# Improved Ability to Reduce Academic Procrastination Through Counseling Cognitive Behavior

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## Abstract

Overcoming procrastination is key to academic success and realizing future goals. This study was conducted at the State Junior High School in Kema Sub-District, North Sulawesi-Indonesia, to determine if cognitive behavior group counseling can help students overcome procrastination. A randomized pretest-posttest control group design and measurement instrument based on the weakness of academic procrastination was used. The findings of the experimental group analysis showed that cognitive counseling behavior could significantly improve the ability to reduce academic procrastination of junior high school students. Overall, school counselors should explore and apply various counseling approaches to help students with academic problems.

**Keywords:** Group counseling, cognitive behavior procrastination

## A.      Introduction

Overcoming procrastination is key to academic success and realizing future goals. Gie (1979) argued that successful students typically understand how to direct themselves towards learning activities, both in and out of the classroom. This idea has been widely discussed among educators. Adler (in Alwisol, 2007:127) argued that every individual has the power to create their lifestyle freely. According to Adler (1964), committing oneself to become successful is necessary to leading a superior and meaningful life. Certain behaviors indicate academic success, such as being actively engaged in the learning process, demonstrating a problem-solving approach, and completing school assignments. Additionally, demonstrating creativity, critical thinking, and problem-solving skills indicates a desire for success. Technological advances can provide students with many opportunities for fun activities that may take up learning time, including completing academic tasks. The ability to overcome obstacles and make the right decisions is essential for success. Core beliefs are the fundamental rules that guide people's reactions to events and their general life circumstances (Albert Ellis, 2004). If students can manage their procrastination, they will be able to finish their schoolwork and turn it in on time. This will help them meet the assessment requirements, which will lead to higher grades and academic success.

It is common for students to procrastinate, especially in exams, leading to poor performance. This behavior can become a habit, which will, in turn, lead to adverse consequences.

The mentioned phenomenon above appears to be symptomatic (Nashrullah research 2015) and Ramadhan & Winata (2016). Besides failure in exams, procrastination may lead to a breed of ignorant students. According to Albert Ellis, the assessment of a situation and the way one interprets an event can significantly affect their emotional reactions, which impacts the actions taken. In this era of technological advances, students are often engrossed in individual and group online and offline games for entertainment. This can lead to addiction and forgetting the main task of studying and completing academic assignments. This addiction can form a mindset that views learning time as spare time instead of using it for learning activities. Aaren Beck (1976)

explained that internal dialogue (self-talk) plays a vital role in displaying behavior. This means that self-talk is a view or belief in the events that people experience. A series of deviant thought patterns manifest in fewer learning activities, leading to decreased achievement and ultimate lack of confidence. Furthermore, these thoughts can create negative beliefs resulting in negative self-talk, leading to confusion and failure.

A Cognitive Behavior Counseling experiment was conducted to help students find the right mindset and overcome the problem of procrastination. According to Aaron T. Beck (1964), Cognitive Behavior Therapy (CBT) is a counseling approach that helps people identify and change negative thinking patterns and behaviors with cognitive restructuring. This means that the counselor works to identify deviant behavior and its causes with the help of questions or stimuli. Also, they encourage the counselee to share their experiences and thoughts about events that may result in negative self-talk. By recognizing the potential consequences of negative self-talk, counselors can help prevent it from developing. Thoughts, feelings, and behavior are interrelated, and by identifying and changing inaccurate thoughts and stressful emotional responses, individuals can overcome challenges and fulfill their goals (Beck, 1976). This view emphasizes that thoughts, feelings, and behaviors need to be expressed constructively to help the counselee see the relationship between their goals and behavior. According to Weishaar (in Corey, 2009), cognitive counseling theory rests on three key assumptions: that humans can communicate with themselves through introspection, a person's beliefs have personal meaning, and that this meaning can be realized by the individual rather than being taught by someone else. DeRubeis & Beck (in Corey, 2009) stated that by identifying and changing irrational or self-defeating thoughts, a person could improve their emotional and behavioral health. The goal is to change the way clients think by helping them identify and challenge their automatic thoughts and then introducing the idea of restructuring. This is carried out by encouraging counselees to collect and consider evidence to support their beliefs. Aaren Beck (1976) explained that internal dialogue plays a vital role in behavior

development (self-talk). Therefore, internal dialogue needs to be changed to empower individuals to develop the desired characteristics, such as the ability to complete academic tasks on time.

