

## **The Model of Academic Guidance to Improve Student Achievement Motivation in Higher Education**

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**Abstract:** This research is based on an empirical finding which shows that the level of student achievement motivation in STMIK AKBA in fair category. The purpose of this study is to obtain a description of the implementation of academic guidance and the level of students' motivation at STMIK AKBA. It is also to produce an effective model of academic guidance to improve student achievement motivation. This research was a Research and Development (R&D). The process of developing the model refers to the theory of development research proposed by Borg and Gall with four stages, namely: preliminary study, designing, validation and try out. The results of the model development are in the form of academic guidance books, a guidebook for lecturers as the academic adviser and module materials for students. In the hypothesis test, it is showed that all aspects of achievement motivation of students ranging from achievement syndrome, self-study, goal setting and interpersonal support had increased significantly after the intervention in the form of guidance with an academic guidance model to improve the achievement motivation of students. The results of data analysis also showed that all aspects of achievement motivation get significant value. Thus, the model of academic guidance to improve student achievement motivation can improve student achievement motivation in higher education.

**Key words:** Research development, achievement, motivation, academic guidance model, value

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### **INTRODUCTION**

Motivation is a crucial factor in the teaching because it can be the foundation for students to succeed. By having high motivation, learners will have a good characteristic. They will have the spirit of the life. They will be optimistic, realistic, confident and happy. They are always trying to be successful. They will have awareness in action and have a sense of responsibility. In addition, they will be able to take into account toward the risks of their action.

Various studies in the psychology in terms of motivation found that motivation which is believed to affect the achievement and the success of a person is achievement motivation. It is in line with what is proposed by McClelland and Atkinson that:

“The most important motivation in educational psychology is achievement motivation, where someone is struggling to achieve success or choosing an activity-oriented for the purpose of success or failure. The purpose or goal becomes motivation for them to meet a need”.

The reality in the field shows that there are still many students who have low achievement motivation as stated by Winkel that the symptoms alarming enough in

education are motivation crisis. Some symptoms indicate the motivation crisis according to Winkel. The attention to the learning time decreases. There is an omission in doing assignments and homework. There is a delay in preparedness of quiz or examination. There is a view as long as pass and as long as enough. Thus, it causes the low level of achievement of some students. In addition, the level of drop-out rate and the number of students who are not active in most universities are also high.

The lack of motivation can influence student achievement in low academic performance as demonstrated by the results of research conducted by Uguroglu and Walberg. The results showed that the achievement motivation and academic achievement have a reciprocal relationship very closely (Handoko, 1998). Educational experts such as McClelland, Bandura, Bloom, Weiner, Fyans and Maerh undertake their research on the role of motivation in learning and they found interesting results. Studies conducted by Fyans and Maerh show that the three factors, namely family background, school context and motivation are the best predictor of student achievement. Walberg concluded that motivation contributes between 11-20% of learning achievement. Moreover, McClelland showed that achievement motivation has contributed to 64% of student

achievement. The study conducted by Suciati concluded that the contribution of motivation is 36% towards students' achievement. The research conducted by Arifin (2008) concluded that motivation significantly influences student achievement at Computer Engineering Department at the Academy of Computer Science AKBA.

Achievement motivation can be improved. According to Woolfolk (1995), an approach to improve motivation is a behavioral approach. In the view of behavioral learning, people learn in different ways namely learning through signal according to Pavlo, learning through reinforcement according to Skinner and learning from the model according to Bandura. In all conceptions, the paradigms Stimulus-Response (S-R) are held. Each conception explains in what way the relationship between stimulus and reaction through a learning process will be established.

McClelland and Murray have also introduced a model of education or training that can be used to enhance the achievement motivation. The training is known as the Achievement Motivation Training (AMT). This ATM is oriented to increase motivation to achieve the objectives that have been determined based on the ability of the individual. In other words, ATM gives awareness to someone to find out its potential, as well as a passion for achievement as much as possible.

According to McClelland and Winter, the Achievement Motivation Training materials can be grouped into four basic classes, namely: achievement syndrome, self-study, goal setting and interpersonal support.

