

## The Aanalogizable Psychological Study of Selected Variables of Self-Regulation Among Sportspersons and Non-Sportspersons of India

Kumar R.<sup>1\*</sup>, Singh A.<sup>2</sup>, Singh V.<sup>3</sup>, Reddy T.<sup>4</sup>

DOI: <https://doi.org/10.55968/ijems.v12i01.235>

<sup>1\*</sup> Ravinder Kumar, Research Scholar, Department of Physical Education, Banaras Hindu University Varanasi, Varanasi, UP, India.


<sup>2</sup> Anand Kumar Singh, Research Scholar, Department of Physical Education, Banaras Hindu University Varanasi, Varanasi, UP, India.

<sup>3</sup> Vikaram Singh, Professor, Department of Physical Education, Banaras Hindu University Varanasi, Varanasi, UP, India.

<sup>4</sup> T. Onima Reddy, Professor, Department of Physical Education, Banaras Hindu University Varanasi, Varanasi, UP, India.

The research scholar selected this study to compare selected self-regulation variables between sportspersons and non-sportspersons of India. Keeping the objective in mind, the researcher prepared two groups, one in which the experiment group is for sportspersons and the other control group for non-sportspersons. A total of 100 subjects were randomly selected. The age of all selected subjects in this research study ranged from 18 to 25 years. According to the supervisor's and research experts' guidance, the research scholar used the Self-Regulation Questionnaire (SRQ; (Brown, 1999) to measure self-regulation. The above-mentioned Questionnaire had high reliability and acceptable construct validity. Therefore, the scales were found to have adequate properties and to be applicable in research and practice. It is inferred from this study that there would be no statistically significant difference in psychological measures between sportspersons and non-sportsperson. To compare self-regulation with psychological well-being, the research scholar used descriptive statistics and paired group t-Test in the IBM SPSS® data analysis package. In the present research study, it was found that there was no statistically significant difference in the selected psychological measure, namely Self-regulation among the sportspersons and non-sportspersons.

**Keywords:** Self-Regulation, Psychological Well-Being, Sportspersons, Non-Sportspersons

| Corresponding Author   | How to Cite this Article  | To Browse   |
|--|---|---|
| Ravinder Kumar, Research Scholar, Department of Physical Education, Banaras Hindu University Varanasi, Varanasi, UP, India.<br>Email: <a href="mailto:Ravinderkr.bhagat@bhu.ac.in">Ravinderkr.bhagat@bhu.ac.in</a> | Ravinder Kumar, Anand Kumar Singh, Vikaram Singh, T. Onima Reddy, The Aanalogizable Psychological Study of Selected Variables of Self-Regulation Among Sportspersons and Non-Sportspersons of India. IJEMS. 2023;12(01):20-26.<br>Available From<br><a href="https://ijems.net/index.php/ijem/article/view/235">https://ijems.net/index.php/ijem/article/view/235</a> |  |

**Manuscript Received**  
2022-12-21

**Review Round 1**  
2023-01-17

**Review Round 2**  
2023-02-16

**Review Round 3**  
2023-03-02

**Accepted**  
2023-03-23

**Conflict of Interest**  
NIL

**Funding**  
NO

**Ethical Approval**  
YES

**Plagiarism X-checker**  
13

**Note**



© 2023 by Ravinder Kumar, Anand Kumar Singh, Vikaram Singh, T. Onima Reddy and Published by The University Academics. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License <https://creativecommons.org/licenses/by/4.0/> unported [CC BY 4.0].



## Introduction

Another similar research study, just before we talk about self-regulation, it supports a variety of types of processes, such as beings controlling many of their actions and internal functioning processes. Controlling oneself is a unique skill. Self-regulation is a person's state; in which he plays an important role in transforming his animal nature into the one of a respectful human being.(Baumeister, 2004)

Self-regulation is reconfigurable to important self-help skills that allow individuals to properly manage their thoughts, feelings, and actions in order to master a demanding environment. This study sought to investigate the relationship between self-regulation ability, psychological well-being, and burnout in 37 Canadian medical students and 25 physicians. Regression analysis revealed that self-regulation ability predicted psychological well-being but not burnout in both groups. The advantages of self-regulating competence were especially evident for practitioners in terms of life purpose and environmental mastery. The implications of developing self-regulation capacity for achieving and maintaining optimal mental health are discussed(Marie-Claude J. Gagnon's et.al, 2016)