Procrastination can also be a trait or individual habit of responding to tasks (Ghufron & Risnawati, 2014: 151-157). It involves the behavior of misusing time where one tends not to immediately start a job due to irrational thoughts and beliefs in response to an upcoming task. Ellis and Knaus (in Tuckman, 2002) explained academic procrastination from a Cognitive-Behavioral point of view that it occurs because of someone's irrational beliefs. This can be caused by several factors, such as viewing the task as a heavy and unpleasant burden and fear of failure. As a result, students feel unable to complete their tasks adequately. Cognitive-behavioral counseling helps people change negative thinking and behaviors. Counselors need to understand the reasons for delays caused by inadequate facilities or lack of knowledge about how to complete the required tasks. This counselor's ability to effectively communicate and guide their counselee will be crucial in helping them identify and creatively find solutions to difficult situations. According to Amabile (1987), creativity is not only a cognitive trait but also influenced by motivation, attitudes, personality, and other characteristics. Research has shown that personality traits significantly influence individual creativity. According to Rookey (1973), creative personality tendencies fall under the affective domain of creative behavior. Cheng & Yu (2006) showed that creative tendencies primarily measure an individual's personality.

In the school environment, the goal of creativity is not to solely focus on achieving elitism but also to guide students towards developing positive personality traits and diverse talents. Davis (1989) proposed specific goals for creativity education regarding cognition, compassion, and skills. The attitudes and dispositions shown during creative activities require long-term curricular guidance and cultivation to impact future research results significantly.

Group counseling is conducted on people who share similar problems, whose implementation starts with accepting the counselor by all counselees (Coleman & Anderson, 2000). The counselor adheres to the group process rules to create a respectful and supportive environment. They also encourage them to participate actively and openly in the counseling process. The contract stipulates that the counselee will make an effort to progress by discovering alternative solutions.

Academic Procrastination

Anyone working anywhere can experience procrastination, be it academics or professional (Burka & Yuen, 2008). Academic procrastination, however, is primarily seen in students or academics. According to Silver (Ghufron & Risnawati, 2014:152), individuals who procrastinate do not intend to avoid the task at hand. Instead, they have a hard time getting started on the task, which takes longer than it should. Burka & Yuen (2008: 6) stated that the word implies suspending an action to a later time, according to the American College Dictionary. In this view, activities that should be carried out now are postponed to other occasions. This practice can be overcome by practicing self-control and setting a schedule. It can be challenging to stick to a work schedule without self-control, leading to unfinished or neglected tasks. Ferrari et al. (1995) stated that academic procrastination could be measured and observed using specific indicators. For instance, delay in starting or completing a task at hand. Procrastinators know that the tasks at hand are helpful and must be completed immediately, but they still put them off. Since schools are closed due to the Covid-19 pandemic, it can be challenging to meet with teachers because all classwork is done online. Individuals who do procrastination take longer than the average time it takes to complete a task. The time difference between when a procrastinator plans to do something and when they do it. These people often experience delays in meeting the deadlines that have been determined. Each person's perspective on procrastination may be different, depending on their personal experiences. A positive mindset can manifest in behavioral conditions through various stages:

a. An assessment is carried out: this stage is all about understanding what the counselee is doing, thinking, and feeling. Their activities, thoughts, and feelings are assessed to see if they are rational or irrational.

b. Setting goals: goals should be determined according to a mutual agreement between the counselor and the counselee to help the counselee achieve the desired behavior change.

Counselors work with counselees to help them overcome problems they are experiencing, such as excessive behavior or deficits. These techniques can lead to behavioral changes, as seen in the difference between the pre-counseling and post-counseling data.

## B.        Research Methodology

This research involved using quantitative methods through experiments. The questionnaire was chosen for an adaptation to measure procrastination and the ability to overcome it. This instrument was administered before and after the experiment. It contained 20 items with negative words, whose responses were inverted, having 40 items with positive comments.

