

# **THE RELATIONSHIP BETWEEN INSTRUCTOR FEEDBACK AND STUDENT OPTIMISM**

A Senior Scholars Thesis

by

AMISHA ATCHISON

Submitted to the Office of Undergraduate Research  
Texas A&M University  
in partial fulfillment of the requirements for the designation as

UNDERGRADUATE RESEARCH SCHOLAR

April 2010

Major: Psychology

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Approved by:

Research Advisor:  
Associate Dean for Undergraduate Research:

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## **ABSTRACT**

The Relationship between Instructor Feedback and Student Optimism. (April 2010)

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Many college freshmen find the transition from high school to college difficult. These difficulties might stem from differences in students' personalities, as some optimistic students might underestimate the difficulty of college and other pessimistic students might overestimate the difficulty. These biased expectations can lead students to experience dissatisfaction with their learning environment. Students' satisfaction may be based on many factors, including the curriculum and classroom size, but perhaps most importantly the interaction between the instructor and students. The present investigation was particularly focused on the relationship between students' optimism, their perception of instructor teaching style and student satisfaction and achievement. Participants ( $n = 78$ ) completed the study in partial fulfillment of their psychology course. Participants completed the LOT-R (Life Orientation Test-Revised), a measure of individual optimism and pessimism. They also rated the teaching style of their instructor, their sense of control over the course, sense of intrinsic interest, satisfaction with the school and course, and reported their grades in the course. The results of this study showed that

the frequency with which the instructor was perceived as using authoritarian methods was associated with worse performance on the first exam and greater ratings of course difficulty.

## **DEDICATION**

This research is dedicated to all the teachers that believe that every student can learn and every student that wants to learn. Thank you Mr. Mansfield for pushing me so hard in high school. You were one of the few teachers that cared about me beyond high school graduation. Your knowledge and passion has inspired me to grow up to be just like you. This is also dedicated to Josh Watson for encouraging me to apply to this program. Thanks for being patient as I was stressing out over the application process.

## **ACKNOWLEDGMENTS**

I would like to thank Dr. Lench for supporting my passion of research in education. Her dedication to research is an inspiration behind my own. Thanks for taking time out of your busy schedule to help me meet all of my deadlines.

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## CHAPTER I

### INTRODUCTION

One of the biggest differences between high school and college is the increase in student responsibility. College professors often expect students to independently take the necessary steps in order to complete the assignments on time. For most students, this may be a relatively new concept as they transition from high school to college. This transition may be made easier if students perceive that their instructor is providing useful feedback and is open to student perspectives, resulting in better student performance and greater satisfaction. Some teaching styles, particularly the style known as authoritarian, may appear to be closed to student input. Students' perception of their professor's instructional style may differ based on student personalities and may relate to students' perception of the course difficulty. The extent to which a class is demanding is thus defined by the skill of the student and the feedback of the instructor, but students' personalities may also play a role in determining their perception of the class. Feedback that instructors provide can also enhance or reduce a students' sense of control. Too much feedback is likely to undermine sense of control. Instructor feedback, both positive and negative, plays an important role in determining how satisfied students are with school. In this investigation, I examined the relationship between instructional style and student optimism.

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This thesis follows the style of *Journal of Applied Psychology*.