Material about achievement syndrome is an introduction to the concept of material motives and achievement motivation. Through achievement syndrome material, an understanding and introduction to achievement motivation and habituation to use the understanding of achievement motivation in any behavior are given so that the students have behavior that is oriented to achievement behavior. The self-study material is directed to provide more opportunities to learn by themselves. This material is also directed to know what is needed, what is owned, how the state of the environment by assessing the strengths and weaknesses that exist in themselves, what is the purpose of life, norms and values of life in the neighborhood. Material about goal setting is directed to evoke responses that are known in dealing with the students' task or situation. Goal setting is the determination of what is trying to achieve. On the material of interpersonal support, it is discussed human as the subject of a dynamic who can influence and can help each other. The contact that occurs among humans will determine the maturation process of human development.

Considering the importance of achievement motivation for learners, some efforts are needed to improve achievement motivation for learners as educational objectives in Act No. 20 of 2003 on National Education System, Article 3 as follows.

"The National Education functions to develop the capability, character and civilization of the nation for enhancing its intellectual capacity and is aimed at developing learners 'potentials so that they become persons imbued with human values who are faithful and pious to one and only God; who possess morals and noble character; who are healthy, knowledgeable, competent, creative, independent and as citizens, are democratic and responsible".

Lecturers in their capacity as an academic adviser has a very strategic role in building and improving student motivation. They act as motivator, resources, advisor, mentor and facilitator as well as a model for their students.

According to Winkel and Hastuti, the term "guidance" have a relationship with the "guiding". It means showing the way, leading, conducting, giving instruction and advising giving advice. More specifically, Good gives the definition of guidance to students at universities as follows: "individual and group service in higher education of a consultative nature primarily concerned with the total welfare of the students such as educational and vocational counseling, student employment and housing service, students advisement and coordination organization" (Good, 1973).

Based on some opinions about the meaning of the guidance as mentioned above, guidance that is intended in this study is a kind of support services such as counseling that is systematic, programmatic and continuity of the academic adviser to the guiding students to improve the achievement motivation of students.

There are some previous researches related to academic advising. The research conducted by Hafiuddin and NurHasyim shows that academic advising has a crucial role and the role can motivate students to learn. Nurhayati (2010) show that the model of academic guidance is effective to improve students' skills in learning and independent learning. Research conducted by Stacey (2010) showed that if an institution plans to continue the mentoring program, then the agency should seek to strengthen the effectiveness and restructure the provision of guidance services more effectively and efficiently who meet higher education needs and college student. Ahman found that the academic guidance needs to be intensified by applying the principles of an ideal guidance to meet the demands of a higher education.

Academic advising that is programmed systematically and continuously will affect functionally to the academic adviser to help students who have a particular problem in a matter of motivation. According to Sidjabat, universities should be able to organize the learning process and academic advising services to students in accordance with the development of their age, especially in the effort to improve their motivation of underachievement.

The finding of this study indicates that the academic advising services in STMIK AKBA which took place during the time according to students, lecturers and leadership have not been optimal in increasing student achievement motivation. This finding becomes factor, challenge, foundation and material input how the researchers create a model for more effective guidance that can be implemented by the academic advisers to their students as expected by the leaders and lecturers as well as students' needs. Thus, the model of academic guidance is created to be an alternative model to freshen the saturation faced by the academic advisers in terms of the guidance system that has been going on all this time. In addition, it becomes a medium to develop skills in the field of mentoring to the students so that the task of becoming an academic adviser who has been in the decree is not just a formality. The implementation of academic advising will be more functional in accordance with the needs of students, university and leadership. However, it does not mean that they would change the system of academic advising revolutionarily and gradually. It is only to increase the quality of the guidance in response to student needs that arise from the lack of motivation of their achievement.

On the basis of the above reasons, then a model of academic guidance to improve student achievement motivation in STMIK AKBA is drafted.

## **MATERIALS AND METHODS**

This research applied research and development. It is a method used to produce a specific product and test the effectiveness of the product.

