

The application of structure equation modeling analysis for assessment and educational research

Augusto Da Costa^{*)}

Instituto Superior Cristal, Timor-Leste

^{*)}Corresponding author, ✉e-mail: adacostas3bk2015@gmail.com

Abstract

The purpose of this study is discovering and confirming the essential function of Structure Equation Modeling (SEM) Analysis for assessment and educational research. The literatures in regards to SEM analysis as method of assessment and educational research will be descriptive analyzed and explored in the light of meta-analysis. The result of the study shown that by using SEM analysis ones get empirical data and clear picture of student's need and do right assessment and research in education. The empirical data enable scholars and government to set new or revise current education program for the future. Therefore this result should be considered as important data for government, especially Education department to establish curriculum and planning strategy of teaching and learning which is conjunction with reality in the field. It means the education program that been established and will develop really match with real life and needs of student, society and the nation. So SEM analysis is important method for each researchers and scholars to run assessment and educational research now and beyond.

Keywords: Structure equation modeling, assessment, education, research.

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Introduction

Structural equation modeling (SEM) is a general method of data analysis that brings together path analysis and factor analysis. The path analysis specifies and tests a models of causal relationships among variables and to estimate direct and indirect effects. SEM uses traditional path analysis by estimating of full model simultaneously and providing overall measures of model fit (Hair et al, 2014). The factor analysis is to identify unobserved, latent variables that related between observed variables. SEM is a statistical technique that use to test hypothesis and to analysis a structural theory (Raykov and Marcoulides, 2006; Fadlemula, 2011). SEM been used to construct validation and theory development (Pedhazur & Pedhazur, 1991; Fadlemula, 2011). SEM emphasis on confirmatory factor analysis that been proposed a factor model and test to see whether the data is fits. Finally, SEM allows to combine path analysis and confirmatory factor analysis by testing models of causal relationships among hypothesized factors.

Mirroring on the title of articles there are three elements that need to be explore in this article such as SEM, educational assessment and educational research. Speaking about SEM analysis ones thinking are directly pointed to the highest and complicated method. The method that been used to analysis the data of social, economic, psychology and education since Wright (1918) in (Khine, 2013). For analysis the data of

genetic theory in biology has been created a path analysis (Teo & Khine, 2009). Since then SEM has been develop more rapidly in social science such as using AMOS (Analysis of Moment Structures) been developed (Arbuckle, 2006). Nowadays SEM takes essential place in multivariate statistical analysis.

Nowadays, SEM has become increasingly popular among researchers from many different disciplines. Interestingly that SEM has been growing numbers of software programs to apply SEM such as (AMOS, EQS, LISREL, and Mplus) (Ruiz et al, 2010; Brandmaier et al, 2013; Hair et al, 2014). Numerous graduate and postgraduate level courses were continuing education workshops to explain SEM. Many empirical works been published the researchers describe SEM results (Kline, 2011). This fact is proving that most of the data analytical techniques, such as confirmatory factor analysis, multiple regression, path analysis, and several analysis of variance as well as multivariate variance analysis, are special cases of structural equation modeling (Hayes, 2013).

In regards to the running program of SEM there are 6 basic steps that been formulated by Kline (2011) these steps are actually iterative because problems at alater step may require a return to an earlier step: (1) Specify the model. (2) Evaluate model identification (if not identified, go back to step 1). (3) Select the measures (operationalize the constructs) and collect, prepare, andscreen the data. (4) Estimate the model: (a) evaluate model fit (if poor, skip to step 5), (b) interpret parameter estimates, (c) consider equivalent or near-equivalent models (skip to step 6). (5) Re-specify the model (return to step 4). (6) Report the results. Without abandoned the other social science which use SEM as method of analyzing the data; this article more focus on the data of assessment and educational research.

The terms of evaluation or assessment are both in common using in education environment. In Timor Leste, both terms are using to describe two simultaneously attitude, assessment refer to judgment of students work, mean-while evaluation to refer to judgecourse/s delivery andthe process of judgments. That is how those both termswill be used in this article. Assessment isreferring to a judgment which can be justified according to specific weighted set goals, yielding either comparative or numerical ratings. It is necessary to justify (a) the data-gathering instruments, (b) the weightings and (c) the selection of goals (Scriven, 1967). It means assessment is essential part of running the education system.

Assessment is a process to obtain information relative to some goals. Assessment be understood also as ongoing process of: (a) establishing clear, explicit and measurable objectives of student learning, (b) ensuring and verifying the program is designed to foster students learning and opportunities to gain those objectives, (c) systematically gathering, analyzing, and interpreting data that indicate student ability to determine student ability in learning conjunction to education institute's expectations, (d) using the resulting information to understand, to foster and to elevate student learning. Assessment be formulated that expectation outcomes of student learning at all levels of education system and of all programs that address to foster student learning and development. The result of assessment providesfact that students are achieving key institutional and program learning outcomes (López & Garcia, 2014). It will be used to improve student teaching and learning.

There are two types of assessment test and non-test. Assessment non-test be conducted without using instrument such as observation and interview. Assessment test be done by instruments of test to get result of an education system that been implemented. Standard instruments refer to instruments such as rulers, scales, thermometers, pressure gauges, etc. Assessment is a broad term that includes testing. A test is a special form of assessment. Tests are assessments made under especially circumstances which be administered. Tests are assessments however not all assessments are tests. Testing be done at the end of a program (Kizlik, 2012). Assessment is a progress at the end of a school year by testing. Assessment is most usefully in related to some goal for which the assessment is designed.