Within that study, 100 young adults' psychological well-being was matched to their ability to self-regulate. To meet the objectives of the study, short forms of the Psychological Well-Being scale (Ryff& Keyes, 1995) and the original Self-Regulation Questionnaire (SSRQ; Carey, Neal, & Collins, 2004) were employed. According to Pearson correlation analyses, self-regulation capacity is negatively correlated with autonomy and environmental mastery and positively correlated with psychological well-being and its dimensions, including personal growth, positive relationships between foreigners with others, a sense of purpose in life, and self-acceptance. The importance of self-regulation in preserving the best possible mental health was presented as a positive construct.(Surjeet Singh, 2018)

According to another similar research, there are significant worries surrounding postgraduate students' mental health and how student achievement is relevant around the world. Previous studies have found that psychological health and self-regulated learning are crucial elements of student performance; however, there is a dearth

Of studies looking at how these characteristics interact all across the course of a semester-long course. In this study, nine weekly online planning and reflection tools were completed by 118 students in a learning-to-learn optional university course. Students who were preparing for a study session took an academic engagement and a psychological well-being assessment, thought about a challenge they had faced, and then stated the strategy they had taken to solve it. Results showed that (a) students who also said they always achieved their goals had greater mental well-being as a whole and (b) psychological well-being patterns among participants.(Sarah K. Davis et.al, 2021)The goal of this study is to evaluate whether different groups of psychology students describe common emotions including joy, sadness, anger, contempt, disgust, fear, and surprise. Comparative analysis of emotions is the focus of the study. 34 boys and 34 girls, representing the total sample of psychology students, are the participants. The subjects were put to the test using the Ekman micro expressions training software, which is used to identify emotions through certain facial expressions. We unutilized-test to examine the outcomes after entering and processing the data with the SPSS statistical tool. The findings indicated that there are substantial differences between male and female pupils' abilities to recognize and analyse emotions.(Cristina Marina Sandu et.al, 2015)This research examines the aspects of self-regulation throughout four fields of study on the grounds that STEM students may demonstrate higher levels of self-regulation than non-STEM students. It was discovered through the use of multivariate analysis that differences in self-regulation levels between STEM and non-STEM students predict their GPAs. Compared to non-STEM students, STEM students reported better levels of self-regulation. But when compared to students studying non-STEM fields of study, only engineering students in the STEM fields showed a statistically significant difference in self-regulation levels. Students studying computer science had GPAs that were statistically non-significantly higher than those studying law and business administration, with engineering students having the second-highest GPA. The results of a regression study showed that students' levels of self-regulation significantly predicted their GPA. (Konabe Bene et.al, 2021)

The article examines multiple meanings of self-regulation. Analyzing the self-regulation

Concept and how it is viewed in Western and Russian psychology, as well as the idea of self-regulatory capacities and the concepts of self-regulatory components, levels, and models, is the task at hand. Reviewing how self-regulation is portrayed in Western and Russian psychology demonstrates that self-regulation is examined in relation to a variety of aspects of life, including learning, work, managing one's health, and overall well-being. A general definition of self-regulation uses the words "capacity" or "ability." It enables scientists better understand the idea of self-regulatory capacities in general. Although we can speak about the heterogeneity of self-regulation through intensive analysis of its elements, levels, and models, there are some elements that are universal and essential: enthusiasm, and criteria. (Ozhiganova, 2018)

One of the most crucial protective variables in relation to resilience is the self-regulation capacity which should be encouraged, especially in at-risk children. According to previous research, these adolescents exhibit actions that point to a loss of vision. The current study set out to investigate a potential association between these individual factors. The participants were 365 Navarre (Spain) students participating in Initial Vocational Qualification Programs between the ages of 15 and 21. (IVQP). The Short Self-Regulation Questionnaire (SSRQ) and the Connor Davidson Resilience Scale (CD-RISC) were used for the assessment. We performed. (Megan M McClelland, 2017)

The paper revealed the relationships between professional skills, self-regulated learning, and active learning among student teachers. 422 student-teacher survey responses were examined utilizing statistical techniques. When highly motivated student instructors with outstanding self-regulated learning had much more active learning experiences, their mean functional team scores increased in a substantial way. (Virtanen, Päivi, 2017)

## Hypothesis

- Keeping with the objectives of the present research, it is hypothesized that there would be no statistically significant difference found between the selected variables among the participants (sports, and non-sportspersons) at 0.05.

