



Commitment, Present Bias and College Students

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Abstract. This research paper delves into the intricate domain of time bias, a pivotal point in behavioral economics, exploring the systematic cognitive biases individuals exhibit when making decisions involving time and resource allocation. The study posits that understanding time bias is crucial for comprehending delays in economic development, particularly in the context of global events like the COVID-19 pandemic. The research bifurcates into two critical aspects: management systems and academic performance, with a focus on gender, commitment, and family incomes as influencing factors. In the literature review, the study examines existing research on the impact of gender, school commitment, and family incomes on time bias. Notably, gender differences are explored, revealing that female students tend to exhibit better academic performance due to enhanced behavior management and greater adherence to regulations. The discussion on school commitment emphasizes the role schools play in mitigating disruptions and fostering an environment conducive to academic success. Additionally, the exploration of family incomes unveils a nuanced relationship between wealth, present bias, and academic achievement, challenging conventional assumptions. The study proposes a novel experimental approach in the form of an academic English class, segregating students into two groups: one with long-term goals and the other with short-term, frequent commitments. The aim is to assess the influence of commitment structures on academic performance and procrastination, with gender differences also under scrutiny. The research hypothesizes that short-term commitments positively impact academic performance. Anticipated results expect the short commitment group to outperform the long-term commitment group, and the gender-based impact on academic performance to be more pronounced among male students. The significance of this research lies in its potential to uncover effective methods for managing time bias, not only in academic settings but also in broader practical and business contexts. The findings may contribute to enhancing efficiency and effectiveness in various management structures.

Keywords: time bias, economic development, College Students.

1 Introduction

The main purpose to process this research would be the study of time bias. Time bias has been a hot topic in recent years. Time bias in behavioral economics refers to the systematic cognitive biases and preferences that individuals exhibit when making decisions involving time and the allocation of resources over time. It is to say that you are time-biased if you have structural preferences or misinterpretations among events that are about to happen [1]. The development of the economy would rely on efficient movement and dynamic management. That means that people would consume time to produce and deliver corresponding results. In the management system, scholars would describe the high production results from limited time as efficiency [2]. The per unit of time could generate more productivity would represent that the company or the economic entity has higher efficiency [3]. In other words, the “time” could be treated as the resources to be allocated to improve productivity [4-6].

From the broader research area, the research on time bias would explain the time delay in economic development [7]. As time is a valuable resource to drive the development of the economy and productivity, the time delay becomes a problem to stagnate development. Lee from Stanford has published research that in the digital era, “time” has become a valueless good. The customers of “time” may contain the bias of time to consume “time”. With many digital entertainments, the time consuming would be invisible that people with time bias consume time (Lee, n.d.). The overall time delay would influence global economic development [8]. Covid-19 is an example that with lockdown, people would be misunderstood by the time bias that global economic development has slowed down [9]. Di Crosta et al., processed the research that because of the isolation and home quarantine, Covid-19 has changed people’s behaviours. People would be more careful to take action whilst they are less sensitive to time spending and time span [10]. From this research, regarding the narrow area, the time bias would seriously influence the management system and the normal life.

Therefore, this research believes that the study of time bias would be meaningful for future research. From the previous research, the time bias would lead to time delay and procrastination [11]. The plain introduction of procrastination indicates that people would be overconfident in their ability to finish jobs while the practical reason is that the time bias influences people’s decision to process their job timely [12-14]. Because of COVID-19, online teaching and remote communication have become the mainstream teaching model. Students would have higher self-imposed time. Under this circumstance, students exhibited more self-imposed time while their achievement was clearly weakening. Because of this background, this research will focus on the two aspects. On the one hand, the influence factors to create time bias would be researched to help the readers and audiences understand time bias. On the other hand, the location of influencing factors would enrich the research area and develop an efficient method to control the time bias.

However, based on the previous research, this topic would be separated into two aspects. One is the management area. Goswami and Urminsky, Fink and Pinchovski, and Altahtoo processed the studies based on empirical cases to evaluate the harm from the time bias [15-17]. They discussed that time bias would restrain efficiency. Thus

time bias is a key limitation when attempting to raise efficiency. The other aspect is the academic performance. In the academic environment, the deadline mechanism is the most effective way and is considered to be most important to students. Students will receive punishments if they miss the deadlines. Goldman thoroughly discussed the causes of the formation of time biases and indicated that the short-term benefits may cover the long-term achievements [18]. This paper agrees with this point and will further dig into this point. From the academic perspective, if students focus on immediate happiness, they will fail their academic performance and fail their courses. Adams and Blair specifically studied the undergraduate engineering program to research time bias and academic performance. Nasrullah and Khan discussed that time bias could create problems for students to effectively manage their studying time and lead to academic failures [19].