Validity of instrument needs to be tested divergent and convergent validity. These both elements are important to be examined. However there is a lack of studies which examine and establish the convergent validity among creativity tests (Plucker & Maker, 2010; Yoon, 2017). Critical thinking are examples of studies attempting the validation of critical thinking as a subject-specific skill (Tiruneh et al, 2017), the primary purpose of assessment is to improve of student learning. The assessment process will highlight and promote those practices that are most effective, determine action for improvement where needed and

provide evidence of program quality and student learning. Assessment is essential element of education (Taras, 2005).

However, there is no evidence about the convergent validity between measurement tools of critical thinking. Even when convergent validity of critical thinking measurement tools is examined, it is not established on comparison of performances in critical thinking assessments (Ventista, 2018). The researchers tried to establish the criterion validity with comparing the performance of students with their grades of students in arts, in spite of another critical thinking assessment (Gelerstein et al, 2016).

Assessment yields information relative to goal. It means that assess to determine whether or not goal has been obtained. Assessment of skill attainment is rather straight achieved. Either the skill exists at some acceptable level or it does not. Assessment of understanding is much more difficult and complex (Kizlik, 2012). The Assessment could be done on a person's knowledge in a variety of ways. In the section on behavioral verbs is to assess means the conditions by which the behavior specified in goal may be exacted.

Based on the result of assessment government or those in charge of education responsibility should be provide a good system of teaching and learning to create and to elevate student's skill. It will facilitate student to able to adapt with gadget era. Student must be critical and creative thinking in face this development (Berliner, 2011). Those activities exist during the learning process be named assessment (Dylan Wiliam, 2011).

Furthermore, economies, societies and psychologies aspects nowadays are changing rapidly, therefore schooling must be prepared learners to deal with specific problems (Chiu, 2016). In spite of timing learners will finish their study, there areraisednew problems to be solved. It means they should be able to critically approach these issues and generate solutions creatively (Ventista, 2018). Nowadays, particularly in the English-speaking research has been an increasing tendency to understand activities that are provided to guide the learning towards the goals. The one spesific goal of education is outcomes of the student learning.

Learning outcomes becomesfundamental key to a meaningful education. The focusing on learning outcomes is essential elementsto inform diagnosis and improve processes of teaching and student learning. Meanwhile there is a long tradition of discovering learning outcomes which named assessment. Assessment that been running within institutions courses and programs, emphasis on learning outcomes has become more important in current years (Marshall, 2009). The steps assessment: (1) determine goals and objectives, (2) checking alignment between the curriculum and objectives, (3) develop a meaningful, manageable, and sustainable assessment plan, (4) collect assessment data, (5) close the loop–collective reflection and action, (6) Routinely examine the assessment process. Interesting on developing comparative measures of learning outcomes has increased also in response to a range of higher education trends, challenges and paradigm shifts (Tremblay, 2012).

Australian Learning and Teaching Council, (2010) presented seven key points to guide assessment in light of increasing focus on standards, and to address criticisms of current practice. It sets directions for change designed to enhance learning achievements for all students. Students be able to improve the quality of their experience (Faulkner, 2017). The seven key points states that assessment has most effect when assessment is used to: (1) engage students in learning that is proactive, (2) actively improve student learning, (3) facilitate student and teachers become responsible partners in learning and assessment, (4) help students to induct into the assessment practices and cultures of higher education, (5) assessment for learning is placed at the centerof subject and program design, (6) assessment for learning is a focus for staff and institutional development, (7) assessment provides inclusive and trustworthy representation of student achievement.

Based on the description of the assessment by some researchers, would be formulated that assessment is ongoing process of education system such as teaching and learning circle. Assessment be needed to courage teacher/lectures and student to be partner in learning process. It will be able student to proactive in learning to improve the skill, knowledge, critical thinking ability to achieve best outcomes of learning.

Education becomes essential part of the human race, without gaining good education ones will not be fully function in socially life (Scott & Usher, 2011). To provide best education systemand curriculum for

the learners, government and education institution need to do educational research. Education research is the scientific study to exam the education and learning processes. The learning process expresses in human attributes, interactions, organizations, and institutions which provide and shape educational outcomes (Smeyers & Depaepe, 2010). Scholars endeavor to describe, understand, and explain how learning should takes place throughout the life. How ones be educated in formal and informal education contexts that affect all forms of learning.

Education research involve the full spectrum of fabulous methods appropriate to the questions that being asked and also engage the development of new tools and methods (Greeno, 2006). Developing new tools and method are one advance step in research, however should be started from many basic ideas and concepts that involved in educational research (Chiu, 2016). Those concepts that been included in educational research as follows: quantitative, qualitative, R&D, hypotheses, population, sampling, variables, indicator, item, measurement, exploratory factor analysis, confirmatory factor analysis, validity, reliability, correlation, simple regression, multi regression, Path Analysis, SEM and so on (OECD, 2009).

Process of educational research also need certain skills that will enhance researchers' ability to understand and master the research process (Reason & Bradbury, 2006). These include such things as how to select a research problem, formulate a hypothesis, conduct a literature search, choose population and sample, define words and phrases clearly, develop a valid instrument, and many other steps that needs to take place (SAS, 2003). Regardless of the methodology a researcher uses, all of these skills are important to master a research. Mentioning also the ethical aspects and implications involved in conducting of research itself (Maxwell, 2004). The ethical and aspect that involved in research such as citation and quotation, should according to the rule of it.

Based on the description about educational resercah can be conclude that educational research is essential and central part of education system, program and process. Education research are integral and central part of education system because of conducting educational research new and affective instruments an methods of education can be discover. Scholars and government has responsibility to promote and to embraces each one who are conducting educational research.

