

Validating Module to Increase Student's Academic Resilience Who Experiences Plateau by Using the Dilemma Technique

Abdul Murad^{1*}, Asih Menanti², Armitasari³, Zainudin⁴, Ibrahim Gultom⁵

{abdulmurad@unimed.ac.id¹, unimedasih@unimed.ac.id², armitasari90@unimed.ac.id³,
Prof.zainuddin@unimed.ac.id⁴, ibrahimgultom44@gmail.com⁵}

Faculty of Education, Universitas Negeri Medan, Medan, Indonesia^{1,2,3,4,5}

Abstract. This research aimed to validate guidance module to increase student's academic resilience experiencing plateau. Plateau was meant a condition viewing self-trapped in challenge. To solve more complicated life, students in a campus generally need high academic resilience, it was needed solution to be increased so that students could face challenge, difficulties, and suffering in a variety of life aspects, including in study. On the other words, avoiding students from plateau condition, namely a condition considering self-trapped in obstacles needs to develop/to validate module to increase student's academic resilience. The research used the approach of Research and Development Four-D of Thiagarajan. Research process covered phases as follows: a. definition, b. Design, and c. Development. The research subjects as much as eighteen (18) classrooms amounted 522 students. The trying out students amounted 69 students. The research instrument used scale developed by researcher and scale adapted of available instrument. The trying out instrument of academic resilience scale was done in two classrooms. Data analysis used module validity and effectiveness analysis to increase academic resilience by applying social moral dilemma technique. Research results showed that validator evaluated on academic resilience module averagely as much as 0,89 categorized as very good. Effectiveness of academic resilience module was obtained pre-test 27,530 and post-test scores 37,302 classified middle+ (effective enough). Based on research findings, module could be recommended to be applied increasing student's academic resilience. This module will be used as one of learning resources to increase student's academic resilience.

Keywords: Validation, effectiveness, module, academic resilience, plateau.

1 Introduction

Student's less empowerment in accomplishing their study was caused by internal and external factors. Those causal two factors can interact and accumulate in order to make students experiencing plateau, namely as proposed by Menanti et al plateau was meant as a level without progress [8]. When the trap as condition without progress was ignored, then it will be developed to become the cause of study fail, or minimally could still finish their study, although it needed too long time and low standard learning achievement. In plateau condition, students should be resilience whereas it was competence to rise up back successfully, although "strong risk exposure" [7].

Student (other individual) needs high resilience in every life aspects such as academic resilience, social, moral, family, online, religion. If student owns resilience, then it means describing invulnerable, invincible, hardy, struggle, suffering (Henderson and Milstein, 2003) in facing variety of hard life challenges [3]. We could understand that if individual has had invulnerable, invincible, hardy, struggle and suffering above, then the experiences will produce competence, especially in form of academic resilience to solve every problem appearing in accomplishing study as soon as possible and in extremely satisfied achievement.

Through researcher's observation as lecturer, it was founded that there were students who indicates phenomena of less resilience, for examples in academic resilience. Observed behavior like student does the lecture assignments with poorly achievement, although there are students who can accomplish their lecture assignments easily, fluently and with high quality. Especially in Universitas Negeri Medan, students were obliged completing a number of assignments such as Routine Tasks, (TR), Critical Book Report (CBR), Critical Journal Report (CJR), Project Task (TP), Idea Engineering (RI), besides obligation to follow Semester Mid Test (UTS) and Semester Final Test (UAS). Those assignments above could train students to become resilient individual, but always founded that student experienced potential plateau phenomenon, because of feeling hard and stressed to complete those lecture assignments.