- It is also hypothesized that the results of this research may have been different if we have taken elite athletes as subjects.

## Material and Method

### Research Design

The present study's design was descriptive, in which a survey was conducted through two separate questionnaires. Keeping in mind the aims and objectives of the research study, the research scholar had determined two different groups of participants one was the experimental group and the other was the control group.

### Participants

Keeping in mind the main objective of this present study, a total of thirty participants were randomly selected by the researcher. For this research, two groups were pre-determined, in which fifty participants were national-level sportspersons placed within the experiment group, while fifty participants who were non-sportspersons were placed inside the control group. Selected all participants were natives of India and the age ranged from 18-25 years.

### Intervention

The researcher sent an invitation to all the participants through email and called them to the Department of Physical Education located at Banaras Hindu University and discussed the psychological aspects of the research and gave directions for further action.

### Selection of Variables

The research scholar selected the variables of the current study as mentioned below in the table

Table 1, the selected scales, variables, and abbreviations of the study

Enclosed as Annexure 01

As per table-1, the description of selected scales, variables, and abbreviations of the study; therefore, SR stands for Self-regulation, RRI stands for Receiving relevant information, ETI stands for Evaluating the information, TC stands for Triggering change, SFO stands for Searching for options, FAP stands for Formulation of the plan, ITP stands for Implementing the plan, and APE stands for Assessing the plan's effectiveness.

### Measures

The research scholar used the Self-Regulation questionnaire (SRQ; Brown, Miller, & Lewandowski, 1999) to measure self-regulation and used Ryff, C. D. (1989) (42 items) Questionnaire to measure psychological well-being, the above-mentioned questionnaire had high reliability and acceptable construct validity. Therefore, the scales were found to have adequate properties and to be applicable in research and practice.

### Collection of Data

For this current research study, the research scholar collected the data through two different questionnaires according to the variables selected by the guidance of his supervisor and research expert. Before collecting the data, all the participants were motivated by the research scholar and given directions to carefully read out instructions, and questions inside the booklet. After that instructions were given to tick or circle one of the given statements in the questionnaire booklet. All the selected participants were very excited.

### Statistical Methods

The following statistical methods were applied for data analyses are documented below.

01. Descriptive statistics were used to check the mean and S.D. between selected variables.
02. Paired group t-Test was used to compare both selected variables among the participants.

### Result

- The result revealed that for the selected variable of self-regulation namely "Receiving Relevant Information," (RRI) the mean and SD found experiment group is  $33.06 \pm 3.84$  and the control group was  $32.26 \pm 5.95$ . It was evident from table 2 that there was no significant difference found between the experiment group and control group data on "Receiving Relevant Information" (RRI) as  $t' 0.463$ ,  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.
- The selected variable namely "Evaluating the Information" (ETI), the mean and standard deviation was found experiment group  $27.2084$ , and the control group  $27.334.73$ . It was evident from table 2 that there was no significant difference found between
  - the experiment group and the control group on "Evaluating the Information" (ETI) as  $t' -0.061$ ,  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.
  - The selected variable namely "Triggering Change" (TC), the mean and standard deviation was found experiment group  $31.0678$ , and control group  $31.334.30$ . It was evident from table 2 that there was no significant difference found between the experiment group and the control group on "Triggering Change" as  $t' -0.061$ ,  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.
  - The selected variable namely "Searching for Options" (SFO), the mean and standard deviation found experiment group  $33.86 \pm 4.50$ , and the control group  $36.8 \pm 4.60$ . It was evident from table 2 that there was a significant difference found between the experiment group and the control group on "Searching for Options" as  $t' -1.714$ ,  $p \leq 0.05$ . The result specified that there was a statistically significant difference between both groups at 0.05.
  - The selected variable namely "Formulation a Plan" (FAP), the mean and standard deviation were found in the experiment group  $31.26 \pm 3.26$ , and the control group  $30.33 \pm 4.93$ . It was evident from table 2 that there was no significant difference found between the experiment group and the control group on "Formulation a Plan" as  $t' 0.594$ ,  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.
  - The selected variable namely "Implementing the Plan" (ITP), the mean and standard deviation was found in the experiment group  $31.8 \pm 4.57$ , and the control group  $32.33 \pm 5.51$ . It was evident from table 2 that there was no significant difference found between the experiment group and the control group on "Evaluating the Information" (ETI) as  $t' -0.240$ ,  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.
  - The selected variable namely "Assessing The Plan's Effectiveness" (APE), the mean and standard deviation was found between