The procedures of the development in this study consisted of four stages, namely preliminary study, design, validation and test. The product that is tested in this study is a model of academic guidance to improve student achievement motivation that is also called BA-MMB Model and the device is in the form of guide books for academic advisers and module materials for students. This model was tested during six meetings and six academic advisers facilitated its implementation. The subjects of this study were 80 students in STMIK

AKBA who were divided into two classes. The 40 students were in control class and 40 students were in experimental class.

There are two types of data obtained in this study namely primary data and secondary data. The primary data were obtained through achievement motivation scale as the main instrument to determine the level of achievement motivation of students. They were also obtained from the interviews with academic advisers and leadership about the implementation of academic guidance in STMIK AKBA. In addition, they were obtained from the observation of field test process as material for improvement models. Secondary data were obtained from the literature, journals, scientific articles and others.

Data were analyzed in three phases. The first phase of data analysis was performed quantitatively and qualitatively. The quantitative procedure was performed by calculating the percentage level of achievement motivation of students. The procedure was to interpret the qualitative description of conditions on the need to increase achievement motivation, academic advising and the supports from the university leaders. The second phase of the data analysis was conducted by using qualitative procedures by assessing objective conditions of the students' needs about the increase of achievement motivation and academic guidance service as a basis for formulating the draft of BA-MMB Model. The third phase of the data analysis was conducted by using qualitative and quantitative procedures. Qualitative analysis was performed by examining the implementation process models and used as a basis for developing the final model of BA-MMB. Quantitative analysis was performed by calculating the percentage of achievement motivation level of students before doing treatment (pre-test) and the condition after receiving treatment (post-test) using a statistical test by using t-test correlated. The use of t-test was used to test the hypothesis of comparative average by comparing before and after treatment.

## **RESULTS AND DISCUSSION**

**Phase 1 (preliminary study):** There are three findings at this phase. The first finding shows that academic guidance services implemented so far have not been satisfactory except guidance at the beginning of the semester in terms of signing study plan card. Other guidance services either the guidance given throughout the semester or the guidance given at the end of the semester are not running properly as specified in the guidelines for academic guidance given to each academic

adviser. Some factors cause why academic counseling service is not running. First, there is no a willingness of academic advisors to provide guidance seriously. Second, the ability of academic advisor to guide students still limited. Third, there is a lack of control and concern given by the leaders of the university. Fourth, there is a lack of moral and material support provided by the leaders to improve academic guidance services, either in the form of financial incentives or the supports for developing the personal capabilities of the advisors in the form of training to improve the ability to guide the students, especially for new lecturers. Fifth, guiding ability possessed by the lecturers is only obtained from their experience. Sixth, there is a lack of appreciation for the academic advisors who have been performing a useful guidance. The second finding shows that according to the university leaders, academic guidance is not yet entirely satisfactory except the guidance at the beginning of the semester when the signings of KRS. This is consistent with the recognition of the academic advisor itself. The leaders consider that the task becoming academic advisor is a task that is attached to the predicate as lecturers so that it can be performed without incentives. In addition, the leaders have been trying to develop the ability of the advisors by conducting training although it is not a special training to improve the ability to guide the students. They promised that they would support morally and materially the programs that can improve the quality of college academic guidance services in particular. The third finding in this phase shows that from the preliminary study, it is found that the level of achievement motivation of the students at STMIK AKBA is still in fair category (66%) in almost every aspect of achievement motivation that is the studied, although they have received academic guidance from their academic advisors respectively.

**Phase 2 (designing):** The designing phase consists of designing book for academic guidance models, the designing of guidebook for academic advisors and designing modules and materials for students. The research instrument is achievement motivation questioner.

The design of the model book covers rational, supporting theory, the purpose of model development, syntax or the stages of the guidance starting from the pre-guidance, the beginning of the guidance, the core of the guidance, closure guidance and post-counseling or evaluation guidance, target guidance, technique of guidance, time of guidance, counseling strategies and the material of guidance. The design guide book for lecturers (academic advisors) consists of general guidelines, a special guide that consists of pre-guidance, beginning of guidance, the core of guidance, closure guidance,

post-counseling and evaluation. The design of the module materials for students consists of four modules. The first module is achievement syndrome, the second module is self-study, the third module is goal setting and the last module is interpersonal support. The design of motivation questionnaire is based on material in the Achievement Motivation Training (AMT) as proposed by McClelland and Winter, namely, Achievement Syndrome, Self-Study, Goal Setting and Interpersonal Support.