The study results done by Menanti et al [10] on "Resilience was viewed of Guidance Counseling Study Program student's Lecture Assignment and control locus in Universitas Negeri Medan", showed that 18,18% of student's resilience was classified low, 56,57% of student's resilience was classified middle, and the rest as much as 26,25% was classified high [4]. Research findings conducted by Menanti et al [9] on "Peer counselor's role in increasing troubled student's resilience at Guidance Counseling Study Program, Universitas Negeri Medan", showed that 51,71% of students had resilience to be classified below average [5]. This low average resilience condition was understood that students needed resilience development seriously. Murad, Menanti, and Gultom [8] [13] in their research on "Pedagogy Student's academic resilience development in Universitas Negeri Medan through the application of learning Ice Breaking", in their research background identified that a part of students had less resilience [6].

Departure from research findings conducted by in surrounding of Universitas negeri Medan above, and researches out of Universitas Negeri Medan, as well as writer's observation result as lecturer for students, then it was needed solution to change plateau students to be high academic resilience students. How will module that uses dilemma technique be valid to increase pedagogy student's academic resilience that has potentially strong and extremely potential experiencing plateau in Universitas Negeri Medan? To solve this problem, It is crucially used the approach that equips students with a numbers of valid academic resilience development module performed by lecturer in students learning. How will module that uses dilemma technique be effective to increase pedagogy student's academic resilience that has potentially strong and extremely potential experiencing plateau in Universitas Negeri Medan? Finally, the module produced in this research to be reference for lecturer and students to develop academic resilience. This is why, this article would like to focus on answering the both questions above. Hereby, this research implied its goal, namely a. to produce module applying dilemma technique, valid to increase pedagogy student's academic resilience who has strength potentially experiencing in Universitas Negeri Medan, b. to produce module using dilemma technique, effective to increase pedagogy student's academic resilience who has strong potentially experiencing plateau in Universitas negeri Medan.

2 Research Method

This article was produced from the research of Murad et al [11] on module development with social dilemma technique to increase academic resilience [7]. This research used descriptive quantitative approach. This study was conducted in Guidance Counseling Study Program, Universitas Negeri Medan. Data collection was carried out directly face to face between researcher and respondent of the research. This was done face to face based on judgment that deeper interaction was happened, that possibly enables the happening of question and answer in research process. This study used the approach of Research and Development Four-D from Thiagarajan. The research was purposed to develop, to validate product [16]. Research phase followed big three phases path as follows: a. Definition, b. Design, and c. Development. The research was conducted in Universitas Negeri Medan arounds. Research subjects who were coming from students amounted 18 classrooms with 522 students. The trying out students amounted 69 students. The research instrument applied was scale developed by researcher and scale adapted of the existed instrument. To uncloze data of student's academic resilience, it was applied scale adapted from scale arranged by [2]. It was also used as follows: a) Academic resilience, developed by Reivich and Shatte [15] [10], also mentioned like Resilience Quotient Test (RQT). The results of quantitative validity and reliability test on academic resilience scale as much as 0,93. Meanwhile, result of quantitative validity and reliability test on plateauing scale as much as 0,837. Data analysis used in this research was module valid analysis to increase academic resilience by using social-moral dilemma technique.

2.1 Phases of research

- a. Phase of Defining: Assessing need in process of student's character, in order to be obtained description for problem solving. There were five activities as follows:
 1. Initial analysis: Identifying problem experienced by students causing them to own low academic resilience, for example, lecturer did not have enough time to stimulate psychological developments such as academic resilience. On this step, researcher used interview with limited students total and limited observation.
 2. Student analysis: Analyzing student's attributes in relation to academic resilience for example, motivation to be resilience self.
 3. Task analysis: Identifying student's academic resilience achievement
 4. Concept analysis: Identifying gap between academic resilience achievement and it should be owned by students
 5. Goal analysis of module development increasing student's academic resilience by using social-moral dilemma technique: Creating resilience student personal
- b. Design phase (designing): On this phase purposed to develop the initial product design. Activity in this phase among others: Arranging instrument; choosing module; and initial design.
- c. Develop phase (development): on this phase its goal is to produce module product to increase student's academic resilience with steps as follows:
 1. Expert validation: On this phase, module or its wares were validated by competence validator material, media, and lay out experts (art design experts). Revision on this expertise validation was called as final product.