The questionnaire used a five-point Likert scale ranging from 'strongly disagree' to 'strongly' agree.' The questionnaire results were tabulated according to the total score of all 35 items. A higher score indicates a greater ability to overcome self-procrastination. This research used a pure experimental (actual experiment) and research design from Fraenkel and Wallen (2006: 274). A pretest-posttest design was used for this research, with a control group chosen based on the following considerations. First, a design suitable for educational and psychological experimental research. Second, a design that would test hypotheses adequately and provide adequate control for variables to get an accurate assessment. The design had several key characteristics: the experimental group receiving cognitive-behavioral counseling treatment and the subjects in the control group being randomly selected. The control group did not receive any treatment, and the sample was chosen for the experiment. The control group did not receive any treatment, and the sample was selected randomly for the

experiment. The experimental design can be seen in the following figure:

Randomized Pre-test Post-test Control Group Design

| Group A | R | O1 | X | O2 |
|---------|---|----|----|----|
| Group B | R | O3 | C | O4 |

Figure 1.1. Experimental pretest-posttest design with the control group

Source: Fraenkel & Wallen, 2006: 274

Description:
R = Random assignment
O = Initial Pretest Observation and Posttest Observation (after treatment)
X = Treatment (Experiment)
C = control

Learning improved through cognitive behavioral counseling developed according to the problematic behavior observed at the research site. One group of cognitive-behavioral counseling received treatment to improve the ability to overcome procrastination. Its members demonstrated improved learning behavior and the ability to complete academic tasks on time. However, the control group did not receive treatment. Both groups were given each treatment twice, with the first serving as a pretest and the second as a posttest.

**Population and Sample**

The sample population comprised 20 students in the 8th grade class of 2021. Ten participants were selected by appointment of the homeroom teacher through class documentation data showing their inability to complete school assignments. The control group consisted of 10 individuals who did not receive treatment. A normal distribution of data resulted in a population that met the t-test prerequisites.

**Preparation of Research Instruments**

Two instruments were developed for this research: data collection instruments (procrastination measurement instruments) and counseling experimental guidelines.

**Research Instrument Validation Test**

Ghozali's (2011: 52) validity test measures whether a questionnaire is valid or invalid. A questionnaire is valid if the questions accurately reveal the desired information. The data to test the validity of the Test Item Validity of Procrastination Measurement Instruments was collected from 35 students in the 8th grade of junior high school students. The instrument's validity was examined using the product-moment method, while Cronbach's Alpha was used to assess its reliability. The item validity test was performed using the SPSS version 22 program. An instrument item is considered valid if the significance of the item correlation coefficient is less than 0.05. The validity of the question items is determined by correlating the score (value) obtained from each question item or statement with a total score. This can be done using the Pearson Product Moment correlation or comparing the product-moment correlation coefficient (Rcount) with its critical value.

**Instrument Reliability Test**

Ghozali (2011) recommended using reliability to measure the questionnaires (instruments) that are indicators of variables or constructs. A questionnaire is considered reliable if a person's responses to the questions are consistent over time. The Cronbach Alpha test is used to measure the reliability of the questionnaire. Qualifications for scoring instrument answers consist of four answer options, including Strongly agree (Ss); Agree (S); disagree (ts) strongly disagree (ss).

## Research Variables

This research consisted of independent variables (cognitive behavioral counseling) as a treatment to improve the ability to overcome academic procrastination in the experimental group and one

dependent variable. Therefore, the Dependent Variable is shown by (Y), while the Independent Variable is represented by (X).

The chart below describes the relationships between variables

| Independent Variable (X)  Cognitive behavior counseling | → | Variable (Y)  Procrastination |
| --- | --- | --- |
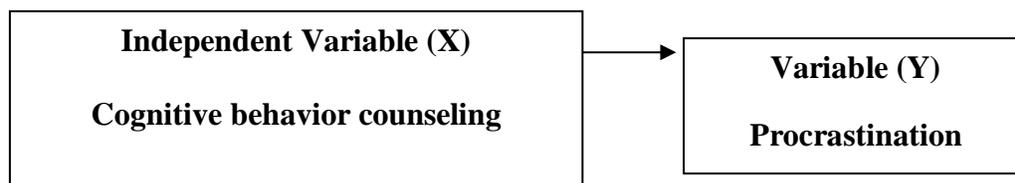
Data collection on individual progress or changes in behavior outside of group interactions can be seen in the results of questionnaires or other instruments filled out by counselees after attending counseling sessions (posttest). Subjects in the experimental and control groups were given procrastination reduction measurement instruments as a posttest to obtain treatment results.

Analyses were conducted to compare procrastination results on the pretest and posttest for each subject in the experimental group, as well as to analyze the procrastination measurements of each subject or counselee in the control group. Furthermore, an analysis was conducted to obtain the difference in the level of achievement in overcoming procrastination in the experimental group.