Method

This study is literature study that uses meta-analysis to explore and to discover the function of SEM analysis in assessment and educational research. Study been done by analyzing the literature of SEM analysis, assessment and educational research that provided in books and international journal. First of all Study been done about literature that describe all the aspect of SEM including important steps and points. This same processtudy also been done toward assessment and educational research.

Result and Discussion

The literature study towards SEM analysis, Assessment and educational research discovered four essential points: (1) SEM analysis is best method to discover and confirm detail and specific the empirical data of research. (2) Assessment is one way of research to discover and to get empirical data and clear information of education program that has been done by education institutions. (3) Educational research is the study that been taken place in education circumstances to get and to develop effective tools and methods of education. (4) SEM analysis becomes a best method in conducting assessment and educational research.

Based on the literature study towards application of SEM analysis for assessment and educational research there are three points (SEM, Assessment and research) need to be discussed.

First of all, SEM is clear and detail and exact method of analyzing data in regards to any social science topic, economic, psychology, politic even biology and health. SEM embraces all aspect that form and include in quantitative research. SEM presents empirical data more detail and explicit, from the correlation between items, indicators, variables, item to indicators and variables. That is why SEM be name best method of the statistical data analysis at present moment probably unto beyond. However SEM

has limitation in providing and in conveying the information. The limitation is focus only on statistical data (numerical, nominal and scale), out of the numerical data such observation and interview as even documentation (pictures) could not be able to analysis.

Secondly, assessment be understood that an ongoing process of getting and collecting information that becomes empirical data do establish or revise any existing programs, especially in education circumstances. By assessment conductors of assessment be able to distribute questions in frame on test, and observe and interview to collect the correlation data in terms of non-test. Using assessment education people be able to identify the needs of learners and to discover the strength or advantage of learners. These data will help educators to create education programs and system that match with the needs of learners in all education levels. Means the program that being established based on assessment there are small possibilities to fail. Because the program is creating and establishing based on empirical data from the field no according to the will of educators. It will be able learners to enjoy with teaching and learning process because program is matching with learners ability and capacity. This point is conjunction with teaching of the Vygotsky (in Hitepeuw, 2009) that program been established no too far from the initial ability of learners, learners will enjoy the program and will succeed in teaching and learning process. Mirroring of this fact all educators must integrate assessment effectively in education program and system to establish program based on characteristic learners and program.

Finally, education research means an effort that been done, is doing and will be running in all education system. Educational research is essential element of the education system and program, because by research education institute and government be able to revise, to increase and to provide valid and reliable tools and methods of education. At this point educators and government be enriched experiences of education and enable to establish effective education program to educate learners and all citizens and further research in various fields.

Conclusion

Based on the all process of study including result, could be concluded that application of SEM analysis of assessment and educational research are most important. SEM analysis contribute an empirical data by analyzing the collected data. Assessment is collecting empirical data by test and non-test methods to establish effective program by considering characters of learners and characters of program. It will facilitate learners to enjoy the program, means learners and educators will success in the process of teaching and learning. Educational research is essential and fundamental element of education system and program, because it provide effective tools and methods of education now unto beyond.

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Learning skills level on the young prisoners

Alizamar Alizamar ^{*)1}, Gusni Dian Suri², Mudjiran Mudjiran³, Syahniar Syahniar⁴, Afdal Afdal⁵
¹²³⁴⁵ Universitas Negeri Padang

*)Corresponding author, ✉e-mail: alizamar@konselor.org

Abstract

The future achievement of adolescent in correctional institutions is also required to assume education or learning. The purpose of this study was to describe learning skills of the young prisoners in correctional institution adolescent Tanjung Pati. This research used quantitative approaches with descriptive-quantitative method. The sample in this research consisted of 32 young prisoner. An analyze of the data used instruments learning skills of the young prisoners and analysis used is presentation. The research finding showed that learning skills of young prisoners at a medium level as many as 17 people with 73.91%, the very high level as many as 5 people with 21.74%, the low level as many as 1 people with 4.35%. The implication of this research is to describe learning skills young prisoners. In order, the results of this study could be data to assist the prisoners and coaching for solving their problems in learning.

Keywords: Learning skills, Young Prisoners

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Introduction

Adolescence is a period of change (Santrock, 2002; Linamarliyah, 2004; Kurniawan, 2009; Maslihah, 2011) from childhood to adulthood (Kartono, 2005; Laksmiwati, 2011; Batubara, 2016) which experiences development into all aspects or functions (Qomariyah, 2009). Adolescence is also know as a period of storm and stress, which is period of turbulence and conflict and mood changes (Payne, 2012; Arnett, 2006) some teenagers have not been able to control themselves well which leads to deviant behavior. Teenagers that behave deviantly because the lack or do not get love, care, guidance in developing attitudes, behaviors, adjustments, and supervision from parents, guardians, or foster parents will be easily dragged in the flow of community relations and an unhealthy environment and detrimental to development personal experience (Syamsiah, 2010). The negative experiences faced by teenagers who are dealing with the law are very diverse (Astuti, 2011; Fitriani, 2017). Children in conflict over the law (Sinaga, 2010; Sudarti, 2014).

The future achievements of adolescents (Shofia, 2009; Nasimah, 2009) who are in correctional institutions is also required to carry out education or learning, because education must be implemented at all levels of society from an early age, adolescence, adulthood, to old age, including life skills education for prisoners who are serving sentences in prisons. This is in agreement with Widari (2012) that the right of education of students in prison must be given even though they are undergoing coaching, the right to freedom is revoked. In the end, Akbar, Wijaya, & Alkonina (2014) in their research mentions non-formal

education programs in prisons, giving a very large contribution, especially for child inmates who should at the age of their formal education, but because of a crime, they have to be in prison.