2. Trying out academic resilience module development in the field.

The assessment conducted by validator on given scale, hence it is valued ordinaly scores 4, 3, 2, 1, and done score percentage classification: PS= Obtained score total: maximum score total x 100% [1]. It is transformed as proposed on table 1.

Table 1. Module Valid Criterium

Interval of Percentage value (%)	Criterium
85% - 100%	Very good
70% - 84%	Good
60% - 69%	Middle
50% - 59%	Less good

[1]

3 Results and Discussion

3.1 Results

3.1.1 *Module Validation to Increase Academic Resilience by Using Moral-Social Dilemma Technique, by Validator*

Table 2. Validation of Academic Resilience on Module Material Element (Substances) to Increase Student's Academic Resilience by Using Moral-Social Dilemma Technique

Number	Descriptions	Obtained Items Score Total	Maximal Items Score Total	Count Result (%)	Category
1	Content (material) complete module	4	5	0,80	Good
2	Module Content (material) is in short	5	5	0,100	Very good
3	Module content (material) is easy to understand	5	5	0,100	Very good
4	Language used is simple (not complicated)	5	5	0,100	Very good
5	Module content (material) explains for something complicated (namely giving examples or illustrations)	4	5	0,80	Good
6	Module content (material) encourages curiosity	4	5	0,80	Good
	Average			0,90	Very good

Based on table 2 above, it was explained generally, academic resilience module on material element (substance) had been validated by guidance and counseling material experts averagely to achieve as much as 0,90, categorized as very good. Meanwhile, if viewed from each academic resilience material elements, content complete module with obtained score total 4 of maximal score total 5 (0,80%) was classified good. Content module is in short with obtained score total 5 of maximum score total 5 (0,100%) was classified very good. It was easy module content to understand with obtained score total 5 of maximum score total 5 (0,100%) was classified very good. Simple used language with obtained score total 5 of

maximum score total 5 (0,100%) was classified very good. Module content explaining for something complicated by giving examples and illustrations with obtained score total 4 of maximum score total 5 (0,80%) was classified good. Module content encouraging curiosity with founded score total 4 of maximum score total 5 (0,80%).

3.1.2 Aspect of Academic Resilience on Verbal Communication Element (Writing) in am Module

Table 3. Academic Resilience Validation on Verbal Communication Element – Module Writing to Increase Student's Academic Resilience by Using Moral – Social Dilemma Technique

Number	Descriptions	Obtained Score Total	Maximum Score Total	Counted Result (%)	Category
1	Information clarity in module	4	5	0,80	Good
2	Language comprehension convenience in module	4	5	0,80	Good
3	Language Efficiency in module	5	5	0,100	Very good
	Average			0,87	Very good

Based on table 3 above, it was explained that generally, academic resilience module on verbal communication element had been validated by guidance and counseling experts averagely to achieve as much as 0,87, categorized as very good. In the meantime, if viewed from each academic resilience of verbal communication elements, Information clarity in module with obtained score total 4 of maximal score total 5 (0,80%) was classified good. Language comprehension convenience in module with obtained score total 4 of maximal score total 5 (0,80%) was classified good. Language efficiency in module with obtained score total 5 of maximal score total 5 (0,100%) was classified very good.

3.1.3 Aspect of Academic Resilience on Module Appearance Element

Table 4. Academic Resilience Validation on Module Appearance Element to Increase Student's Academic Resilience by Using Moral – Social Dilemma Technique

Number	Descriptions	Obtained Score Total	Maximal Score Total	Count Result (%)	Category
1	Lay out in module	4	5	0,80	Good
2	Writing guidelines in module	5	5	0,100	Very good
3	Module appearance attractiveness	4	5	0,80	Good
4	Relevance of appearance with module topic	5	5	0,100	Very good
	Average			0,90	Very good