**Phase 3 (validation):** Three people perform validation of the model. They are two experts in the field of guidance and counseling (Professors) and one practitioner (motivator).

The results of validation conducted by the experts are as follows. First, the abbreviation MBAMMBM is changed to BA-MMB. Second, the design and the cover of the guidebook are replaced with pictures and illustrations with clearer philosophy. Third, there are still some typos. In addition, the results of validation conducted by the motivator of a practitioner are as follows. First, the sheets of exercises consisted of "Fine Me Out" "Who Am I" and "My Plan" should be attached to the guide book for academic advisors. Second, the video that will be displayed should have a title. Third, there are many typos. The results of the instrument validation study are that from 113 statements only 86 statements that are considered to be relevant to the issues that are measured.

**Phase 4 (Try out):** Try out is conducted for six sessions starting from March 25 April to 28 April 2016. Six academic advisors perform it. The results of the tryout in the form of testing the effectiveness of the BA-MMB Model are conducted by using statistical t-test. The research hypotheses are formulated as follows: "Academic Guidance Model to Improve Student Achievement Motivation in Higher Education."

- $H_0$ : there is no difference in improving standards of achievement motivation between experimental and control class after following the guidance with the BA-MMB Model.  $H_1$ : there is a difference in improving standards of achievement motivation between experimental and control class after following the guidance with the BA-MMB Model

Testing criteria state that if the probability or significant values  $>0.05$ , the null hypothesis ( $H_0$ ) is accepted but if the probability or the significance values  $<0.05$ , the null hypothesis ( $H_0$ ) is rejected. The results of the analysis of the tryout are described as follows.

The analysis of the improvement of the students' achievement motivation from pre-test to the post-test partially for control class. Based on the results of the descriptive analysis, it shows that the average value of pre-test for the achievement syndrome aspect in the control class in which the number of students is 40 is 61.32 and the mean value in the post-test is 61.32 (the improvement is 0%). The average value of pre-test for the aspects of self study is 77.67 and the post-test is 77.72 (the improvement is 0.05%). The mean value of pre-test for the goal setting aspects is 72.62 and the post-test is 72.72 (the improvement is 0.1%). The average value of pre-test for the interpersonal support aspects is 85.72 and the post-test is 85.92 (the improvement is 0.2%).

Based on the analysis above, it is found that the value of  $t_{\text{count}}$  for self study aspects is -0.628, goal setting aspect is -0.662 and the aspects of interpersonal support is -0.465 while the  $t_{\text{table}}$  value is -2.021. It is also found that  $t_{\text{count}} > t_{\text{table}}$  ( $t\text{-value} > -2.042$ ). It means that  $H_0$  is accepted and  $H_1$  is rejected. The significance values are 0.534; 0.512; 0.644. In this case, the significance values are greater than the predetermined alpha 0.05. Because the significance value (0.534; 0.512; 0.644 > 0.05), then  $H_0$  is accepted and  $H_1$  is rejected. It means that there is no difference in scores before and after treatment.

The analysis of the improvement of the students' achievement motivation from pre-test to the post-test partially for the experimental class. Based on the results of the descriptive analysis, it shows that the average value of pre-test for the achievement syndrome aspect in the experimental class in which the number of students is 40 is 60.27 and the average value in the post-test is 65.02 (the improvement is 4.75%). The average value of pre-test for the aspects of self study is 78.52 and the post-test is 80.47 (the improvement is 1.95%). The average value of pre-test for the goal setting aspects is 72.65 and the post-test is 74.25 (the improvement is 1.6%). The average value of pre-test for the Interpersonal Support aspects is 84.55 and the post-test is 90.25 (the improvement is 5.7%).