## **Concept of flow**

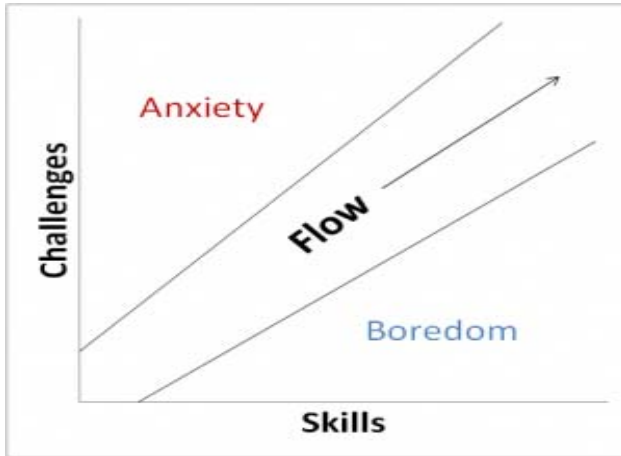
The concept of flow, developed by Mihaly Csikszentmihalyi (1996), refers to the state of being in which the person is fully immersed in what he or she is doing by a feeling of energized focus, full involvement, and success in the process of the activity. This state is associated with satisfaction and optimal performance. Challenge-skill balance in flow is a perceived balance between the challenges of the situation and one's skill, with both operating at a personally high level (Jackson & Marsh, 1996). As illustrated in Figure 1, this dimension occurs when a person's skill is at just the right level to cope with the situational demands, which are above average for the person (Csikszentmihalyi & Csikszentmihalyi, 1988). Although no study has examined factors related to student flow in an academic context, correlational results suggested that a teacher's sense of flow was positively correlated with their students' academic optimism and thus flow appears to be an important component of academic pursuits (Beard, 2008).

Importantly, if students feel they do not have the skills to meet the course demands, the course will be considered too challenging. If the student feels their skills exceed the course demand, the course will be considered not challenging enough and the student will be bored. Students' personalities may be key to understanding the relationship between interactions in the classroom and achievement related outcomes.

Figure 1

*The concept of flow*

*Note.* Adapted from Norprobo (2009).



## Optimism

Optimism, the extent to which students hold positive expectations for the future, is particularly likely to relate to students' perceptions that they can meet the demands of the class (Scheier & Carver, 1987). Numerous studies of adults and children have found that those with an optimistic outlook on life enjoy better health, are more motivated, are less prone to depression and have higher levels of achievement at work and in school and sports (Buchanan & Seligman, 1995). Optimists view the causes of positive events as long term, due to their own efforts and generalize across situations. Negative events are seen as temporary, due to external causes and limited to specific occasions. It is suggested that optimists feel as if they have more control over their outcomes as they relate positive events to their own effort. In contrast, pessimists interpret

negative events as permanent, personal and pervasive and positive events as transient, external and ephemeral.

Although they may perform well in a course, pessimistic students may not feel like it is due to their own effort but due to outside forces, suggesting that pessimistic students do not feel the same sense of control as optimistic students. In the classroom pessimistically oriented students are more prone to depression, discount their successes, and give up more easily when confronted with failure (Seligman, 1990). Some evidence suggests that optimism relates to more persistence in educational efforts and to higher later income (Carver & Scheier, 1992). In response to repeated failures, pessimistic students display characteristically passive learned helplessness behaviors in the classroom by decreasing their efforts, ceasing to try or simply opting out altogether. Thus, optimism was expected to relate to students' sense of control in the classroom and to performance outcomes associated with the perception of control.

Optimism may also relate to perception of instructional styles. Due to having a feeling of control in the classroom, optimistic students may feel more confident in the course and have a better relationship with their professor. This suggests that optimistic students may be less likely to rate their professor as authoritarian (an instructional style associated with negative feedback and strict control over students). On the other hand, pessimistic students may not feel confident in the course and feel as if they do not have a good relationship with their professor. This may lead pessimistic students to rate their professor's style as authoritarian.

**Sense of personal control**

A sense of personal control over the situation or activity relates to the experience of flow (Mihály Csíkszentmihályi, 1998) and may be the most important factor in regards to education. It is important for teachers to give students control over their own academic endeavors. Other constructs related to personal control include powerlessness (Seeman, 1975), self-efficacy (Bandura, 1977), and sense of coherence (Antonovsky, 1984). Powerlessness is conceptualized in terms of an individual's general perceptions of a lack of power, encompassing elements of lack of autonomy, fatalism, and inefficacy (Seeman, 1991). The self-efficacy construct differs from personal control in that self-efficacy beliefs or expectations focus on evaluations of one's ability to accomplish certain behaviors or achieve certain outcomes (Bandura, 1977) whereas personal control expectancies related to judgments about whether actions can produce a given outcome. Bandura differentiates self-efficacy from personal control, suggesting that whereas personal control beliefs focus on the question of whether one can control an outcome, self-efficacy beliefs focus on the evaluation of one's ability to effectively perform the behaviors necessary to realize that outcome (Bandura, 1977).