Based on table 4 above, it was explained that generally, academic resilience module appearance element had been validated by module appearance expert averagely to have achieved as much as 0,90, categorized as very good. Meanwhile, if viewed from each

academic resilience of module appearance elements, lay out in module with obtained score total 4 of maximum score total 5 (0,80%) was classified good. Writing guidelines in module with obtained score total 5 of maximum score total 5 (0,100%) was classified very good. Module appearance attractiveness with obtained score total 4 of maximum score total 5 (0,80%) was classified good. Relevance of appearance with module topic with obtained score total 5 of maximum score total 5 (0,100%) was classified very good.

3.1.4 Aspect of Academic Resilience on Media element in Module (namely media consists of six cases (dilemma events))

Table 5. Validation of Academic Resilience on Media Element in Module to Increase Student's Academic Resilience by Using Moral-Social Dilemma Technique

Number	Descriptions	Obtained Score Total	Maximal Score Total	Count result (%)	Category
1	Clarity of Used dilemma cases/events	5	5	0,100	Very good
2	Language efficiency in used cases/events	4	5	0,80	Good
3	Attractiveness of case/event story content	4	5	0,80	Good
4	Practice used by others	5	5	0,100	Very good
	Average			0,90	Very good

Based on table 5 above, it was explained that generally, academic resilience module media element had been validated by guidance and counseling media experts averagely to achieve as much as 0,90, categorized as very good. In the meantime, if viewed from each academic resilience of module media elements, such as clarity of used dilemma cases/events with founded score total 5 of maximum score total 5 (0,100%) was classified very good. Language efficiency in used cases/events with founded score total 4 of maximum score total 5 (0,80%) was classified good. Attractiveness of case/event story content with obtained score total 4 of maximum score total 5 (0,80%) was classified good. The last element: practice used by others with founded score amount 5 of maximum score total 5 (0,100%) was classified very good.

3.2 Discussion

Based on the research results that academic resilience and each element of academic resilience averagely achieved as much as 0,89 to be classified very good. This result achievement showed guidance and counseling expert validator's evaluation result on the achieved module was categorized as highly valid. This means that this module had fulfilled scientific requirements to be implemented in increasing the pedagogy student's academic resilience who were experiencing plateau in Universitas Negeri Medan. The next research

findings were module effectiveness classified middle tend to good (C+) with achievement 37302 (refer to range C: 25057 – 37584). This also means that produced module was effective enough in increasing student's academic resilience who were experiencing plateau in learning. This academic resilience achievement that was effective enough still needed intense action out of module validity its self like student's interest and motivation continuously kept out in order to be able to overcome the challenge completing study on time with satisfied achievement. Achievement on this academic resilience was module strength produced to manifest student's academic capacity and to achieve excellence achievement in accordance with his self-potential.

Before discussing in detail about research findings above, it was important to propose some definitions of resilient according to some experts. According to notes Smith-Osborne (2007), resilience was theory that has been developed in context of development psychopathology and colored by ecosystem perspective, stress theory, as well as coping. In 1980, resilience more developed to be research topic and theoretical analysis; and one of expert in the era 2000 consistently continues a variety of resilience researches was Michael Ungar [5].

In journey of resilience development, there were so many definitions formulated by many experts. Some among others were, Grothberg [3] proposed that resilience was human's ability to face, overcome, find strength and competence to achieve self-transformation after experiencing adversity (suffering) [13]. Krovetz [7] proposed that resilience was competence to rise up stronger back successfully although risk exposure was strong.

Henderson and Milstein (2003) proposed Wolins's opinion (1993), Rirkin and Hoopman (1991), Richardson et al (1990), as follows: According to Wolins (1993), resilience was capacity to rise up/strong back, to avoid difficulty, and to improve self. According to Rirkin and Hoopman (1991) resilience was capacity to bounce, to adapt successfully in context of suffering endurance, and developing social, academic, and occupation competences, although experiencing stress. Richardson et al (1990) defined resilience as coping of disturbing life event, full of stress, or lived events challenges in a way of sharing individual coping skill as well as additional protection than ever on trouble caused by the event [7].

