

Guangyu_report

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Submission date: 27-Nov-2023 08:25PM (UTC+0000)

Submission ID: 217067925

File name: 51130_Guangyu_Zhu_Guangyu_report_529027_733889085.docx (28.88K)

Word count: 2498

Character count: 15544

The critique of *Perceived—and not manipulated—self-control depletion predicts students' achievement outcomes in foreign language assessments*

Introduction

This article will comment on the article *Perceived - and not manipulated - self-control depletion predicts students' achievement outcomes in foreign language assessments* by Christoph Lindner and Jan Retelsdorf published in 2019 on Educational Psychology. 

My comments will be based on the following four aspects: theoretical background, research hypothesis, research design and research results.

In their study, the authors aimed to investigate the role that self-control plays in achievement-related outcome variables in EFL assessments. They conducted a quantitative research method including collecting numerical data through standardized group test sessions, self-report questionnaires and analyzed the data using statistical methods. As a result, the authors concluded that the study provides valuable insights into the impact of self-control depletion on students' achievement outcomes in foreign language assessments and highlights the importance of considering both manipulated and perceived self-control depletion in future research (Lindner and Retelsdorf, 2019). 

This study which is about self-control in EFL assessments is so much related to the area I am going to explore, and the design of the study is scientific, systematic and logical leading to a reliable research result which also effectively make up for the gaps in the field of self-control.

Theoretical Background

Based on the hypothesis that self-control is needed when students want to have better results in a foreign language test, the authors did exhaustive surveys on the previous related to self-control and gave a clearly theoretical framework of their own study. 

The authors formed the theoretical background from three aspects including self-control depletion and cognitive performance, in which the term self-control is well defined as an essential mental capacity to prevent individuals away from the irrelevant emotions or thoughts and focus on their goals (Baumeister et al., 2007; Inzlicht, Schmeichel, and Macrae, 2014). And also the sequential-task paradigm is mentioned in this part which is claimed as a typical task  when investigating the effect of self-control depletion. Some experiments about self-control depletion and cognitive ability are introduced here to make an illustration on the self-control depletion effects on cognitive tasks that require problem-solving and reasoning abilities. After introducing all these findings, the authors proposed that the effect of self-control depletion on foreign language in schools should also be test. 

Then, they looked back on some findings on executive functions, self-control depletion, and foreign language learning. What should be noticed here is that in this part the authors explained the perceived self-control depletion which is one of the variables in this study by citing Bertrams et al (2011) and also they claimed that the term could be measured through self-report instruments which was proved valid and reliable (Bertrams et al., 2011; Lindner and Retelsdorf, 2019). Also, manipulated self-control depletion was introduced in the theoretical background section of the text. The authors discussed the empirical evidence for the relation between experimentally induced self-control depletion effects and decrements in students' cognitive performance. They also raised the question of whether self-control depletion depends on individuals' perceived levels of mental fatigue and described perceived self-control depletion as the feeling of mental exhaustion and reduced control of the concentration needed for goal-directed behavior 

The last part of their theoretical background is the recall of studies on trait self-control, self-control depletion, and foreign language assessment. The aim of the study is to inspect the the interaction between trait self-control and self-control depletion and their

effects on English achievement, thus the authors review some research relating with trait self-control and achievement related behavior. By citing the report of Beaver et al (2008), the authors proposed that trait self-control relates closely with students' language ability which also was a foundation of conducting their own experiment.

When introducing the theoretical background part, the authors made an exhaustive review on the previous studies related to self-control depletion, trait self-control, cognitive ability, executive functions, foreign language assessment which make a full introduction on all variables mentioned in the study. It is quite relative to their own study. The theoretical framework was well-organized from three parts mentioned above, and the sources mentioned in this part were both seminal and current.

However, they did not make a clear explanation on the reasons why the studies about the effect of self-control deletion on cognitive performance and executive functions were introduced, which may make it difficult for readers to understand the theoretical framework. What's more, although the relationship of trait self-control and self-control depletion was explained in the article, the function of trait self-control in the experiment was not clearly given. And they didn't suggest the help or significance of the study for English learning practice.

Research hypothesis

In general, the authors aimed to investigate the role that self-control plays in achievement-related outcome variables in EFL assessments. They make a clear statement on the goals of their study at the end of the theoretical background part.