The two-mean difference test examines the significance of the difference in the mean of the research variables before and after (Sabri & Hastono, 2006).

## C. RESULT

### Description of Result

The results were presented in two parts: a description of the data and hypothesis testing using paired t-tests or other tests to compare pretest and posttest academic performance. The data in this section show the results of counseling treatments, which demonstrate the changes in research subjects' behavior regarding academic task completion.

**a.** Results Reducing procrastination levels of junior high school students through the Counseling Process

$H_a$: There is a significant difference between the average level of procrastination at the pretest and posttest stages of treatment in the experimental counseling group.

**Differences in the level of rejection in counseling procrastination between before and after the Cognitive Behavioral Counseling Experiment**

| Treatment | Test | N | Mean | SD | T | Significance |
| --- | --- | --- | --- | --- | --- | --- |
| Reality counseling experiment | *Pretest* | 10 | 103.0000 | 10.41367 | -4.542 | 0.001 |
| | *Posttest* | 10 | 116.9000 | 13.93995 | | |

The experimental group had an average increase in procrastination rejection ability of 103.000 on the pretest, with a standard deviation of 10.41367 (see table 4:3). The posttest obtained an average

rejection in procrastination of 116.900 with a standard deviation of 1.93995. In Table 4.1, the t-value is -4.542, and the significance is 0.001 (<0.05). Therefore, Ha is accepted, implying that

cognitive-behavioral counseling effectively increases the procrastination rejection of the counselee.

Hypothesis 2

Hypothesis Treatment in the Control group

$H_a$: There is a significant difference between the average level of procrastination rejection at the pretest and posttest stages of the control group with cognitive-behavioral counseling. H0 is rejected if the significance is < 0.05; and accepted if the significance is ≥ 0.05.

**Table 4.4**

**Differences before and after in the control group**

| Treatment | *Test* | N | Rata-rata | SD | T | Significance |
|-----------|--------|---|-----------|-----|---|--------------|
| Control (KAT) | *Pretest* | 10 | 98.8000 | 10.34730 | -7.473 | 0.001 |
| | *Posttest* | 10 | 117.6000 | 7.83440 | | |

In the control group with the pretest, the average procrastination rejection data was 98.0000 (see table 4:4) with a standard deviation of 10.34730. While the posttest obtained an average of 117.600 with a standard deviation of 7.83440 and a t-value of -7.473 at a significance of 0.001, implying Ho is rejected. This shows that after going through counseling, students are significantly better at overcoming procrastination than before treatment.

## Results and Discussion

### 1. Differences in the level of ability to overcome procrastination before and after attending cognitive behavior counseling

Cognitive Behavioral Counseling (CBC) was found to reduce procrastination in those who received the treatment significantly. These findings indicate that effective treatment can help the counselee overcome procrastination behavior.

The cognitive-behavioral counseling process begins by helping counselees who have not been successful in learning due to procrastination. Lifestyle procrastination can result in incorrect thought patterns that lead to developing unclear patterns of self-expectations and prioritizing things that are not important. The cognitive-behavioral counseling process helps people see events with a more rational perspective, based on existing facts, resulting in an improved mindset. Furthermore, The counselee is directed to answer questions and express desires related to academic

success. It is crucial for students to hand in tasks on time in order to be successful academically. Assignments are a necessary part of the learning process, and help students to think, describe learning concepts, make decisions, and solve problems. When students delay completing tasks, the number of assignments only piles up until they get overwhelmed and bored.

The counselor helps the counselee understand that success is possible if they are willing to work hard and not procrastinate. People who have a strong sense of meaning in their lives are better equipped to handle life's challenges (Steger, 2006). Frankl (1985) and Maddi (1978) revealed that the existence of neurosis is an event experienced by a person as a state of saturation, a condition without meaning, empathy, and purpose.

The counselor should help a counselee build a robust positive meaning in life to manage challenges they may face. It is essential to encourage the counselee to improve their behavior to reduce procrastination. By doing tasks every day or directly doing the assigned tasks, they will find ways to solve difficulties or problems. They are not only given the skills they need to succeed but also taught to be creative problem-solvers. Academic struggles demonstrate problem-solving behavior and the pursuit of hopes and ideals. The counselor also becomes part of the change process by assigning academic tasks and encouraging their completion. Subject teachers and counselors need to pay attention to anticipating boredom to ensure

it does not happen. Also, it is necessary to give rewards to students.