Resilience had bi-dimensional construct, proposed by Nasution [14] as follows: a. Owning too long suffering. Someone could be told to have achieved resilience if he ever experienced an event causing continuously suffered life, b. Manifestation of success adapted if facing to risk (Luthar et al.; Masten; Rutter in Schoon [14]. Someone could be told to have achieved resilience if he had been already success to rise up of life suffering they experienced. The research conducted by Murad et al [11] in Universitas Negeri Medan showed that student's academic resilience increased through the application of ice breaking module learning done by lecturers of education psychology subject in Universitas Negeri Medan [15].

Based on some definitions above, it could be formulated conclusively that what was meant with resilience is someone's competence to adapt positively on challenge, hardy, faced suffering and desire to rise up back of down faced successfully, although in stressed situation.

Effort achieving student's higher academic resilience more than ever was emphasized primarily sourced from student's self-strength (I am) such as keeping self-confidence that he can achieves his academic achievement and optimism and has hope to reach their future time expectations. Maintaining responsibility and self-discipline of efforts that can be done by students (I can), students strike continuously to survive high academic resilience, like by increasing ability to communicate, problem solving competence, emotional regulation ability and impulses, understanding others such as friend's character, lecturer's character, also ability to maintain other's trust, for example in collaborating to complete group task. Students also

maintained conducive environmental factors (I have), such as health readiness, education support.

Studying on module effectiveness of this research findings showed that module was effective to increase student's academic resilience experiencing plateauing. Academic resilience as one of multi-resilience aspects, module effectiveness was classified enough to good (C+) with achievement 37302 (refer to range C: 25057 – 37584). This module had been verified its validity to increase student's academic resilience. Hereby, this module can be learning resources for educators in teaching and learning process to make students learning in context of increasing their academic resilience. This is critical condition/level that should be achieved with hope of causing positive impact for studying completion on time and within a very satisfied achievement level.

3.1 Dilemma Moral

Dilemma was situation providing only two ways of alternative action, where the both alternatives/choices together appeared hardy or unexpected thing, difficulty and confused situation. Dilemmatic meant having attributes dilemma, highly difficult and confused [6]. It could be understood that dilemma was situation making confuse in taking decision or determining into difficult two alternatives. For example, student had name/initial AA experiencing dilemma on what he must decide going homeland to help his mother preparing married party dan his older sister's party, with condition that his father had died so his back home was highly expected by his mother, or choosing to follow semester final test face to face directly with lecturers at the same week. To go homeland, he needed time for two days using bus transportation, meanwhile for flight transportation, his parent did not enough money to purchase flight ticket.

3.2 Moral dilemma as Efforts Increasing Academic Resilience

In cognitive theory, moral dilemma experience is part of process can or not moral judgment increases. The increase is happened following phases as follows:

- a. Individual has rich social interaction
- b. Rich social Interaction, appeared role taking
- c. Rich role taking will appears conflict socio-cognitive (called with other term, namely moral dilemma)
- d. Conflict socio-cognitive (dilemma)
- e. Conflict socio-cognitive (dilemma) completed with using mature moral judgment or higher than individual's moral judgment level at the time, consistently, so individual's moral judgment will increase.
- f. Hereby hence, individual who has capacity could achieves postconventional moral judgment level, and there were happened enrichment and intensity.

Based on the study results in relation to the module validity and effectiveness, validity in this research validated elements covered by academic resilience module. There were four elements becoming parameters/indicators covered by academic resilience module validity, such as material, verbal communication, appearances, and media elements. Generally,

validator evaluated the four elements of module to increase student's academic resilience classified averagely very good, but students were critical to increase their academic resilience.