The authors had several hypotheses in their study. In line with the three hypotheses, they pursued three goals. When elaborating the purpose of the research, each research question has its own theoretical basis. For example, when discussing the first research goal, the author cites the theoretical hypothesis proposed by Inzlicht et al. (2014) and

the experimental results of Bertrams et al. (2016); The second research objective referred to the experimental study of Hagger et al. According to their research design, the author proposed an experimental design that matched his own research objective. The third research objective is the hypothesis based on the empirical research conducted by Bertrams(2014), Tangney et al(2004).

The hypotheses of the study are directly related to its aims. The authors aimed to investigate whether different aspects of students' self-control affect their experience and behavior in a foreign language assessment situation. To achieve this aim, they formulated several hypotheses about the relationship between self-control depletion and students' achievement-related outcomes, such as test scores, motivation, and emotions. By testing these hypotheses, the authors were able to determine whether self-control depletion has a significant impact on students' academic performance in foreign language assessments.



The authors measured several variables in their study, including the experimental condition, manipulation check, perceived self-control depletion, positive affect, negative affect, and test-taking valence. They also collected data on students' achievement-related outcomes. All these variables were explained and identified. The aims of this study were clearly described and well organized.

The hypothesis put forward by the author fitted well with the purpose of the study, each variable in the study was identified.

However, although the authors use a separate section to explain their research purpose, they do not match the research hypothesis to the research purpose in this section which sometimes might make readers confused.



Research Design

Participants: The authors chose seventh-grade students because this is a critical period in their academic development. At this age, students are transitioning from primary to secondary school, which can be a challenging time for many students. Additionally, foreign language learning becomes more important in secondary school, and students are expected to have a certain level of proficiency in a foreign language by the end of their secondary education. Therefore, the authors wanted to investigate whether self-control depletion affects students' foreign language learning at this critical stage of their academic development.

Research method: The study adopted quantitative research method which is really helpful to reach the goals. According to André Queirós et al, quantitative research focuses on objectivity and is especially appropriate when there is the possibility of collecting quantifiable measures of variables and inferences from samples of a population (André Queirós et al,2017). The variables in the study including both manipulated and perceived self-control depletion, trait self-control, and various achievement-related outcome variables, all these variables were measured in this study. The authors measured including test-taking valence, test-taking arousal, test-taking motivation, distracting thoughts, and EFL test score. The authors used multiple linear regression models to analyze the relationships between these variables, which is also an essential part of quantitative research method. Quantitative research adopts structured procedures and formal instruments for data collection. The data are collected objectively and systematically. Finally, the analysis of numerical data is performed through statistical procedures, often using software such as SPSS, R or Stata. (André Queirós et al,2017). The authors collected numerical data through standardized group test sessions and self-report questionnaires, and analyzed the data using statistical methods such as ANOVA and regression analysis. The aim of the research is to explore the relationship between trait self-control and self-control depletion and the influence of the two to outcomes and behaviors in EFL assessment, and by using quantitative

research method, the result of the study would be more scientific.



Research design: The research design of the study is an experimental design with a between-group design. The authors randomly assigned 176 seventh-grade students to one of three groups: the inhibition group, the word list group, and the control group. The inhibition group completed a self-control depletion task, the word list group completed a neutral task, and the control group did not complete any task. The authors then measured several variables to determine the impact of self-control depletion on students' achievement-related outcomes. The theoretical background of the research design is based on the strength model of self-control proposed by Baumeister et al. (1998) and has been further developed by various researchers, including Inzlicht, Schmeichel, and Macrae (2014). This model suggests that self-control is a limited resource that can be depleted by exerting effortful control over one's thoughts, emotions, and behaviors. When self-control is depleted, individuals are less able to regulate their behavior and are more likely to engage in impulsive or automatic responses. The strength model has been applied to various domains, including academic performance, where self-control is seen as a critical factor in achieving academic success. The authors used this theoretical framework to investigate whether self-control depletion affects students' foreign language learning and academic performance.