Based on the analysis Table 1, it is found that the value of  $t_{\text{count}}$  for achievement syndrome aspect is -8.033, self-study aspect is -2.327, goal setting aspect is -2.046 and the aspects of interpersonal support is -5.582 while the  $t_{\text{table}}$  value is -2.021. It is also found that  $t_{\text{count}} > t_{\text{table}}$  ( $t\text{-value} > -2.042$ ). It means that  $H_0$  and  $H_1$  are accepted. The significance values are 0.534; 0.512; 0.644. In this case, the significance values are greater than the predetermined alpha 0.05. Because the significance value is 0.000; 0.025; 0.047; 0.000 < 0.05, then  $H_1$  is accepted and  $H_0$  is rejected. It means that there is no difference in scores before and after treatment.

The analysis of the improvement of the students' achievement motivation from pre-test to the post-test simultaneously for the control class. Based on the results of descriptive analysis, it shows that the average value of pre-test with 40 respondents is 60.27, the median is 297.00, the mode is 295.00, the standard deviation is 22.20, the Variance is 493.20, the range is 116.00, the minimum score is 242.00 and the maximum score is 358.00. Furthermore, the average value of posttest with 40 respondents is 297.70, the median is 296.00, the mode is 295.00, the standard deviation is 22.41, the Variance is 502.57, the range is 121.00, the minimum score is 244.00 and the maximum score is 365.00.

The analysis of the improvement of motivation from pre-test to post-test in control class. Based on the results of the descriptive analysis, it shows that the average value for the pre-test in which the number of students is 40 is 297.35 and the mean for the post-test is 297.70 (the improvement is 0.35%). For more detail, it can be seen in Table 2.

Based on the analysis Table 3, it is found that  $t$  value for the control class is -0.657 while the value of  $t_{\text{table}}$  is -2.021. Because the results of analysis of the value of the  $t_{\text{count}} > t_{\text{table}}$  ( $t\text{-value} > -2.042$ ), it can be concluded that  $H_0$  is accepted and  $H_1$  is rejected. Based on the significance value, it is obtained 0.515, in this case, the significance value is greater than alpha (0.05) which has been determined. Because of the significant value (0.515 > 0.05), then  $H_0$  is accepted and  $H_1$  is rejected. It means that there is no difference between the value before and after treatment.

The results of the analysis for the improvement motivation from pre-test to post-test Simultaneously in the experimental class. Based on the results of descriptive analysis, it shows that the average value of pre-test with 40 respondents is 296.00, the median is 296.00, the mode is 292.00, the standard deviation is 10.31, the variance is 106.410, the range is 47.00, the minimum score is 270 and the maximum score is 317. Furthermore, the average value of posttest with 40 respondents is 310.00, the median is 310.00, the mode is 314.00, the standard deviation is 10.58, the variance is 111.94, the range is 52.00, the minimum score is 287.00 and the maximum score is 339.00.

Based on the results of the descriptive analysis, it shows that the average value of pre-test with 40 respondents is 296.00 and the post-test is 310.00 (the improvement is 14%).

Based on the analysis Table 4 and 5 it is found that  $t$ -value for the control class is -9.278 while the value of  $t_{\text{table}}$  is -2.021. Because the results of analysis of the value of the  $t_{\text{count}} > t_{\text{table}}$  ( $t\text{-value} > -2.042$ ), it can be concluded that  $H_0$  is accepted and  $H_1$  is rejected. Based on the

Table 1: The improvement of student achievement motivation (from pre to post-test)

Case study	Paired differences			95% confidence interval of the difference		t-values	Sig. (2-tailed)
	Mean	SD	SE mean	Lower	Upper		
Pair 2: pre-test self study post-test Self study	-0.05000	0.50383	0.07966	-0.21113	0.11113	-0.628	0.534
Pair 3: Pre-test goal setting post-test goal setting)	-0.10000	0.95542	0.15106	-0.40556	0.20556	-0.662	0.512
Pair 4: pre-test interpersonal support post-test interpersonal support	-0.20000	2.71935	0.42997	-1.06969	0.66969	-0.465	0.644

Table 2: The improvement of student achievement motivation (from pre-test to post-test in control class)