4 Conclusion

Modul increasing the academic resilience by using this social - moral dilemma had fulfilled the requirements of a module validity. In trying out process there was also proved that this module was enough close to be effective in promoting the student's academic resilience, with achievement 37302 (refer to range C: 25257 – 37584). Student's academic resilience needed improvement efforts by students and if in campus we also needed improvement and conducive situation of all whole civitas academic. Based on those researches results, so module is able to increase student's academic resilience although student needs implementing reinforcement on academic resilience aspect.

Student's academic resilience problem needed the existence of this module to increase student's academic resilience who experience plateau by using the dilemma technique. To produce this guidance module in assisting student's development was conducted module validating in order to ensure module accountable to apply and to implement in lecturer's instruction process in their own classroom. This guidance module was also utilized by Counseling Centre in Universitas Negeri Medan.

References

- [1] Arikunto, S. (2011). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- [2] Cassidy, S. (2016). The Academic Resilience Scale (ARS-30): A Multidimensional Construct Measure. *Frontiers in Psychology*, 7, 1787. <https://doi.org/10.3389/fpsyg.2016.01787>
- [3] Grotberg, E. H. (1999). *Tapping Your Inner Strength*. Oakland: New Harbinger Publications, Inc.
- [4] Henderson, N., & Milstein, M. M. (2003). *Resiliency In Schools: Make It Happen For Students And Educators*. California: Corwin Press, Inc.
- [5] Hendriani, W. (2018). *Resiliensi Psikologis: Sebuah Pengantar*. Jakarta: Prenadamedia Group.
- [6] Kamus Besar Bahasa Indonesia. (2007). Jakarta: Pustaka Phoenix.
- [7] Krovetz, M. L. (1999). *Fostering Resiliency*. California: Corwin Press, Inc.
- [8] Menanti, A., & Murad, A. (2023). Analisis Plateauing Dan Kompetensi Aktual-Ideal Mahasiswa FIP UNIMED Dalam Menerapkan Layanan Bimbingan-Konseling Terintegrasi Pada Pembelajaran Yang Dilakukan Oleh Guru. Research Report. Medan: Universitas Negeri Medan.
- [9] Menanti, A., Murad, A., & Nurmaniah. (2019). Analisis Peran Konselor Sebaya Dalam Peningkatan Resiliensi Mahasiswa Bermasalah Pada Prodi BK FIP UNIMED. Research Report. Medan: Universitas Negeri Medan.
- [10] Menanti, A., & Rekan-rekan. (2017). *Resiliensi Dianalisis Dari Lokus Kontrol Mahasiswa Prodi BK FIP UNIMED*. Medan: Unimed.

- [11] Murad, A., Gultom, I., & Menanti, A. (2024). Pengembangan Modul Untuk Meningkatkan Multiresiliensi Mahasiswa Yang Mengalami Plateau Dengan Menggunakan Teknik Dilema Serta Implementasinya Pada Pemberian Bimbingan-Konseling Oleh Konselor Sebaya Unimed. Research Report. Medan: Universitas Negeri Medan.
- [12] Murad, A., & Menanti, A. (2023). Validating Ice Breaking Module in Learning to Increase Student's Pedagogical Academic Resilience in Universitas Negeri Medan. International Journal of Innovative Science and Research Technology, 8(11). <https://www.ijisrt.com>
- [13] Murad, A., Gultom, I., & Zainudin. (2023). Pengembangan Modul Ice Breaking Dalam Pembelajaran Untuk Meningkatkan Resiliensi Akademik Mahasiswa Jalur Kependidikan Di Universitas Negeri Medan. Research Report. Medan: Universitas Negeri Medan.
- [14] Nasution, M. (2011). Resiliensi: Daya Pegas Menghadapi Trauma Kehidupan. Medan: USU Press.
- [15] Reivich, K., & Shatté, A. (2002). The Resilience Factor: 7 Keys To Finding Your Inner Strength And Overcoming Life's Hurdles. New York: Broadway Books.
- [16] Sugiyono. (2018). Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.