From the research, this research paper will process the empirical study of academic performance related to time bias. Based on the experimental study, this dissertation tries to locate the influencing factors of procrastination due to time bias. In addition, this dissertation will further discuss the results in the business world. The following sections of this research paper will cover the literature review and data analysis. Based on the literature review and the data analysis, this paper will reach conclusions and extend to the relevant discussions.

2 Literature Review

This research topic would be meaningful that there are many scholars have been processed the relevant research. The dissertation would firstly review those results by literature reviews. The first two sections of literature reviews would discuss the influencing factors of gender and academic commitment on the management of time bias. The third section would process research related to the current research of the relationship between the time management and incomes. As introduced before, this dissertation would discuss the time bias based on the research of the academic performance. This dissertation has assumed that there are influencing factors include gender, families' stability, and families incomes. The literature review section would first research these two topics.

3 Gender

Gender, as an important socioeconomic factor, has been proven to have significant impacts on human behaviour. Khan justified the difference in the extent of procrastination based on 200 students (Male/Female ratio=1:1) aged between 16 and 27. Tuckman Procrastination Scale (TPS) was used to collect data and indicated a difference of 5.18% between males and females [20].

Similarly, another experiment was conducted, with female participants more than male participants, resulted in a similar conclusion showing a 4.88% TPS difference across genders. The study also stated that students from different academic courses

displayed the same degree of procrastination. However, the above study only subjected students to a single region, which may cause concerns about its external validity.

As for the effectiveness on procrastination, the previous study divided commitment into three main types: self-imposing deadline, evenly spaced deadline (externally imposed) and end deadline (single deadline at the end of the experiment). The result showed that evenly spaced deadlines promoted the highest performance, while the end deadline performed the worst. So far there's no specific literature suggesting any significant difference in the impacts of different types of commissions (deadlines) on different genders directly regarding academic performance, thus we assume the impacts are consistent, regardless of gender.

From the previous research, female students would show better academic performance than male students. The main reason would include that female students generally have better behaviour management than male students. Second, female students would be more conservative and less self-confident and they would prepare in advance for their jobs and exams. In addition, female students would be more willing to follow the regulations. This point would be meaningful for the following research. With more and shorter work, female students would be self-motivated to submit those works in time.

To determine the impact of gender on the relationship between commitment and academic performance, it's adequate to set up Randomized Controlled Trials for each gender. The sample capacity should be sufficient enough to be representative. Divide male and female participants separately and randomly into the control group and treatment group. Impose commitment (evenly spaced deadline) to the treatment group, while providing no extra intervention to the control group. Collect the academic performance at the end of the term and compare the result between the control group and treatment group within each gender.

4 School's Commitment

The topic of our discussion has revolved around the influence of the commitment of teachers on the academic performance of students. The interpretation provided is of a general and comprehensive nature. In order to offer a more comprehensive anticipated outcome to the aforementioned research, it is worthwhile to examine the extent of schools' commitment to their students. The school's commitment to fostering social cohesion has the potential to enhance students' academic performance and commitment through the mitigation of school delinquency. Research on public education problems has often concluded that school delinquency is partly caused by students' lack of commitment to educational goals.

These are few examples of how school can be more committed to its students. To begin with, resolving family disruptions. These disruptions could be divorce, legal separation, and parental death. As the number of families facing disruption continues to rise, schools are searching for better ways to identify and provide counseling to students who may be suffering from disruptions. Schools should consider implementing more effective parent communication processes to support students who are facing

disruptions. This could involve replacing or supplementing traditional large parent-teacher conferences and PTA meetings with independent meetings that involve psychologists. These specialized meetings would be designed specifically for families who are experiencing disruptions. This particularly benefits students whose families are experiencing disruptions by reassuring them and helping them understand that their parents and the school still share common goals despite the challenges they are facing. This has the potential to reduce engagement in delinquent behavior and increase students' commitment to their education.

Another example would be to provide all students with the same opportunity to enroll in more high-level courses. This can provide all students with an equal experience. Parents who have higher levels of education are typically more involved in school related matters. This includes participating in parental information networks and taking an active role in decisions about their children's placement in advanced mathematics courses. This connection between a parent's level of education and a student's academic performance may be diminished if schools make greater effort to provide all students with the chance to participate in more sophisticated courses, such as advanced mathematics, disregarding of their family background or academic performance. When students see that they are provided with the same opportunity to succeed in advanced courses, it will significantly enhance their confidence and commitment to school. In return, may lead to a decrease in involvement in school delinquencies.