In the present investigation students' sense of control over their learning experience was expected to relate to academic performance in the course and satisfaction with course outcomes. Sense of control gives students the feeling that their accomplishments in the course are the result of their own efforts. Without control, students may perform worse in the course and be less satisfied with outcomes.

## **Instructional style**

Instructional style is also likely to influence satisfaction and performance because it influences the degree to which students find the course intrinsically interesting (Csíkszentmihályi, 1998).

According to Deci, Koestner and Ryan (2001), performance-contingent rewards are linked to people's performance. The teacher sets a certain standard which is required to be met before a reward is given out. This type of reward reinforces the positive aspect of flow if the student is able to reach their goal. Failure to meet the challenge may cause a decrease in motivation to perform a difficult task. Deci and colleagues also suggest that "if the interpersonal climate within which these rewards are administered is demanding and controlling, the rewards are expected to be more undermining of intrinsic motivation" (p.15). This relates to the interaction between the instructor and the student. It was expected that students who perceived that their instructors used a more controlling instructional style would experience worse performance and lower satisfaction in the course. The four instructional styles include authoritarian, authoritative, laissez-faire, and indifferent. Authoritarian professors place firm limits and controls on the student; verbal exchange and discussion is discouraged. Authoritative also place limits and controls on the student, but simultaneously encourages independence; teacher is open to considerable verbal interaction. Laissez-faire is similar to the form of government by placing few demands or controls on the students; accepts students' impulses and actions as creativity and learning freely. Indifferent is unique in that professors are not very involved in the classroom; places few demands on students and appears generally uninterested. Authoritarian style is considered more controlling than other styles because the instructor is not open to students' contributing to the



atmosphere of the classroom. Most authoritarian instructors use lecture-only techniques, and leave little room for students' questions or feedback.

### **Overview of the present investigation**

The overarching goal of the present investigation is to identify more effective ways to reach out to students with differing backgrounds and personalities. Catering to students' individual educational needs may lead to an increase in school satisfaction and a decrease in achievement gaps. This study included measures of student optimism, sense of control, and perception of teacher instructional style. I hypothesized that students' personalities would influence the perception of control and instructional style, which were expected to relate to students' satisfaction with the class and their academic performance in the class.

## CHAPTER II

### METHOD

#### **Participants**

Undergraduates from Texas A&M University took part for credit in partial fulfillment of class requirements in their introductory psychology course. Participants ( $N = 78$ ) completed an online survey evaluating two professors. Participants were 69.2% freshman, 21.8% sophomore, 7.7% junior, and 1.3% senior. Participants were 62.8% women, with ages ranging from 18 to 21 years ( $M = 18.6$ ,  $SD = 0.78$ ). Participants reported their class rank as well as the number of years they had been in college. Most (69.2%) had only been in college for one year. Most (56.4%) considered their high school area suburban, 24.4% chose urban, while 19.2% chose rural. Most (57.9%) reported that their parent's income was \$76,000 and above.

#### **Procedure**

Surveys were administered via an internet survey website. Participants completed the survey in a lab room on individual computers. The lab room was equipped with cubicles, so that participants could not see the responses of their neighbor. Participants could refuse to answer any question. Participants completed the measures detailed below and then were debriefed and released.

#### *Demographics*

Family income was given in order to get a sense of participants' SES. Given ranges were \$25,000 and under, \$26,000-\$35,000, \$36,000-\$45,000, \$46,000-\$55,000, \$56,000-\$65,000, \$66,000-\$75,000, and \$76,000 and above. Participants were told to only list income of parents

that were able to claim them on taxes. If they considered themselves independent they listed their family income. Participants were also told to describe the surrounding area of their high school. The three options included rural, suburban, and urban.

### **Performance**

Participants reported their current grade in the course based on their first exam (A to F).

