Using Multiple Methods to Distinguish Active Delay and Procrastination in College Students

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Abstract

The purpose of the current study was to explore qualitative and behavioral differences between students classified through self-report measures as engaging in either procrastination or active delay. Participants were 14 undergraduate college students, who had participated in a larger quantitative study examining the distinction between students who procrastinated or engaged in active delay. Individual responses were compared to the mean responses for the sample to identify those self-reporting active delay (intentional delay) or procrastination. A behavioral measure of delay was also recorded. During individual interviews, students described their study habits and any delays or procrastination that they elicited in an undergraduate course. Transcripts were analyzed and coded according to themes that emerged. The themes identified were compared to behavioral and survey measures. Results further support prior research that those who intentionally delay their work may do so as a purposeful strategy for studying. This study adds to the understanding of various forms of procrastination and active delay demonstrated by college students.

Academic procrastination has been defined as one's ongoing failure to complete academic tasks within the desired amount of time (Senecal, Koestner, & Vallerand, 1995; Tice & Baumeister, 1997; van Eerde, 2003; Wolters, 2003). Although procrastination has been viewed as maladaptive, recent research claims that an active form of delay exits, which may be associated with adaptive outcomes, such as higher academic grades, positive cognitive strategy use, and positive emotional outcomes (Schraw, Wadkins, & Olafson, 2007; Corkin, Yu, & Lindt, 2012; Choi & Moran, 2009; Chu & Choi, 2005). Although critics argue that active forms of delay do not exist, labeling all forms of procrastination as irrational delays (Steele, 2010), additional studies utilizing various methods of research suggest that some students do in fact actively make plans to delay their studying until near the deadline (Choi & Moran, 2009; Schraw et al., 2007). Though some studies suggest that students may actively delay their work because they feel they can work better under pressure (Schraw et al., 2007), other research counters that sensation-seeking is not linked to procrastination (Simpson & Pychyl, 2009). Therefore the current study investigated: 1) whether differences exist between students' delay in task completion and 2) whether active delay can be more closely linked to an intentional form of delay. Using a combination of survey measures, guided interviews, and behavioral measures, researchers sought to gain a greater understanding of college students' beliefs and behaviors regarding procrastination.

Quantitative Measures

Much of the recent research in procrastination has utilized various self-report measures, in which students admit the extent to which they agree or disagree with a statement provided by researchers (Howell & Watson, 2003; Klassen et al., 2008; Wolters, 2003). From various studies, new survey measures have been created for use in procrastination research (Choi & Moran, 2009). As a result of these newly adopted measures, a need exists to further understand students' responses on the procrastination scales to students' actual beliefs associated with their procrastination.

Qualitative Measures

Recently, Schraw et al. (2007) utilized qualitative research methods to conduct a grounded theory study in procrastination. Students, self-reporting themselves as procrastinators, responded to questions about procrastination, and provided researchers with a greater understanding of students' definitions of procrastination and situations when procrastination usually occurs. Their results support survey research, which suggest that students may procrastinate because of lack of interest and low motivation, which may result in poor work quality and anxiety. Students in the study also mentioned active delay with positive associations in improved work efficiency and good grades.

Behavioral Measures

In addition to quantitative and qualitative methods utilized to better understand students' procrastination, researchers have also employed behavioral measures to track students' submission times for assignments. Solomon and Rothblum (1984) conducted a research study to identify students' procrastination by their assignment submission time, indicating that students submitting closest to the deadline were labeled as procrastinators. Howell et al. (2006) found correlations among students' self-reported procrastination and submission time of online course assignments four hours or less before the deadline. However, no research has identified differences in behavioral measures for students who engage in active delay and those who passively procrastinate as classified through the use of quantitative measures.

Method

Participants

The current research study was conducted at a large public university in the south. Over three semesters, students were invited to participate in the research to fulfill a research credit component for an undergraduate course that satisfied a writing core requirement. The current study was a part of a larger research study, which included 206 total participants Those students participating in Part 1 of the research study were then invited to participate in the interview portion (Part 2) and received an additional hour of participation credit. The final sample was comprised of 14 students and was mostly female (86%, n = 12). Participants were ethnically diverse with 28.6% African American (n = 4), 7% Latino (n = 1), 28.6% Asian (n = 4), 7% Native American (n = 1), and 21% White (n = 12).