- the experiment group  $33.4 \pm 3.24$ , and the control group  $31.8 \pm 3.93$ . It was evident from table 2 that there was no significant difference found between the experiment group and the control group on "Assessing The Plan's Effectiveness" (APE), as 't',  $p \geq 0.05$ . The result specified that there was not a statistically significant difference between both groups at 0.05.

**Discussion and Findings**

The study was a pure comparative in nature to compare selected variables of self-regulation between sportspersons and non-sportspersons. If we talk about self-regulation, then it is a psychological factor that helps the player to control their behavior in adversesituation another Onanother hand side we can say that, Self-regulation is the psychological capacity of the individual to respond to the ongoing demands of experience with emotion, as well as the ability to delay spontaneous responses to social situations.

Talking about the field of education, many studies of self-regulation were reviewed in psychology, but this study was innovative in the field of physical education, so it was selected. Keeping in view the objective of this research, it was hypothesized that no difference would be found between sportspersons and non-sportspersons on the variables of self-regulation.

**Major Findings**

- The selected variables of Self-regulation namely Receiving Relevant Information, Evaluating The Information, Triggering Change, Searching forOptions, Formulation a Plan, Implementing The Plan, and Assessing the Plans Effectiveness found nota statistically significant difference between the experimental (Sportspersons) and control group (Non-Sportspersons) at level 0.05.
- The selected variable of Self-regulation namely Searching for Options found a statistically significant difference between the experimental (Sportspersons) and control group (Non-Sportspersons) at level 0.05.

Table 2, Selected t-Test: Paired Two Sample for Mean of Self-Regulation between Experimental and Control Group

Enclosed as Annexure 02

Table 2, (Continue) Selected t-Test: Paired Two Sample for Mean of Self-Regulation between Experimental and Control Group

Enclosed as Annexure 03

Figure 1 the graphical representation of selected variables of Self-regulation between Sports and Non-Sportsperstands

Enclosed as Annexure 04

**Recommendations**

- It has been proved from the current research study that it will be useful for coaches and trainers of sports, and physical education in improving the performance of games and sports.
- We can do similar research studies to compare other psychological variables such as self-efficacyamong sportspersons and non-sportspersons.
- We can do similar research studies on different games and sports.

**Acknowledgment**

We acknowledge all those who contributed to this present research. Finally, I must express sincere gratitude to Prof. (Dr.)Vikram Singh, and Dr. Pradeep Singh Chahar for their guidance.

**Annesure**

Annexure 02

Table 1, The selected scales, variables, and abbreviations of the study

| S.No.   | Scale           | Selected Variables                | Abbreviations |
|---------|-----------------|-----------------------------------|---------------|
| 1.      | Self-regulation |                                   | SR            |
| 1.1.    |                 | ReceivingRelevant Information     | RRI           |
| 1.2.    |                 | EvaluatingThe Information         | ETI           |
| 1.3.    |                 | TriggeringChange                  | TC            |
| 1.4.    |                 | SearchingFor Options              | SFO           |
| 1.5.    |                 | Formulation a Plan                | FAP           |
| 1.6.    |                 | Implementing The Plan             | IIP           |
| 1.7.    |                 | AssessingThe Plan's Effectiveness | APE           |
| N = 100 |                 |                                   |               |