Efforts to facilitate prisoners in solving learning problems can be through tutoring services. In this study, the objectives to be achieved related to aspects of learning are focused on developing learning skills. In the research, Sirait & Sewu (2015) found that there were concerns of assisted children when they were rejected by the community after completing the construction period, especially if the child was not equipped with skills. Then in terms of education which was interrupted, resulting in a lack of information obtained, plus LPKA was not allowed to use communication tools with the outside world. This is also an important factor for young prisoners in developing learning skills. The problem now is that there is no implementation of learning skills in LPKA Tanjung Pati, which is an important part of the learning process at LPKA. Initial interviews conducted with four prisoners in LPKA Tanjung Pati on July 20, 2017 found that generally they were less able to develop learning skills for their future provision after leaving / undergoing criminal time and also lack of information and learning that was obtained by them in developing learning skills.

Living the learning process is an important part (Tahar, 2006; Hakim, 2005) in learning activities in order to understand and master the subject matter well (Chrisnajanti, 2002, Muhson, 2009). The skills of each individual are needed so that the process becomes maximal and provides satisfactory results (Rahayu, et al, 2011; Kriswoyowati, 2011). Marshak & Burkle (in Juneja, 2016) states "Study skills can be defined as learned abilities essential to acquiring knowledge and competence. Study skills emphasize the process of learning. "Furthermore, Gall (1990: 17) stated " Study skills as the effective use of appropriate techniques for completing a learning task ". Furthermore, Surya (in Adiningtiyas, 2016; Sulistyowati, 2015) revealed that skills are neoromuscular activities. Learning skills is the ability to develop a framework of thinking, attitude and skill in a focused and directed way by doing an activity or deed.

Learning skills is very effective (Darmayanti, 2015) in understanding everyday lessons and to increase learning interest. This is also found in Juneja's (2016) study stating, "The evidence shows that there is a direct co-relation between the applications and academic and performance issues of students with learning issues in class. Group of 354 students between the age of 12 and 15, found that high-achieving students are able to recognize the use good good strategies and good good skills over effective effective learning "The "The aspects of learning skills according to Prayitno (1997: 89) namely (1) make a note of the teacher's teaching time (Siagian, 2015; Buzan, 2007), (2) make a summary of the material that is read (Warouw, 2010), (3) make a report (review report, discussion, implementation of certain activities), (4) developing ways to answer / solve test / exam questions, (5) compile papers, effective effective reading (oral and write), (7) ask effectively.

The Basic Concept Of Adolescents And Young Prisoners

Adolescence is one of the stages or phases of human development, which means growing into adulthood or developing into adulthood. According to WHO (in Sarwono, 2012), adolescence is a time when an individual develops from the first time he shows his secondary sexual signs of sexual maturity; individuals experience psychological development and patterns of identification of children reaching adulthood; there is a shift from full socio-economic dependence to relatively more independent conditions. Furthermore, De Brun (in Jahja, 2013) defines adolescence as a period of growth between childhood and adulthood. In line with this opinion, Papalia, Olds & Feldman (2009: 8) also explained that "Adolescence is the transition of the development period between childhood to adulthood, which includes major changes in physical, cognitive, and psychosocial aspects, which generally begin at age 11 or 12 years and ends at the end of a dozen years or early twenties. " During the development of adolescents who experience a lot of changes and developments, it is not uncommon for teenagers to fall into negative directions, where they take actions that they should not do or deviant behavior.

The deviant behavior can be said to be a child's delinquency defined by Sarwono (2012: 252) as an act by an immature person who deliberately violates the law, and the act was known by a legal officer he can be used by punishment. Deviant or delinquent behavior of children in the form of narcotics uses and distribution, extortion and threats, rape, murder, mistreatment, theft, robbery, sexual harassment, possession of firearms, gambling and embezzlement, which are usually influenced by several factors such

as neglect of parents in educating, parents' disputes or conflicts, parental divorce, family economic lives that are in disarray, unemployed life, lack of ability to take advantage of free time, negative relationships, and so on. These cases are the cause of a teenager entering a correctional institution because of unlawful behavior and subjected to sanctions in the form of punishment.

Young Prisoners Learning Skills

The learning skills of young prisoners in LPKA Tanjung Pati can be said to be still low, prisoners have not used the library that has been provided properly in LPKA Tanjung Pati. Prisoners rarely come into the library because they do not have good learning skills. Young prisoners in LPKA Tanjung Pati explained that the desire to learn exists in interviews. However, it is less skilled in utilizing libraries, while in the library inmates are confused about how to read, write or concentrate well.

Method

This research is a descriptive study (Arikunto, 2010; Yusuf, 2005). It was aimed to describe learning skills of the young prisoners in correctional institution adolescent Tanjung Pati Lima Puluh Koto. This research used quantitative approaches with the descriptive-quantitative method. The sample for this research consisted of 32 young prisoner. D ata analyze learning instruments learning skills with aspects learn, to learn, reading skills, recording skills, listening skills, memorization/recall skills, speaking skills, critical-thinking skills, time managing skills, concentration skill of the young prisoners and analysis used is presentation.

Results and Discussions

Based on the result of data processing, the result of this study can be described as follows:

Description of the Results of Young Prisoners Learning Skills

Based on the data processing that has been done, the results of the study are presented and analyzed with the aim of seeing an overview of the learning skills of young prisoners. The results of a study of 23 prisoners in LPKA Tanjung Pati, it was known that; young prisoners as a whole have learning skills in the category of as many as 17 people with a percentage of 40.48%. Prisoners who have learning skills in the high category are 5 people with a percentage of 11.90%. Prisoners who have learning skills in the low category are 1 person with a percentage of 2.38%. These prisoners needs guidance from the counselor to improve their learning skills, Counselors can improve learning skills by providing various services. because learning skills are needed by young prisoners.

