my professor's class.  
A B C D E
119. My professor makes my class enjoyable.  
A B C D E
120. I feel comfortable discussing my personal life with my professor.  
A B C D E
121. I want to take other classes taught by my professor.  
A B C D E
122. My professor and I communicate well.  
A B C D E
123. My professor is eager to help students.  
A B C D E
124. My professor is compassionate.  
A B C D E
125. My professor encourages me succeed.  
A B C D E

126. My professor knows me by name.  
A B C D E
127. I feel I have learned much less from this professor compared to others I have had in the past.  
A B C D E
128. My professor is confident.  
A B C D E
129. My professor cares about students.  
A B C D E
130. My professor is enthusiastic.  
A B C D E
131. My professor is a role model.  
A B C D E
132. My professor wants to make a difference.  
A B C D E
133. My professor is receptive.  
A B C D E
134. My professor is reliable.  
A B C D E
135. My professor is unfair.  
A B C D E

## Appendix B

### CONSENT DOCUMENT Rhode Island College

Students' Personality, Behavior and Course Grades in Lecture and Hybrid Courses

You are being asked to participate in a research study comparing social cognitive factors related to student performance in various types of courses. You were selected as a possible participant because you are taking a course that corresponds with the types of courses we are studying. Please read this form and ask any questions that you may have before agreeing to be a participant in the research.

### **Background Information**

This research is an attempt to gather empirical data relevant to the role that the structure of the class has in student achievement, in interaction with the personality characteristics and behavior of the student.

### **Procedures**

If you agree to be a participant in this research, you will be asked to do the following things: Stay after class for about twenty minutes to complete the questionnaire. You will be given 3 points (out of 213 possible points in this class) if you volunteer to participate in this research. If you do not wish to participate, you have an alternative extra credit activity you can do for 3 points.

### **Voluntary Participation**

Your participation is completely voluntary. If you choose not to participate in this research, there will be no negative consequences to your grade in this course or your standing at Rhode Island College. Also, you can change your mind about participating at any time with no negative consequences. Choosing not to participate or changing your mind will not affect your relationship or standing with Rhode Island College.

### **Risks and Benefits to Being in the Study**

The risks of participating in this research are minimal, meaning that they are about the same as what you would experience in your normal daily activities. If you feel any frustration while completing the questionnaire you may stop at any time. If you feel uncomfortable answering any of the questions you may skip those questions. You may stop taking the survey at any time without consequences.

### **Confidentiality**

The Informed Consent forms with your name will be kept separate from your questionnaire responses, maintaining the anonymity of your responses. The records of this research will be kept private. In any sort of report that might be published, the researcher will not include any information that will make it possible to identify anyone who responded to the questionnaire. Research records will be kept in a secured file, and access will be limited to the researcher, the Rhode Island College review board responsible for protecting human participants, and regulatory agencies. All data will be kept for a minimum of three years, after which it will be destroyed.

\_\_\_\_\_ Initial here to indicate that you have read and understood this page.

### **Contacts and Questions**



The researcher conducting this study is Katelyn Paquin. You may ask any questions you have now. If you have any questions later, you may contact her at [kpaquin\\_3289@ric.edu](mailto:kpaquin_3289@ric.edu) or 401-580-9023, or Dr. Joan Rollins, Professor of Psychology, at [jrollins@ric.edu](mailto:jrollins@ric.edu) or by phone at 456-8578.

If the researcher cannot be reached, or if you would like to talk to someone other than the researcher about (1) your rights as a research participant, (2) research-related injuries or problems, or (3) other issues/concerns you have about your participation in this study, please contact the Chair of the Institutional Review Board at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone (401-456-8228), or by writing, Chair, IRB; c/o Office of Research and Grants Administration; Roberts Hall; Rhode Island College; 600 Mount Pleasant Avenue; Providence.

You will be given a copy of this form for your records.

#### Statement of Consent

I have read and understand the above information, and I agree to participate in this study. I understand that my participation is voluntary and can be withdrawn at any time with no negative consequences. I have received answers to the questions I asked, or I will contact the researcher with any future questions that arise. I am at least 18 years of age.

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Initial here to indicate that you have read and understood this page

## **CONSENT DOCUMENT**

### **Rhode Island College**

#### Students' Personality, Behavior and Course Grades in Lecture and Hybrid Courses

You are being asked to participate in a research study comparing social cognitive factors related to student performance in various types of courses. You were selected as a possible participant because you are taking a course that corresponds with the types of courses we are studying.

Please read this form and ask any questions that you may have before agreeing to be a participant in the research.

### **Background Information**

This research is an attempt to gather empirical data relevant to the role that the structure of the class has in student achievement, in interaction with the personality characteristics and behavior of the student.

### **Procedure**

If you agree to be a participant in this research, you will be asked to do the following things: Respond to the questionnaire during Dr. Aydogdu's class time.

### **Voluntary Participation**

Your participation is completely voluntary. If you choose not to participate in this research, there will be no negative consequences to your grade in this course or your standing at Rhode Island College. Also, you can change your mind about participating at any time with no negative consequences. Choosing not to participate or changing your mind will not affect your relationship or standing with Rhode Island College.

### **Risks and Benefits to Being in the Study**

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If the researcher cannot be reached, or if you would like to talk to someone other than the researcher about (1) your rights as a research participant, (2) research-related injuries or problems, or (3) other issues/concerns you have about your participation in this study, please

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Print Name of Participant: \_\_\_\_\_ Signature of  
Participant: \_\_\_\_\_ Date: \_\_\_\_\_ Initial  
here to indicate that you have read and understood this page