Participants also rated the difficulty of the first exam on a 5-point scale ranging from *much lower than expected* (1) to *much higher than expected* (5), their disappointment with their grade on a 5-point scale ranging from *not at all* (1) to *extremely* (5), and their approval of their grade on a 5-point scale ranging from *not at all* (1) to *extremely* (5).

### *Optimism*

Participants completed the LOT-R in order to measure their optimism. The LOT-R was designed by Scheier and Carver (1992) to assess individual differences in optimism versus pessimism.

Participants were given a 5-point scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Items included “In uncertain times, I usually expect the best”, “It’s easy for me to relax”, “If something can go wrong for me, it will”, “I am always optimistic about my future”, “I enjoy my friends a lot”, “It’s important for me to keep busy”, “I hardly expect things to go my way”, “I don’t get upset too easily”, “I rarely count on good things happening to me”, and “Overall, I expect more good things to happen to me than bad”.

### *Personal control*

To assess sense of personal control, participants were asked to rate their ability to control the outcome of their first exam results on a 5-point scale ranging from *not at all* (1) to *extremely* (5).

### *Perceived teacher instructional style*

Participants rated how frequently their professor used four instructional styles. These styles were authoritarian, authoritative, laissez-faire, and indifferent. A brief description was provided for each instructional style. Authoritarian was defined as “*places firm limits and controls on the student; verbal exchange and discussion is discouraged*”. Authoritative was defined as “*places limits and controls on the student, but simultaneously encourages independence; teacher is open to considerable verbal interaction*”. Laissez-faire was defined as “*places few demands or controls on the students; accepts student’s impulses and actions as creativity and learning freely*”. Indifferent was described as “*not very involved in the classroom; places few demands on students and appears generally uninterested*”. Participants rated how often their professors used the four different instructional styles on a 6-point scale ranging from *not at all* (1) to *all the time* (6).

## CHAPTER III

### RESULTS

#### Descriptive statistics

As shown in Table 1, students were, on average, moderately optimistic and felt that they had control over the outcome of the exam. Most students reported their instructors used authoritarian and indifferent methods infrequently. Students reported getting on average a B grade on their first exam (A = 1; B = 2; C = 3; D = 4; F = 5). Students were moderately disappointed with their grade on the first test and somewhat less approving.

Table 1

Descriptive statistics for study variables.

Variable	M	(SD)
Optimism	3.51	(0.79)
Control	3.68	(0.89)
Instruction Style: Authoritarian	1.99	(1.40)
Instruction Style: Indifferent	1.78	(1.32)
Performance on Test	1.95	(0.79)
Disappointment of Test Grade	3.38	(1.35)
Approval of Test Grade	2.82	(1.27)

### **Optimism and perception of control and instructional style**

Optimism was expected to relate to students' sense of control and perception of instructional style. As expected, optimism was positively correlated with a sense of control over the exam,  $r(78) = .20, p < .05$ . Students' optimism was negatively correlated with how often they perceived the instructor used authoritarian methods,  $r(78) = -.34, p < .05$ . Because there were only a few instructors rated, this suggests that greater optimism led students to perceive that their instructor used authoritarian methods less frequently.

### **Relationship to outcomes**

Participants with a greater sense of control in the course were less disappointed with their grade on the first exam,  $r(78) = -.34, p < .005$ , and were more approving of their grade,  $r(78) = .42, p < .001$ . Participants with a greater sense of control also reported that their current grade was better in the course,  $r(78) = -.23, p < .05$ . As expected, the more control students felt they had in the classroom, the better they performed. The frequency with which the instructor was perceived as using authoritarian methods was associated with worse performance on the first exam,  $r(77) = .32, p < .005$ , greater disappointment with the first exam grade,  $r(77) = .35, p < .005$ , less approval of the grade,  $r(77) = -.25, p < .05$ , and greater ratings of course difficulty,  $r(77) = .26, p < .005$ . The frequency of authoritarian methods and a sense of control over the exam were negatively correlated,  $r(77) = -.26, p < .05$ . When entered together, perceived authoritarian methods predicted worse performance, perceived control predicted approval of the grade, and both predictors contributed to students' disappointment with the grade.