Procedure

In Part 1, participants completed a survey online that asked them to provide their demographic information and respond to Likert-scaled responses. Students completed the Procrastination Assessment Scale – Students (PASS) (Soloman & Rothblum, 1984; Howell & Watson, 2007), which was modified by researchers to align with the content of the current course and to assess students' intention to procrastinate. Students also self assessed their potential to intentionally delay their studying, using the Active Procrastination – 16 Item scale (Choi & Moran, 2009). Items on the existing scale were also modified for the current course.

In addition to completing surveys, students' submission times for writing assignments were recorded. Because the current research was conducted in a writing class, students were required to write two essays as a part of the course. Students were given the prompts and due dates at the beginning of the course and provided with a peer review session one week prior to each paper's due date. Students were required to bring a completed draft to class for peer editing. Following the peer editing class, students had one week to make final corrections to their papers before submitting them electronically through WebCT/Blackboard. The system recorded the day and time of each student's submission.

Part 2 of the research utilized individual student interviews with questions derived from previous qualitative research in the procrastination literature and Carspeckian interview protocol (Carspecken, 1996; Schraw et al., 2007). Interview questions were comprised of general questions regarding students' personal experiences with assignments for their current course, as well as probes to better understand students' process of procrastinating. Interviews were conducted by the principal researcher in a private room or over the phone. All interviews were recorded. The interview sessions lasted approximately 30 minutes and only required students to participate once.
All students in the research study were enrolled in one of four sections of the same writing class, so interviews began with a low inference question regarding students study habits for writing their papers for the specific class.

Subsequent questions probed students' reasons, causes, and frequencies of procrastination (i.e. Medium inference: You suggested that you did not use all of the time that you had to work on the paper. Why do you think that is? Probes: adaptive (e.g., increased efficiency, self-regulation) and maladaptive (e.g., laziness, boredom). Depending on students' responses, questions were tailored to determine students' various reasons for delaying their studying. Because researchers were specifically interested in determining whether students intentionally delayed their studying or not, questions were designed to probe students' thoughts as to why they put off their studying. Students were also asked to explain positive and negative consequences of their personal procrastination experiences.

Results

Quantitative

First, the mean score for the PASS scale for the total sample of students was recorded, using the 16 item PASS scale developed by Solomon and Rothblum (1984). Then, researchers identified procrastinators as those whose PASS scores fell above the mean of 2.87 on the 5 point Likert scale (Chu & Choi, 2005). Then, researchers calculated the mean of the Active Procrastination Scale for those students who self-reported higher levels of procrastination. A mean of 4.34 was reported for the 7 point Likert scale for the Active Procrastination Scale. Based on previous research from Chu & Choi, students were then placed into one of two groups: passive delayers (below the mean of 4.34) or active delayers (above the mean of 4.34), determined by their responses to the Active Procrastination Scale.

In addition, a behavioral measure of procrastination was recorded by students' paper submission times for the course. The mean submission time of two paper assignments was recorded as 35.92 hours before the date and time due. Students who submitted papers less than the mean time were noted as potential delayers.

Qualitative

Following the individual interviews, transcripts were coded by the principal investigator and several other trained research assistants for validity and reliability of the qualitative data. A triangulation strategy to interpret meaning and derive codes was used to categorize students' responses from the interview questions into themes for delaying studying (Glaser & Strauss, 1967). Both inductive and deductive reasoning were used for interpreting and describing students' responses. Using previous research as a guide, student responses were separated into categories, representing each stage of the original interviews (low inference, medium inference, and high inference), in which students responded to general questions regarding their study habits and were probed further to discuss procrastination or active delay. The process involved creating new categories, deleting overlapping categories, and finalizing themes.

Using the quantitative results as a guide, researchers analyzed the fourteen student interview responses to gain a more thorough understanding of students, who met the above criteria for active and passive procrastination. In the current sample of interviewees, only four students' PASS scores fell above the mean for procrastination. Of the four, three students' were classified as active delayers and one as a passive delayer.

Active delay

As someone who submitted her paper 13.97 hours prior to the time due, Carol (Native American, 39yrs) admits that she often waits until her assignments are due before working on them. She explains that she delays working on her assignments because she has other priorities that come first.

Elena (White, 24yrs), who was also classified as a participant in active delay, admits that other activities and assignments cause her to delay her studying. Her average submission time was 2.67 hours prior to the time due, indicating that she waited only a few hours prior to the deadline to submit her paper.