Data analysis: The data analysis strategies used in this study fit well with the research aims. The authors used multiple linear regression models to analyze the relationships between self-control depletion and various achievement-related outcome variables. These models allowed the authors to examine the unique contributions of each variable to the outcome variables while controlling for other variables. The authors also conducted several post-hoc analyses to explore the moderating effects of trait self-control and the interaction between trait self-control and perceived self-control depletion. These analyses helped to further clarify the relationships between self-control depletion and academic performance. Overall, the data analysis strategies used

in this study were appropriate for the research aims and provided valuable insights into the impact of self-control depletion on students' achievement outcomes in foreign language assessments.

Conclusion

The authors made an exhaustive review on the previous studies related to self-control, all the variables used in the article have been included in their theoretical part. The studies they reviewed were both seminal and current. Based on the analysis of previous studies, they proposed their own hypotheses and research aims which was sure filled the gap of the research area associated with self-control in EFL assessment. Since the role of self-control in foreign language learning has been little studied so far, their study is the first to provide evidence to show that self-control is a positive predictor of achievement-related experiences and behaviors in foreign language assessments.  18

What's more, the research hypotheses they proposed fitted well with their research aims, and each hypothesis has its own theoretical base and the research results answered their hypothesis by using scientific research design. The research procedure was based on the experiment outcomes by the former scholars which was proved reliable. All variables in this study were identified and measured through various tools which were also proved reliable and valid through previous studies.  19

In terms of the conclusion of the study, the authors concluded that the study provides valuable insights into the impact of self-control depletion on students' achievement outcomes in foreign language assessments and highlights the importance of considering both manipulated and perceived self-control depletion in future research.  20

However, there were still several limitations in this study. One limitation of this study is that the high values of the EFL test scores may indicate ceiling effects, which could have limited the ability to detect significant effects of self-control depletion on

academic performance. Additionally, the study only examined the effects of self-control depletion on a single foreign language assessment, which may limit the generalizability of the findings to other academic domains.  21 Finally, the study did not measure other potential factors that could influence academic performance, such as prior knowledge of the subject matter or motivation to learn the language. Despite these limitations, the study provides valuable insights into the impact of self-control depletion on students' achievement outcomes and highlights the importance of considering both manipulated and perceived self-control depletion in future research.  22

Word count: 2133

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FINAL GRADE

68 / 100

GENERAL COMMENTS

This is a very good answer which is well presented and clearly defined.

You have displayed a good coverage of the material.

You provide a well-structured argument and the mark recognises work at a high level.

You also demonstrate an effective grasp of the literature and your emerging voice.

You might want to consider:

1. Elaborating on key theory by further referencing key texts.
2. Referring to each research question in more detail.
3. Do the results support the theory on which the paper is based? How? Make sure that you explain the sequential / logical link between data, hypothesis, and theory (i.e. the empirical cycle) as applied within the article. It could be that these are not clear in the article, in which case say so and demonstrate it by giving examples of the lack of clarity.



Comment 1

Full reference.



Comment 2

explain fully.



Comment 3

clear



Comment 4

Is is a paradigm?



Comment 5

Tense - tested.



Comment 6

Can you paraphrase this section as the focus needs more clarification?



Comment 7

explain fully.



Comment 8

What specific predictions of that theory are being tested? (i.e. what hypotheses follow from the theory?)



Comment 9

A page reference would be useful here.



Comment 10

Can you include the actual RQs?



Comment 11

How do the authors define this concept?



Comment 12

Agreed there are some confusing elements.

What specific methodology is being used in order to test the prediction(s) / hypothesis?



Comment 13

Remind your reader what exact age this is.



Comment 14

What did the comprise?



Comment 15

What is the purpose of these statistical tests?



Comment 16

Why would the research be more scientific?



Comment 17

What alternative methodology could have been used? Provide arguments in support of your answer.



Comment 18

Interesting.



Comment 19

How do you know this?



Comment 20

Do the results support the theory on which the paper is based? How? Make sure that you explain the sequential / logical link between data, hypothesis, and theory (i.e. the empirical cycle) as applied within the article. It could be that these are not clear in the article, in which case say so and demonstrate it by giving examples of the lack of clarity.

PAGE 8



Comment 21

Indeed.



Comment 22

Very good overview of the article.

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PAGE 10



Comment 23

Good useful reading.

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