Test	Paired samples statistics			
	Mean	N	SD	SE mean
Pair 1: pre-test control	297.3500	40	22.20828	3.51144
Post-test control	297.7000	40	22.41817	3.54462

Table 3: Analysis of the difference for the improvement of student achievement motivation (pretest and post test results in control class)

Case study	Paired differences			95% confidence interval of the difference		t-value	df	Sig. (2-tailed)
	Mean	SD	SE mean	Lower	Upper			
Pair 1: pre-test control post-test control	-0.35000	3.37069	0.53295	-1.42800	0.72800	-0.657	39	0.515

Table 4: The improvement of student achievement motivation (from pretest to post-test in experimental class)

Test	Paired Samples statistics			
	Mean	N	SD	SE mean
Pair 1: free-testexperiment	296.0000	40	10.31553	1.63103
posttest experiment	310.0000	40	10.58058	1.67294

Table 5: Analysis of the difference for the improvement of student achievement motivation (pretest and post test results in experimental class)

Case study	Paired differences			95% confidence interval of the difference		t-value	df	Sig. (2-tailed)
	Mean	SD	SE mean	Lower	Upper			
Pair 1: free-test experiment post-test experiment	-14.00000	9.54342	1.50895	-17.05213	-10.94787	-9.278	39	0.000

significance value, it is obtained 0.515, in this case, the significance value is greater than alpha (0.05) which has been determined. Because of the significant value (0.515 > 0.05), then  $H_a$  is accepted and  $H_0$  is rejected. It means that there is a difference between the value before and after treatment.

Academic advising models developed in the study can improve student achievement motivation. Achievement motivation is crucial to be developed on student self because with high achievement motivation the students will grow as a person who has the characteristic, has the spirit of the great life, optimistic, happy learning, always trying to be successful, have awareness in action, have a sense of responsibility, realistic, confident and able to take into account the risks of their actions.

Murray, who uses the term need for achievement states that individuals who have the motivation to excel

in a high learning will tend to have a high level of confidence, have a responsibility, always trying to reach their achievement, active in social life, choose a friend who is an expert rather than just a friend and resistant to pressure. Individuals who have these characteristics have dynamics behavior that stands out. They are always working by considering the risk. They do not like to do tasks that are too easy because it will not give satisfaction. Besides, they also do not like a task that is always difficult, because the chances of success are small and the task was out of their ability. Therefore, the individuals will tend to set a goal that is comparable to its own merits. They prefer a task that demands personal responsibility. They also have a strong urge immediately to know the real result of their actions, because it can be used as a feedback to fix the mistakes that have been done and it can encourage to do their best.

Achievement motivation is manifested in the form of efforts and learning activities that are effective to affect the optimization of potential owned by the learners. Thus, the learning activities will be successful when individuals are encouraged to learn. By having the achievement motivation, the students will create ideas, desire and effort to learn effectively and efficiently. The higher the student achievement motivation, the better the students acquire academic achievement. The lower the student achievement motivation, the lower the student academic achievement obtained. In this case, the student with high achievement motivation will successfully understand or obtain academic achievement that tends to be high. On the contrary, the students with low achievement motivation will tend to receive the low academic achievement.

The university is the highest level in the education system. If institutions of higher learning are not maximally successful in forging and developing student achievement motivation, then it will lose the momentum to create a generation that has a high spirit of achievement both intellectually and emotionally. Losing this momentum means losing some functions of the university. Therefore, in addition to organizing the classroom learning, the university also needs to provide academic guidance services that are not just there but its function is felt by students to support their learning success.

### CONCLUSION

After doing four stages of research development namely preliminary studies, designing, validation and try out, it can be concluded that:

- The implementation of academic advising in STMIK AKBA has not been accomplished in accordance with the provisions of the guidelines for academic guidance given to each academic advisor

- Academic advising models resulting from this research consists of three parts. The first is the model of academic guidance. The second is guidelines for academic advisors. The third is module materials for students
- Academic advising models generated from this study proved that it is effective to improve students' achievement motivation. The percentage of the influence of the model of academic guidance to improve the overall student achievement motivation aspects is 14%. The average score of the experimental class is 310,000 and the control class is 297.350.

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