Annexure 02

Table 2, Selected t-Test: Paired Two Sample for Mean of Self-Regulation between Experimental and Control Group

| Statistics         | RRI    |       | ETI    |       | TC     |       | SFO    |       |
|--------------------|--------|-------|--------|-------|--------|-------|--------|-------|
|                    | E.G.   | C.G.  | E.G.   | C.G.  | E.G.   | C.G.  | E.G.   | C.G.  |
| Mean               | 33.06  | 32.26 | 27.20  | 27.33 | 31.06  | 31.33 | 33.86  | 36.8  |
| Std. Dev.          | 3.84   | 5.95  | 4.84   | 4.73  | 2.78   | 4.30  | 4.50   | 4.60  |
| Variance           | 14.78  | 35.49 | 23.45  | 22.38 | 7.78   | 18.52 | 20.26  | 21.17 |
| Pearson Corr.      | -0.120 |       | -0.514 |       | -0.073 |       | -0.060 |       |
| t - Stat           | 0.463  |       | -0.061 |       | -0.194 |       | -1.714 |       |
| P (T<= t) one tail | 0.325  |       | 0.475  |       | 0.424  |       | 0.05*  |       |
| P (T<= t) two tail | 0.650  |       | 0.951  |       | 0.848  |       | 0.10   |       |

Annexure 03

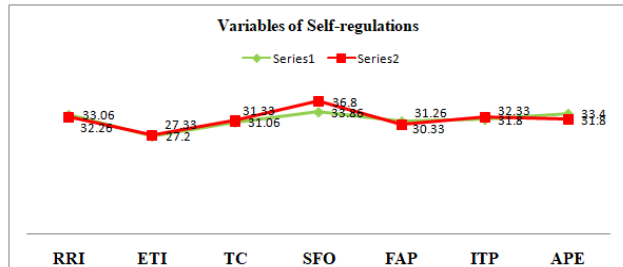
Table 2, (Continue) Selected t-Test: Paired Two Sample for Mean of Self-Regulation between Experimental and Control Group

| Statistics         | FAP    |       | IIP    |       | APE    |       |
|--------------------|--------|-------|--------|-------|--------|-------|
|                    | E.G.   | C.G.  | E.G.   | C.G.  | E.G.   | C.G.  |
| Mean               | 31.26  | 30.33 | 31.8   | 32.33 | 33.4   | 31.8  |
| Std. Dev.          | 3.26   | 4.93  | 4.57   | 5.51  | 3.24   | 3.93  |
| Variance           | 10.63  | 26.38 | 20.88  | 30.38 | 10.54  | 15.45 |
| Pearson Corr.      | -0.059 |       | -0.450 |       | -0.228 |       |
| t = Stat           | 0.594  |       | -0.240 |       | 1.098  |       |
| P (T<= t) one tail | 1.761  |       | 0.406  |       | 0.145  |       |
| P (T<= t) two tail | 2.144  |       | 0.813  |       | 0.290  |       |

\*\*Denotes a significant difference between Sportspersons, and Non - Sportspersons (p < 0.05)  
 E.G. = (Experiment Group)  
 C.G. = (Control Group)

Annexure 04

Figure 1 The graphical representation of selected variables of Self-regulation between Sports and Non-Sportsperstands



Reference

Baumeister, R. F. (2004). Handbook of self-regulation: Research, theory, and applications. 750 First Street NE, Washington, DC 20002-4242, USA: The Guilford Press. Retrieved NOV 12, 2022, from [Article][Crossref][Google Scholar]

Brown, J. M. (1999). The self-regulation questionnaire. (T. Jackson, Ed.) Innovation in clinical practice, 281-292 [Crossref][Google Scholar]

Cristina Marina Sandu et. al. (2015, May 05). Comparative study on emotions analysis in students of psychology by gender. Procedia - Social and Behavioral Sciences, 180, 1638-1642. doi:Elsevier Ltd [Crossref][Google Scholar]

Mandeep Singh Nathial, A Study of Adjustment and Emotional Intelligence of University Coaches in India, American Journal of Applied Psychology. Volume 3, Issue 6, November 2014 , pp. 122-126. doi: 10. 11648/j.ajap.20140306.11 [Crossref] [Google Scholar]

Nathial, Mandeep Singh. A COMPARATIVE AND ANALYTICAL STUDY OF SELF-ESTEEM AND JOB SATISFACTION IN ATHLETES AND NON ATHLETES. Journal of Advances in Social Science and Humanities, 2(10). https://doi.org/10.15520/jassh210123 [Crossref][Google Scholar]