Every person can overcome the desire or habit of delaying completing tasks. Miller and Brown (1991) stated that self-regulation is an individual's ability to direct and monitor behavior to achieve specific goals involving physical, cognitive, emotional, and social elements.

Miller and Brown also contributed to the self-regulation factor. This view should be drawn to the counselor's attention during the counseling process to direct their mindset towards the importance of the counselee's success through self-regulation, time, and appropriate technological use for academic success. Counselees who can complete academic tasks should get the counselor's recognition and appreciation to trigger further progress.

The cognitive behavior counseling process helps people identify and challenge irrational thoughts to think more rationally. This can help free people from negative self-talk and destructive patterns of behavior. The goal is to develop the ability to dispute self-defeating behavior and its negative consequences, to instead act in constructive, success-oriented ways with total commitment and responsibility, to achieve the set goals now and in the future. Cognitive-behavioral counseling is a process that helps people change negative thought patterns and develop successful academic behaviors.

## Discussion

The restructuring process through counseling helps the counselee to dispel deviations in mindset. It is essential to change negative self-talk, think healthy thoughts, and behave creatively and productively to meet progress demands. This includes shunning things that lead to failure and allowing stress and other risks to arise.

## Conclusion

Overall, cognitive behavior counseling helps students procrastinate less and improve their academic performance.

## Recommendation:

Cognitive-behavioral counseling can help students develop rational thinking skills and improve self-regulation. It can also help them learn to complete class assignments in time.

## REFERENCES

[1]  Adler, A. 1964. *The Individual Psychology* of Alfred Adler. In H.L. Ansbacher & R.R. Ansbacher (Eds), The Individual Psychology of Adler, New York: Harper & Row (Torchbooks).

[2]  Alwisol, 2012. Pasikologi Kepribadian UMM press : Jl. Raya Tlogomas no. 246 Malang

[3]  Amabile, T.M. (1987). The motivation to be creative. In S.G. Isaksen (Ed.), Frontiers of creativity research: Beyond the basics. Buffalo, NY: Bearly Limited.

[4]  Akinsola, M., Tella, A., & Tella, A. (2007). Correlates of academic procrastination and mathematics achievement of undergraduate students. *Eurasia Journal of Mathematics, Science & Technology Education, 3*(4), 363-370.

[5]  Beck A.T. (1976) *Cognitive Therapy and the Emotional Disorders.* New York. New American Library,.

[6]  Burka, J. B. & Yuen, L. M. (2008). *Procrastination: Why You Do It, What To Do About It*. New York: Perseus Books.

[7]  Cheng, C.P., & Yu, K.C. (2006). The history of technology development curriculum to middle school students' creativity influence. Living Technology Education, 39(5), 3–15.

[8]  Cheng, Y., & Lin, Y.C. (2016). Regret and psychological adjustment: an examination of the dual-route mediating effect of self-compassion and self-judgment. Bulletin of Educational Psychology, 48(1), 77–89. https://doi.org/10.6251/BEP.20150925.

[9]  Corey, G.(2009). *Theory and Pratice of Counseling and Psychotherapy*. Belmont, CA: Brooks/Cole.

[10] Davis, G.A. (1989). Testing for creative potential. Contemporary Educational

Psychology, 14(3), 275–274. https://doi.org/10.1016/ 0361-476X(89)90014-3.

[11] Ferrari, J. R., Johnson, J. L., & McCown, W. G. (1995). Assessment of academic and everyday procrastination. In Procrastination and Task Avoidance (pp. 47–70). US: Springer.

[12] Ferrari, J.R., Johnson, J.L., &. McCown , W.G. (1995) Procrastination and task avoidance: Theory, research, and treatment. New York: Plenum Press.

[13] Ferrari, J.R., & Tice, D.M. (2000). Procrastination as a self-handicap for men and women: A task-avoidance strategy in a laboratory setting. *Journal of Research in Personality, 34*, 73-83

[14] Fraenkl, J. R. & Wallen, N. E. 2006. *How To Design And Evaluate Research In Education Six Edition*, Boston: The Mc Graw-Hill Companies, Inc.

[15] Hedin, B. (2012). Teaching procrastination-A way of helping students to improve their study habits. In LTHs 7: e Pedagogiska Inspirationskonferens

[16] Gie, Liang. 2000. *Cara Belajar yang Efisien edisi keempat*. Yogyakarta: Gajah MadaUnipress

[17] Kivlighan Jr, D. M., Coleman, M. N., & Anderson, D. C. (2000). Process, outcome, and methodology in group counseling research.