Description of the Results of Young Prisoners Learning Skills Sub Variable

The results of questionnaire processing to 23 young prisoners as follows.

| No | The Aspects Learning Skills | Σ Ideal Score | Σ Score | % Mean | Category |
|----|--------------------------------|---------------|---------|--------|----------|
| 1 | Desire to learn (10) | 1150 | 883 | 76,78 | Hight |
| 2 | Reading skills (9) | 1035 | 632 | 61,06 | Enough |
| 3 | Recording skills (7) | 805 | 419 | 52,05 | Enough |
| 4 | Listening skills (7) | 805 | 517 | 64,22 | Enough |
| 5 | Memorization/recall skills (3) | 345 | 186 | 53,91 | Enough |
| 6 | Speaking skills (2) | 230 | 146 | 63,48 | Enough |
| 7 | Critical thinking skills (3) | 345 | 227 | 65,80 | Enough |
| 8 | Time managing skills (8) | 920 | 601 | 65,33 | Enough |
| 9 | Concentration skills (4) | 460 | 230 | 50,00 | Low |

The table illustrates the learning skills of prisoners LPKA Tanjung Pati is in the enough category. Aspects of their learning skills is at score of 883 with a percentage of 76.78, aspects of their reading skills at score of 632 with a percentage of 61.06. The results of Zakopoulou's study in London found learning difficulties assumed to be the most decisive factor in the development of prisoners (Zakopoulou et al., 2013). Simonoff, Elander, Pickles, Murray & Rutter (2004) suggest that reading problems are weak predictors in relation to crime, but predictors of reading or cognitive problems in the long run will affect antisocial behavior because they are related to cognitive problems, Young prisoners must improve reading skills to develop cognitive young prisoners. Aspects of recording skills is at score of 419 with a percentage of 60.72, aspects of listening skills is at a score of 517 with a percentage of 64.22, aspects of memorizing skills / remembering is on a score of 186 with a percentage of 53.91, aspects of speaking skills at a score of 146 with a percentage of 63.48, aspects of critical thinking skills on score 227 with a percentage of 65.80, aspects of managing skills time at score 601 with a percentage of 65.33, aspects of concentration skills at a score of 230 with a percentage of 50.00..

The problem of young prisoners as a whole is in enough category, this explains that prisoners do not have good learning skills. Reading skills are in the enough category. Reading in the context of learning is an activity to obtain information from something written. Reading is one way to improve and enhance the effectiveness of prisoners (Hastarita, 2013). Furthermore, the aspect of noting/recording skills is in the enough category, this mean that they have not made learning as the most important thing in life.

Furthermore, the aspect of listening skills of young prisoners is in the enough category. Aspect of skills in memorizing is in the enough category, aspect of speaking skills is in the enough category. Aspect of critical-thinking skills is in the sufficient category. Aspect of skills is in the sufficient category. This means that prisoners are lacking in utilizing time in LPKA to go into the library. Learning resources as thinking skills such as problem-solving skills and learning resources such as libraries, learning by using resources provides opportunities for students in this case namely young prisoners to improve learning motivation, self-development in terms of learning that allows them to continue learning throughout life (Sudjana, 2007).

In the Nordic countries (Denmark, Sweden, Finland and Norway), North America, Australia, Britain and Ireland, prison systems generally recognize the need to provide prisoners with basic education, such as: reading (knowing letters) and counting. In the Nordic countries, the focus is on ensuring that prisoners have equal rights to education as well as people outside prison, and prisoners have the opportunity to participate in all forms of education, including vocational education and higher education. In the United States, Canada, Australia, the United Kingdom and Ireland, the focus is on inmates who acquire basic reading and numeracy skills to enable them to participate in training that will give them the best prospects for work when they leave (Dawe, Wynes, & Misko, 2010).

However, the aspect of concentration skills of young prisoners is in the low category. This shows that prisoner learning skills are indicated to be low. Learning skills is very important and has a big role in improving one's intellectual property. Sukmadinata (2013) stated that the success of one's learning is influenced by their skills, such as readability, discussion, problem solving, doing assignments.

In developing countries, this cognitive-behavioral program model has greatly influenced the correctional system in North America, Britain and Australia. Experience in North American, British and Australian countries shows that the intervention of Vocational Education and Training (VET) aims to meet the needs of each prisoner, by creating activities that allow inmates to engage in learning. In this way, it can help support the personal development of prisoners and equip them to continue to further education and employment when they leave prison (Dawe, Wynes, & Misko, 2010). In Queensland, correctional institutions explain the success in the use of Vocational Education and Training (VET) in reducing prisoners who reenter prison facilities (Callan & Gardner, 2005). learning is needed by young prisoners for provision during the prison and continuing education, there are several things that can be given to adolescent inmates to improve learning skills, by providing learning services and training.

Conclusions

The result showed that, overall, most of the learning skills of young prisoners are at medium level. Then, this showed the importance of learning skills for young prisoners that can be used as provision for young prisoners after completing the term of detention or leaving the penitentiary in order to continue formal education well. For that the existence of learning skills in LPKA which will be expected to affect the desire of young prisoners to continue to study and study despite being in prison. Skills to learn that young prisoners can also use the library well and learn effectively. Learning skills are the ability of individuals to do and solve problems in a process or activity. Furthermore, suggestions for improving learning skills for juvenile inmates by developing a Vocational Education and Training (VET) model in Indonesia to meet the needs of prisoners, by creating activities that allow inmates to engage in learning, so that after adolescent inmates are free from correctional institutions can continue their education and be accepted in the world of work.