Passive delay

Taylor (African American, 28 yrs), with an average submission time of 7.62 hours, was categorized as one who procrastinates unintentionally. During her interview, she indicated that she has procrastinated on her assignments. Taylor stated that sometimes one's "social life or a job might get in the way of getting work done." Though she admitted engaging in procrastination often during her first attempt at college, she said that now (10 years later) she has little time to study and must prioritize her tasks to get them completed in time.

Analysis

Through multiple measures of assessment, students were categorized into active and passive delayers to further delineate the differences in students' thought processes, responses, and assignment submission times. Using individual interviews, survey measures, and behavioral measures, researchers have an opportunity to more completely understand the differences that exist between students categorized active and passive procrastinators.

Active delay

In the current study, students who actively delayed were categorized by their survey responses to the Procrastination Scale. They also responded above average on the active procrastination scale to indicate that they made plans to put off their assignments because of a choice to do so (Choi & Moran, 2009). Their behavioral measures indicated that they did in fact submit their assignments close to the deadline, the night before the assignment was due.

In addition, student interviews from active procrastinators further delineate these students from those unintentionally procrastinating by offering that the active procrastinators made plans to delay their studying because of the cognitive benefits they received (Schraw et al., 2007). Similar to previous research describing active delay, the interviews support these findings by offering that some students may intentionally delay their studying because of other priorities, or because they feel that they work best completing the task closer to the deadline (Chu & Choi, 2005). In support of other research with active delay, the current research study provides additional support to the positive relationship between self-efficacy and active delay (Klassen et al., 2008).

Passive delay

Though several students in the study were categorized as those who delayed their work, only one student interviewed met the criteria of unintentionally delaying studying. However, her interview brings further support to the fact that some students unintentionally delay their studying because of other priorities. Her interview suggests that her postponement of the assignment led to her inability to complete the task well (Chu & Choi, 2005).
Different from those students categorized as active procrastinators, this student did not mention intentionally putting off her assignment. She thought about the assignment in advance of the deadline, but she did not read the assignment until days before it was due. In addition, her mention of low self-efficacy further delineates her approach from that of the students categorized as actively delaying.

Discussion

The purpose of the current study was to determine whether differences exist in students' reasons for delaying tasks and whether active delay could be more closely linked to an intentional form of delay. The results of the multiple means of assessment add further support to active delay as an intentional form of delay for some students and offers researchers and educators a greater understanding of the differences that exist in students' reasons for delaying their studying. Also, the current research study adds to existing literature because it sought to further define students who participate in active delay. Students participating in the research study offered insight into their various reasons for delaying their assignments and papers for the course.

In addition, results from students' self-reported delay supports prior research to delineate active from passive delayers (Howell & Watson, 2007; Klassen et al., 2008; Wolters, 2003). Though several students admitted to delaying their studying until a few days or hours prior to the deadline, only some of these students admitted to intentionally delaying. The results suggest that students may intentionally delay studying because of other priorities or the fact that they feel they can work better to write their papers when setting aside a designated period of time.

Interviews conducted in the study also support research from Schraw et al. (2007) to distinguish between active and passive procrastinators. Interviewed students, categorized as active procrastinators, discussed having higher self-efficacy, and admitted that delaying their work is most effective for them to complete assignments effectively. As discussed by Klassen et al. (2008), students exhibited self-efficacy for self-regulating their assignments. This finding lends additional support to the adaptive form of active delay.

Though the results of the current study support and add to existing research in procrastination, some limitations should be addressed. First, the qualitative research study sample was very small and made up mostly of female students. Because the current study took place in a specific writing course, interviews and survey responses were conducted around students' beliefs about delaying their studying for the particular course.

Finally, the current research study invited students to participate in the interview component of the research study, instead of selecting a proportional number of students from the course.

As college instructors create assignments for students, they should keep in mind that students approach their task completion in several ways. Some students may plan ahead and use several weeks to study and complete their assignments, while others may wait to work a few days or hours before the assignment is due. Though earlier research suggested that delaying studying was maladaptive, this research adds to other recent research to suggest that some students' delay may be associated with positive outcomes (Steele, 2010).

Students participating in active delay are not only aware of their delay in the task, but they may feel that the delay helps them to better focus on assignments because they can work on one at a time. Because college students today have various priorities with a rigorous course load and other priorities, they often plan to delay their studying, so that they can devote the time they need to task completion. Instructors should be aware of those students, who unintentionally delay their studying because of anxiety or low self-efficacy for the task. Finally, in designing course requirements, instructors should consider all students and their preferences for studying.

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