Next, I examined whether instructional style influenced outcomes because of its relationship to students' sense of control by conducting mediational analyses with hierarchical linear regression. As expected, the more frequently students perceived that their instructor used an authoritarian style, the less a sense of control they felt over the psychology test,  $\beta = -.25, t = -2.22, p < .05$ . Control predicted approval of grade,  $\beta = .40, t = 3.69, p < .001$ , and the relationship between frequency of authoritarian instruction and approval decreased when sense of control was included,  $\beta = -.10, t = -.90, p = .37$ , (from  $\beta = -.19, t = -1.73, p = .08$ ), Sobel = 1.88 and  $p = .06$ . In other words, students' lack of control predicted less approval of the exam and this sense of control partially mediated the relationship between authoritarian style and approval. No other mediational paths between perceived instructional style, control, and outcomes were significant. To summarize, students felt as if they did not have control if they perceived that professors used authoritarian teaching style and this led to less approval of their grade on the first test.

The more often students perceived their instructors to use indifferent methods, the less they rated their interest in the course,  $r(78) = -.32, p < .05$ . This was expected as indifferent style is described as instructors not taking an interest in the subject matter. Indifferent did not relate to performance, however, suggesting that instructors' indifferent methods did not interfere with student's performance in the psychology course.

## **CHAPTER IV**

### **SUMMARY AND CONCLUSION**

#### **Summary**

As expected, optimism related to several key perceptions of the classroom, including the perceived frequency with which instructors used authoritarian methods and the extent to which students felt they could control the outcomes of an exam. The perception of authoritarian methods and perceived control, in turn, related to a number of important outcomes. Students performed better on their first test, were more approving of their grade, and less disapproving, when they perceived their instructor used fewer authoritarian methods and that they had control over the exam. These findings suggest the need to identify more effective ways to reach out to students with differing backgrounds and personalities. It is important for educators to recognize that optimistic and pessimistic students may perceive instructional styles in different ways. The interpretation of these styles may lead to changes in perceived ability to control outcomes, which alters students' flow in the course. Teachers that frequently use authoritarian teaching methods in the classroom place their students at risk of losing their sense of control in the course. Catering to students' individual educational needs may lead to an increase in school satisfaction and a decrease in achievement gaps.



## **Conclusion**

As expected, students' personalities did play a role in their experiences in a college course. Optimism was related to sense of control in the course, suggesting that optimism is related to flow. This finding is consistent with past research demonstrating the numerous benefits of an optimistic outlook (CITE). The findings extend previous work by suggesting that sense of control, in turn, related to a number of concrete and important outcomes in the classroom, including performance in and satisfaction with the course.

As hypothesized, instructional style and students' personalities had numerous effects on classroom outcomes. In particular, the frequency with which students perceived that their instructor used authoritarian teaching methods affected factors related to students' sense of flow, including sense of control. Lack of control may be interpreted as a decrease in the ability to meet the demands of the course. Importantly, there were only a few instructors for the psychology courses, suggesting that it was the perception of teaching style, rather than objective teaching style, that influenced classroom outcomes. This finding suggests that instructors may want to periodically assess their students' perceptions of their teaching style to determine whether their style is congruent with that of their current class. Some classrooms may be more or less likely to view instructors as authoritarian, depending on the students' optimism in the class.

One limitation of the present research was that it only examined the relationships between personality and outcomes in one cultural context and did not examine student country of origin or ethnicity. Future research can look at cultural differences and how it may relate to students' perception of instructional styles. In some cultures, students may not ask questions out of respect

to the teacher. This may influence their perception of instructional style although another student from a different culture may view it another way. Another limitation of the present study was that it only examined outcomes at one time point in college students. Future research should examine how personality and perception of instructor teaching style can influence outcomes across the course of a semester or year at multiple academic levels.

The transition from high school to college can be made easier if professors are aware of how students' personalities affect perceptions of their instructional style. Decreasing the frequency of authoritarian methods in the course may lead to higher satisfaction with the course and give students a better sense of control not only in the course, but also at their institution.

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