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An initial study in the development of smartphone addiction scale for student (SAS-S)

A.Maulani Habibi^{*)1}, Sigit Sanyata²

¹²Universitas Negeri Yogyakarta

^{*)}Corresponding author, ✉e-mail: 01maulanihabibi@gmail.com

Abstract

The purpose of this study was to develop a new scale, Smartphone Addiction Scale for Student (SAS-S) was developed to measure the level of smartphone addiction in high school students. A total of 32 item scales were developed through literature studies. Exploratory factor analysis (EFA) is used to examine the structure of factors formed in this scale. The results show the Smartphone addiction scale for Student (SAS-S) has 22 good items from 6 factor structures that are formed, including: (1) Self Control Disorder, (2) loss of time, (3) sleep disturbances, (4) can not be without smartphones, (5) changes in feelings and, (6) concerned smartphone. SAS-S is a good scale that can be used by any high school student. Another point also shows that the scale of smartphone addiction for high school students has a strong level of validity and reliability.

Keywords: exploratory factor analysis (EFA); smartphone addiction scale for student (SAS-S).

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Introduction

The use of smartphones today has become a *trend* among the public. According to Gary smartphones to be different from ordinary mobile phones, this is because smartphones have variants and advantages in operational systems (Karuniawan & Cahyanti, 2013). Currently smartphone users have increased in the Indonesian community. Based on research data *digital marketing emarketer* estimates in 2018 the number of active users of smartphones in Indonesia more than 100 million people (Rahmayani, 2015).

Smartphones now have become an item with a high level of need for some people, this is in an effort to support their work productivity (Jocom, 2013). The advantages of the smartphone is no doubt, a variety of features and applications inside are able to make it convenient to use. Currently smartphone users are not only adults only, but students in high schools are also many who use smartphones.

The use of smartphones among high school students today is no wonder, many students take advantage of smartphones as a medium of communication and information in his life. Such as learning media at home. Sophistication possessed by the smartphone of course not only give good impact for its users but also give bad impact. As Ciu in his research found that individuals who can not control themselves in using smartphones will cause themselves to be addicted to smartphones (Karuniawan &

Cahyanti, 2013). Excessive smartphone usage has indicators similar to indicators of alcohol and drug addiction (Yildiz, 2017).

Smartphone addictions is one of the same symptoms with other addictive symptoms. Desouky (2016) in his study found there is a positive relationship between addiction smartphones and internet addiction (Yildiz, 2017). The use of internet and smartphones has almost the same characteristics and also has the same impact. As also conveyed by Young and Rogers in (Dewi & Trikusumaadi, 2016) that the negative impact of the internet makes a person lazy to interact in the real world because it feels more fun to interact with friends online resulting in a lack of empathy towards the surrounding environment.

Excessive smartphone use can cause personal and social problems (Choi et al., 2017). The problem of addiction to this smartphone has been found by researchers in various countries, such as research conducted on 414 students in China, there are 5 symptoms that arise in individuals with addiction to the smartphone that is preoccupation, inability to control the desire, loss of productivity, and feel anxious and lost (Bian & Leung, 2015). This problem is supported also with the results of research done (Duke & Montag, 2017) who found out of 262 smartphone users there is a positive relationship between smartphone addiction with disruption of daily activities. Individuals with smartphone addiction have less productivity when they are at home or at work.

Addiction is an abstract concept, just like love and justice, with no limit in defining it (West & Brown, 2013). Then define an addicted individual is an individual who is experiencing a disruption of control over his behavior to a level that causes or can cause bad harm to himself (West & Brown, 2013). The current level of technological development has changed the definition of addiction, no longer on the contention of a substance or food, but now also includes behavioral addictions, such as gambling behavior, internet, gaming, even addiction to smartphones (Matar Boumosleh & Jaalouk, 2017). This is in line with (Padwa & Cunningham, 2010) that addiction is no longer about substance and alcohol, but addiction is also to behavior, such as gambling, eating, sex, shopping and internet behavior. The development of today's technology smartphones has indeed made people comfortable and happy in using it, in addition to eliminate boredom, smartphone can also adversely affect the users.

Addiction to smartphones is the behavior of individuals who too often use a smartphone that can claim the lives of everyday users (Demirci, Orhan, Demirdas, Akpınar, & Sert, 2014). The loss of time and concentration in learning is one of the most remarkable effects for students when overuse of smartphones.

Based on the issue of smartphone addiction, it will certainly cause concern to students who are vulnerable to having an addiction smartphone. This of course can disrupt the learning process of students at school and at home, as well as affect its development. In addition to interfering with the daily activities of a smartphone addiction can also have some negative impact on students such as increasing loneliness and depression, trigger anxiety, increased stress, aggravate attention disorders, reduce concentration, disturb sleep and encourage self-absorption (Smith, Robinson, & Segal, 2017).

Regardless of the amount of research on smartphone addiction, it needs a scale development that can measure smartphone addiction in high school students. Currently there has been a lot of developing measuring tools against smartphone addiction, but the scale is not necessarily applicable and really measure the addiction of smartphones in high school students in Indonesia. Just as the smartphone addiction scale (SAS) of (Kwon, Kim, Cho, & Yang, 2013) is still neglected and has not yet comprehensively measured the student's smartphone addiction. Then another scale is also developed by (Lin et al., 2014) called Smartphone Addiction Inventory (SPAI), this scale has four factors: compulsive behavior, functional impairment, withdrawal and tolerance. Furthermore, the scaling of *Iowa State University* with 20 statement points that only concerns when the smartphone can not be used, this does not reveal the whole form of addiction itself. Additionally scales have been developing the west may not necessarily be applied to the culture in Indonesia, considering the culture and traditions of the world community are different. Other measuring tools are also developed by (Lee, Ahn, Choi, & Choi, 2014) called The SAMS (Smartphone Addiction Management System and Verification). This measuring tool is developed based on the application on the smartphone. This tool can only be used when the online system

and only measure the indicator of the number of uses, but does not assess other indicators of the concept of smartphone addiction. So it can be said this gauge does not measure fully about the addiction of smartphones. Based on this problem researchers are interested in developing a scale that can measure the level of smartphone addiction in high-school students.