The reduction of school delinquencies improves students' academic commitment. This phenomenon occurs because when students choose not to engage in disruptive or negative behaviors, instead they are able to focus more on their academic pursuits. By minimizing these problems, teachers are able to establish an optimal educational environment, which allows students to actively participate in lessons and coursework. Additionally, reduced delinquencies can foster a sense of safety and belonging within the school community, which can positively impact students' motivation to learn and succeed academically. In general, a reduction in school delinquencies has the potential to positively impact the overall academic performance of students. It is expected that as more schools commit to students, there will be fewer delinquencies. The evidence suggests that when families and schools encourage greater commitment to school, students are less involved in delinquent behavior that may jeopardize their chances for educational success. Research has found that commitment to school is inversely related to delinquency.

5 Family Incomes

Following the last section of the literature review of family stabilities, the higher education families may have higher incomes while the high-income families may also encourage students to pursue better academic performance. In the realm of economic decision-making, individuals often face choices that require balancing immediate gratification against future benefits. The trade-off between the present and the future is a central theme in behavioral economics and has led to the exploration of the concept

of present biases. A notable pattern that emerged from studies is the tendency for wealthier young individuals to exhibit higher levels of present bias and struggle to reach their deadlines. This seeming paradox disrupts conventional assumptions and prompts inquiries into the intricate interplay involving prosperity, academic achievements, and other psychological tendencies. Whether the wealth and income difference would also influence the time bias and procrastination.

At first glance, the connections between wealth (income) and present bias among young individuals might appear counterintuitive. People might assume that individuals with greater financial resources would have a longer-term perspective and prioritizing future benefits. However, several intricate and psychological dynamics come into play, contributing to this pattern. Firstly, the comfort of financial security might inadvertently lead to a diminished sense of urgency when it comes to academic commitments. Given their greater financial means, affluent students might view their resources as a safety net, affording them the luxury of procrastination and consider it sufficient to bear the consequence. They might not face the same external pressures to plan for the future. Such perspectives could impede their ability to meet deadlines effectively. The study conducted in 2014 by Haushofer and Fehr, titled "On the Psychology of Poverty" provided additional evidence that supports the assertion I previously mentioned. They found out that individuals from lower SES backgrounds were more future-oriented and had a lower present bias compared to those from higher SES backgrounds. Those facing financial constraints tended to prioritize rewards to a greater extent and were less likely to miss deadlines. Second, obviously, the wealthy families would have elite parents. The families would provide relatively richer resources to support the future success of children. On the one hand, with more monetary support, the wealthier students could develop their academic performance from diversified areas. For example, Therieau has proved that early art education would have positive effects on students to get better performance in the future. However, the poor or low-income families may not afford the expenditures of early art training or education. The unequal education opportunities would lead to the future differences between students. Even worse, when the rich students enter the society, their families would offer the additional resources that further enlarge the gap of life achievement between rich and poor. This would be the main reason that explains the rich families would have more successful students. However, on the other hand, the wealthier students would heavier rely on the resources and the triumphs from their previous generation. That would be the problems of rich kids. They can afford multiple kinds of entertainments, which can expose affluent students to an array of distractions. The allure of immediate gratification through leisure activities, entertainment, or travel can divert their focus from academic responsibilities. This availability of options can intensify the struggle to allocate time effectively and prioritize present enjoyment and desires over long-term academic goals. In addition, the rich students may over-rely on the family resources and wealth so that they would be subjectively slack and reluctant to study and achieve academic performance.

Therefore, rich students would show two extremes that some students with elite parents would be educated to focus on long-term goal by sacrificing current satisfactions. however, the other extreme of rich students would just focus on the current happiness and immediate entertainment as they have accumulated families'

resources to consume). While the wealthier students are juggling a multitude of opportunities and activities due to their access to resources, the cognitive overload to manage various options could further lead to a preference for immediate decisions over careful consideration of future consequences. Therefore, student's academic goals usually get squeezed out by other entertainment, leading to irrational and present-favored outcomes.