Singh, M. , Kour, R. , &Kour, A. . A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping.International Journal of Health Sciences,6(S3), 11295-11310. [Article] [Crossref][Google Scholar]

Mandeep Singh. , Assessment of Vocational Interests of Pahadi & Bakarwal School Students In Relation To Their Gender. Int J Recent Sci Res. 9(3), pp. 24817-24819. DOI: [Article][Crossref][Google Scholar]

Dr. Mandeep Singh, 2017. "A study of awareness of inhouse doping errors among national level players and sports administrators in J&K state of India", International Journal of Current Research, 9, (01), 45226-45227. http://www.journalcra.com/sites/default/files/issue-pdf/20036.pdf [Crossref][Google Scholar]

Mandeep Singh, 2019; "Effect of Mobile Screen Psychomotor Digital Image Motivators in Person Technique in Reducing Anxiety Level of Intervarsity Players of Cluster University Jammu, Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). Volume-9 Issue-1, October 2019, PP: 3750-3752, DOI: 10. 35940/ijeat. A9811. 109119. [Article][Crossref][Google Scholar]

Mandeep Singh. (2018). THE AWARENESS OF MOVEMENT AND FITNESS SCIENCES AMONG SCHOOL, UNDER GRADUATE AND POST GRADUATE LEVEL STUDENTS: EMPOWERING EDUCATION THROUGH PHYSICAL EDUCATION. European Journal of Physical Education and Sport Science, 4(3). [Article][Crossref][Google Scholar]

Singh Nathial, D. M. (2012). ANALYZING THE CREDIT BASED SYSTEM IN PHYSICAL EDUCATION.

*International Journal of Behavioral Social and Movement Sciences*, 1(3), 172–176. Retrieved from [Article][Crossref][Google Scholar]

SINGH, M. , & SINGH SIDHU, A. (2016). A COMPARATIVE STUDY OF BODY COMPOSITION AND RELATIVE HEALTH STATUS AMONG RESIDENT AND NON-RESIDENT STUDENTS IN DIFFERENT SCHOOLS OF J&K. *International Journal of Behavioral Social and Movement Sciences*, 5(3), 08–13. Retrieved from [Article][Crossref][Google Scholar]

SINGH SIDHU, A. , & SINGH, M. (2022). KINEMATICAL ANALYSIS OF HURDLE CLEARANCE TECHNIQUE IN 110M HURDLE RACE. *International Journal of Behavioral Social and Movement Sciences*, 4(2), 28–35. Retrieved from [Article][Crossref][Google Scholar]

Konabe Bene et. al. (2021). A Comparative Study of Self-Regulation Levels and Academic. *Journal of Turkish Science Education*, 18(3), 320-337. Retrieved Jan 15, 2023 [Crossref][Google Scholar]

Marie-Claude J. Gagnon's et. al. (2016, May). *Self-regulation capacity enhances well-being and reduces burnout in physicians and medical students: Implications for nurturing self-help skills. nternational Journal of Wellbeing*, 1(6), 101-116. doi:10.5502/ijw.v6i1.4 [Crossref][Google Scholar]

Megan M McClelland. (2017). Self-Regulation, Handbook of Life Course Health Development. doi: 10. 1007/978-3-319-47143-3\_12 [Crossref][Google Scholar]

Ozhiganova, G. V. (2018, January). SELF-Regulation And Self-Regulatory Capacities: Components, Levels, Models. *RudN Journal of Psychology and Pedagogics*, 15(3), 255-270. Retrieved Feb 04, 2023, from [Article][Crossref][Google Scholar]

Sarah K. Davis et. al. (2021). *Exploring differences in psychological well-being and. Frontline Learning Research*, 9(1), 30-43. Retrieved Jan 16, 2023 [Crossref][Google Scholar]

Surjeet Singh, R. S. (2018, March). Self-Regulation as a Correlate of Psychological Well-Being. *Indian Journal of Health and Wellbeing*, 441- 444. Retrieved Jan 16, 2023 [Crossref][Google Scholar]

Virtanen, Päivi. (2017, December). Active Learning and Self-Regulation Enhance. *Australian Journal of Teacher Education*, 42(12). Retrieved Feb 2, 2023, from [Article][Crossref][Google Scholar]