Method

The research method used in this research is psychometric, that is developing the smartphone addiction scale for Student (SAS-S). This study is a preliminary study of SAS-S development. The analysis factor was performed as part of the initial development of this scale . Prior to factor analysis, this scale has been performed content validation (expert judgment) with two experts in the field of psychology. Factor analysis in this research using exploratory factor analysis (EFA). Exploratory factor analysis (EFA) was used to see the structure factor formed on the scale (Khan, 2006) in (Gaol & Lin, 2017). Therefore, this study will determine the factor structures formed by EFA test. When using exploratory factor analysis (EFA) , Costello & Osborne (2005) in (Wahyuningsih, 2009) suggests to use principal axis factors as an extraction method and use eigenvalues greater than 1.0 to determine the number of factors. The data collection in this study was done by spreading the scale that has been validated the contents of 32 items given to 271 high school students with an average age of 16 and 17 years.

Result and Discussion

Exploratory factor analysis (EFA) is used to be able to see the structure factor that is formed from the smartphone addiction scale for students (SAS-S). Based on these tests it is known as 10 items wasted scale from the initial 32 items, so that eligible EFA test as much as 22 items the scale of addiction smartphones for students (SAS-S). The results can be proven by various indicator contained in EFA test, among others are explanation of tables as follows:

Table 1. KMO and Bartlett's Test

| KMO and Bartlett's Test | | |
|--|--------------------|-------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .847 |
| | Approx. Chi-Square | 2509.479 |
| Bartlett's Test of Sphericity | df | 231 |
| | Sig. | .000 |

The KMO and Bartlett's Test table shows about the feasibility test of factor analysis on a scale. There are 6 categories that can explain the results of KMO and Bartlett's Test. KMOs with values > 80% (good), between 60% -80% (enough) and below 60% (bad) (Gudono, 2016).

Based on these results, it is known that KMO > 0.5 value is 0.847 or more than 80% which is meritorius / good . KMO close to 1 indicates that the data or samples used are sufficient to test the factor analysis (Yong & Pearce, 2013). Furthermore, it can also be seen from the P-Value Barlett's Test of 0.000 which shows <0.05 which means that the model factor formed is feasible to use.

Furthermore, it can be seen in table 2 that explains the value of the extraction community. It can be seen that the 22 items maintained have an average value of > 0.50 This shows that all items formed can be feasible to use as a determination of the number of structure factor that is formed.

Table 2. Communalitoes

| Item | Extraction | Item | Extraction |
|------|------------|------|------------|
| 1 | .743 | 12 | .744 |

| | | | |
|----|------|----|------|
| 2 | .692 | 13 | .730 |
| 3 | .669 | 14 | .592 |
| 4 | .561 | 15 | .571 |
| 5 | .545 | 16 | .633 |
| 6 | .636 | 17 | .620 |
| 7 | .638 | 18 | .664 |
| 8 | .737 | 19 | .655 |
| 9 | .710 | 20 | .772 |
| 10 | .626 | 21 | .793 |
| 11 | .780 | 22 | .616 |

Tabel 3. Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 6.422 | 29.191 | 29.191 | 6.422 | 29.191 | 29.191 | 2.869 | 13.040 | 13.040 |
| 2 | 2.472 | 11.237 | 40.428 | 2.472 | 11.237 | 40.428 | 2.834 | 12.882 | 25.922 |
| 3 | 1.902 | 8.646 | 49.074 | 1.902 | 8.646 | 49.074 | 2.719 | 12.357 | 38.279 |
| 4 | 1.631 | 7.415 | 56.489 | 1.631 | 7.415 | 56.489 | 2.667 | 12.122 | 50.401 |
| 5 | 1.239 | 5.633 | 62.122 | 1.239 | 5.633 | 62.122 | 1.881 | 8.549 | 58.950 |
| 6 | 1.062 | 4.828 | 66.949 | 1.062 | 4.828 | 66.949 | 1.760 | 7.999 | 66.949 |

After can see the magnitude of the communality of table 2, the can consider the determination of the number of structures factor formed from the 22 items of the SAS-S scale by looking at the value of eigenvalues. The minimum eigenvalues that should be achieved to determine the factor is ≥ 1.0 (Pangalila & Budiarto, 2017). The result of analysis shows that there are six factors that meet the criteria of eigenvalue value ≥ 1.0 (Table 3). The number of components formed is the number of structure factor that is formed from the smartphone addiction scale for students (SAS-S).

Based on the number is known 6 structure factor that is formed. Having known the number of strong factors that form the data note the items SAS-S are arranged in the factor. Each item is an item that has avalue loading factor > 0.50 . Thus can be seen in the table on table 4. Rotaed Component Matrix that each factor has a number of different items.