[18] Madidi, S. (1978) Existential and individual psychologies, Journal of individual psychology. (00221805), 34(2), 182-190. Diunduh melalui Psychology & Behavioral http://search. Ebscohost com/login.aspx?direct-true&db-psyh&AN-20-08-

[19] M. Ghufron Nur. (2003). Hubungan Control Diri dan Persepsi Remaja Terhadap Penerapan Disiplin Orang Tua dengan Prokrastinasi Akademik.*Skripsi*. Universitas Gajah Mada.

[20] Miller W.R. & Brown, J.M. (1991). Selfregulation as a conceptual basis for the prevention and treatment of addictive behaviours. In: Heather N, Miller WR, Greely J, editors. *Self-Control and the Addictive Behaviors*. Sydney, Australia: Maxwell Macmillan; p. 3–79.

[21] Ramadhan R.P. & Winata H. (2016) Prokratinasi Akademik Menurunkan Prestasi Belajar, Jurnal Pendidikan, volume 1 Agustus Halaman 163-169.

[22] Rookey, T.J. (1973). Pennsylvania assessment of creative tendency. NJ: Educational Testing Service Princeton.

[23] Siaputra, I.B., Prawitasari, J.E., Hastjarjo, T.D., Azwar, A. (2011). Subjective and projective measures of thesis writing procrastination: Real world and *the sims* world. *Anima Indonesian Psychological Journal, 26*(2), 128-149.

[24] Slavin, R. (2009). *Educational Psychology, Theory and Practice.* Boston: Allyn and baron.

[25] Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive behavioral correlates. Journal of Counseling Psychology, 31(4), 503. doi:10.1037//0022-0167.31.4.503

[26] Steel, P. (2007). The Nature of procrastination: A Meta-analytic and theoretical review of quintessential self-regulatory failure. Psychological Bulletin, 133(1), 65. doi:10.1037/0033-2909.133.1.65

[27] Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. Australian Psychologist, 51(1), 36–46. doi:10.1111/ap.12173

[28] Steel P.D.G. (2002) The measurement and nature of procratination (publishes Doctoral dissertation ) Universitas of Minnesota.

[29] Steger, M. F., Frazier, P., Oishi, S. & Kaler, M. 2006. The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*, 80–93.

[30] Strunk, K. K., & Spencer, J. M. (2012). A brief intervention for reducing procrastination.Academic Exchange Quarterly, 16(1), 91–96.

[31] Tuckman, B. W. (1998). Using tests as an incentive to motivate procrastinators to study. The Journal of Experimental Education, 66(2), 141–147. doi:10.1080/00220979809601400

[32] Williams, F.E. (1972). A total creativity program for individualizing and

humanizing the learning process. Englewood Cliffs, NJ: Educational Technology Publications.

[33] Wohl, M. J., Pychyl, T. A., & Bennett, S. H. (2010). I forgive myself, now I can study: How selfforgiveness for procrastinating can reduce future procrastination. Personality and Individual Differences, 48(7), 803–808. doi:10.1016/j.paid.2010.01.029

[34] Wolter, W. (2003). Procrastination's Relation with Fear of Failure, Competence Expetency and Intrinsic Motivation. *Psychological Bulletin*, PP 123-127

[35] Simonton, D.K. (1984). Genius, Creativity and Leadership: Historiometric Inquiries. Cambridge, MA: Harvard University Press.

[36] Smith, D.E., & Tegano, D.W. (1992). Relationship of scores on two personality measure: Creativity and self-image. Psychological Reports, 71(1), 43–49. https://doi.org/10.2466/pr0.1992.71.1.43.

[37] Torrance, E.P. (1968). Examples and rationales of test tasks for assessing creative abilities. The Journal of Creative Behavior, 2(3), 165–178. https://doi.org/10.1002/j.2162-6057.1968.tb00099.x.

[38] Wang, Y.F., Li, H.C., Wang, Y.C., & Wu, J.T. (2016). Attachment, coping, and adolescent adjustment problems: examining three competing mediation models. Bulletin of Educational Psychology, 48(1), 15–35. https://doi.org/10.6251/BEP.20150508.

[39] Shavelson, R.J., Hubner, J.J., & Stanton, G.C. (1976). Self-concept: Validation of construct interpretations. Review of Educational Research, 46(3), 407–441. https://doi.org/10.3102/00346543046003407.