Furthermore, another contributing factor is the social environment prevalent among students of higher socioeconomic status. Wealthier students might engage in social circles where academic commitments are de-emphasized in favor of social events or leisure activities. Peer pressure and the desire to fit into their social group can inadvertently influence their decision-making, leading to a preference for present-focused experiences over dedicated academic pursuits. More importantly, the wealthier students might be group polarized and exposed to a culture of consumptions and “*carpe diem*”, where material possessions and experiences are readily available. This will unchain them from the boredom of study, lead to a higher valuation of instant consumptions and enjoyment, reinforcing present bias. More surprisingly, wealthier students not only showed higher present bias in meeting deadlines. In the study of school attendance, Angrist and Lavy also found that higher-income students were more likely to have higher rates of school absenteeism, suggesting a greater inclination towards immediate gratification rather than long-term investments in education.

Understanding this phenomenon is significantly influenced by the concept of opportunity cost. Wealthier students may possess an enhanced awareness of the array of possibilities available to them beyond their academic commitments. The notion that their resources can be allocated to various endeavours can lead to the viewpoint that any missed academic opportunities can be easily compensated through alternative avenues. While this mindset reflects the flexibility enabled by wealth, it can accentuate present bias and hinder the sustained commitment required for academic pursuits. However, this part of literature review still proves that high-level of education and elite parents would offer short-term, constant, and persistent reminders, acting as the short-commitment, to stimulate rich students to achieve better performance. That proves the proposed method in this dissertation would be valuable for research.

6 Research Questions

From the above literature review, this dissertation would research the possible solutions to control the time bias and eliminate the procrastination. The research's direct purpose would be figure out the possible solutions and improve the academic performance. From the literature review, the reminders would act as a short commitment to reminder students. The high-income and high-education background families would constantly remind students to study harder and improve their goals. Considering the gender differences, the interpretation provided is of a general and comprehensive nature. The female students would be more careful and conservative to improve their academic performance. In order to offer a more comprehensive anticipated outcome to the

aforementioned research, the short commitment would be a key topic to process the following research.

7 Methods

To process this research, this dissertation would select a common class--the academic English. This dissertation would separate students into two groups. The ter tasks. However, students would always wait for the last minute. This experiment has separated students into two classes. The classification of students would random that Class 1 would just have the long-term goals. Students would be able to delay the task till the last minute. This group would be set up as the experimental group to validate the time bias and the corresponding procrastination. The Class 2 has the commitments of short-term and breakdown tasks. The students would have weekly goal, such as short essay and short presentations.

The overall goals of two group of students would be the final data to be used in this research.

The data would be used to validate the two hypotheses:

Hypothesis 0: short commitment has NO influence on students' academic performance on Essays;

Hypothesis 1: short commitment DOES have an influence on students' academic performance on Essays.

In this experiment, the short commitment would represent frequent and pushing deadlines to control the procrastination. The frequent commitments would be assumed to help students to improve their performance. The academic performance data would be used to validate this assumption. During the process, this dissertation would also observe that the gender's influencing on this topic.

8 Expected Results

First, the short commitment group (class2) would have obvious better performance than the long-term commitment students (Class 2). Second, based on the previous literature review, the male students tend to procrastinate more than female students, the change in academic performance driven by commission among the male group of college students is more obvious than in the female group.

9 Significance of research

Based on the previous research that this dissertation would set up the examination that compare the academic performance between two groups of students. One group of students would have frequent and short commitments through their semester, instead, the other group of students would just have long-time and relatively less commitments. To process this research, the relevant literature review has been processing the lay the foundation for the experiments. The short commitment could be arranged with multiple

methods in the practical life and real business world. If the method would work in the improvement of academic performance, the method would be meaningful for the management structure to improve the efficiency and effectiveness of productivities. Therefore, the result would be further discussed in business world.

10 Conclusion

This research paper examines the concepts of time bias and procrastination and their impact on academic performance. The literature review has yielded valuable insights on the various factors influencing time bias. The factors encompassed in this study are gender, academic commitment, and family income. Addressing time bias and procrastination is crucial due to their substantial impacts in academic and real-world contexts. The significance of this research holds beyond academia. The study's findings may offer valuable insights for management strategies in various contexts. Businesses and organizations can enhance productivity and address procrastination by implementing short-term commitments. The research has practical applications that can improve work environments, increasing efficiency and ultimately contributing to companies' overall success. To sum up, this paper investigates the correlation between time bias and academic performance, offering valuable insights into the determinants of procrastination. This study seeks to investigate the impact of short-term commitments as a means to mitigate time bias. This study aims to provide a feasible solution that can benefit students and potentially enhance management practices and productivity in various sectors. This study offers an opportunity to enhance our understanding of human behavior, decision-making, and time management. Ultimately, it enhances academic and professional achievement.

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