Table 4. Rotaed Component Matrix

| Statements | Component | | | | | |
|--|-----------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| I will try and be ready to use my smartphone for a long time | .830 | | | | | |

| | |
|---|------|
| I always wanted to use an excessive smartphone | .826 |
| Feel difficult and failed to use an excessive smartphone | .734 |
| I find it difficult to control myself when using a smartphone | .677 |
| Much of my time wasted in vain for lingering on the smartphone | .841 |
| I found the smartphone made me lose and forget the time | .778 |
| While learning i often postpone for long with a smartphone | .683 |
| Smartphones cause me can not be on time in everyday activities | .591 |
| A lot of work and duties i took off too long using a smartphone | .589 |
| Feeling tired and sleeping people due to excessive smartphone usage | .831 |
| I sleep tired because long with a smartphone | .784 |
| Excessive use of smartphones makes it hard to sleep | .770 |
| I am often late for sleeping with my smartphone | .651 |
| I feel i can not live without a smartphone | .743 |
| When my smartphone lives and is not active i always remember it | .739 |
| I can not get away from smartphones | .723 |
| Feel there is less in life there is no smartphone near me | .612 |
| Feeling agitated compiling my smartphone lives at home | .608 |
| I am worried if my smartphone is damaged and can not change again | .847 |
| I feel uncomfortable if the smartphone is damaged | .827 |
| I prefer to play a smartphone than doing school work | .843 |
| Time i use with a smartphone longer than my study time at home | .605 |

Rotated Component Matrix in Table. 4 it can be clearly seen that the value of the loading factor of each variable has been formed well and in accordance with the clear structure. The loading factor rating on the smartphone addiction scale for student (SAS-S) has a value > 0.50, this can mean all items / variables can be used. Furthermore, these factors can be given the name of each factor formed. In order to strengthen the development of SAS-S scale is also conducted reliability test. The SAS-S reliability test is performed measurement by Alpha Cronbach's. results from output Alpha Cronbach's are presented below:

Table 5. Reliability

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .879 | 22 |

Based on the above table, the Alpha Cronbach's value on 22 SAS-S deck items of 0.879 indicates greater than > 0.7, this indicates that SAS-S can be used and declared reliable.

This study is a preliminary study on the development of smartphone addiction for student (SAS-S). This preliminary study was conducted by performing analysis factor with *exploratory factor analysis* (EFA). The EFA results show that the addiction scale has six very powerful structures factor with the loading factor value of each variable having a magnitude of > 0.50. Based on the EFA test there are several items of scale that must be eliminated to reduce the number of items from 32 items to 22 items scale of valid and reliable.

Here are the names of factors on the smartphone addiction scale for students (SAS-S) (1) Loss of control: students are not able to control themselves or control themselves while using a smartphone. (2) Time loss: excessive use smartphone causes students to lose time in vain. (3) Sleeping disorders: lingering with the smartphone causes disruption of student rest time, which is characterized by difficulty sleeping and difficulty to get up faster. (4) Can not be without a smartphone: students are always thinking of a

smartphone and feeling lost when the smartphone is away from it. (5) Changes in feelings: the emergence of feelings of inner discomfort that cause emotional changes in him. (6) Concerned smartphone: always concerned smartphone than the task and responsibilities as a student.

These six structures are the result of literature review conducted by researchers through the operation of the following components of smartphone addiction:

Excessive Use

Smartphone addiction in students is an excessive behavior in the use of smartphones. This behavior can be characterized by the amount of time and everyday activities become disturbed and the appearance of abandonment behavior on the basic needs of human life such as eating, drinking and sleeping becomes disrupted.

Withdrawal Effect

Students with smartphone addiction bring out feelings of discomfort to themselves with feelings of anxiety, anxiety and impatience when the use of a smartphone can not afford to do. This is due to various situations and circumstances that occur, such as left at home and run out of smartphone battery. The impact of this is that students always think of their smartphones even though they are virtually unusable.

Loss of Control

Students feel the difficulty in controlling themselves against the use of smartphones this can be marked by students always try but fail to avoid or reduce from usage excessive smartphone. This is because in individuals with a smartphone addiction can cause him to difficult to let go or avoid such behavior.

These six factor structures are operational from the addiction component of smartphones and internet addiction. Many other studies also make different structures in research such as research conducted by (Kwon et al., 2013) make the structure factor / component smartphone addiction in Smartphone addiction scale (SAS) is (1) disturbance of everyday life. (2) positive anticipation. (3) withdrawal. (4) cyber oriented relationship. (5) Excessive use. (6) tolerance. The difference with the results of research conducted by kwon is the existence of different components that are component cyber oriented on relationship and positive anticipation. This component is not included in the research because this component only focuses on one of the addictions contained in the smartphone that is addicted to chat. While the smartphone addiction is the same thing with internet addiction that causes people to become addicted in some ways.

There are three subtypes of problems that occur when people are always online in front of their computer or Smartphones are: Excessive individuals in the game (excessive gaming), preoccupation with the matter concerned with sexual preoccupations (cybersex) and likes to chat (text massaging) (Block, 2008). This is also in line with (Emanuel et al., 2015) opinion that explains that people are not addicted to smartphones but they are addicted to the information, entertainment and personal connections available in smartphones, such as facebook, text messages, twitter, games, cybersex and many social networks others. The number of possible problems arising from the addiction of this smartphone makes us need to detect the level of student's smartphone addiction.

Conclusions

This study aims to develop a scale of smartphone addiction for students (SAS-S). Based on the result of factor analysis, there are a number of aborted items because they do not meet the minimum limit of the predetermined loading factor . The number of items from the EFA analysis result is 22 points out of the 32 items that have been submitted. This scale can be used to measure smartphone addiction rate of high school students in Indonesia. This scale has been tested and declared valid and reliable. Since this study is a preliminary study, further research is expected to involve more samples and can use better psychometry.

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Relationship parent support and peer with student learning discipline

Lulu Retno Wulandari^{*1}, Neviyarni S², Mudjiran Mudjiran³

¹Universitas Negeri Padang, ²Universitas Negeri Padang, Universitas Negeri Padang³

*¹Corresponding author, ✉e-mail: wulanzaihara12@gmail.com

Abstract

Any student who has been learning discipline will be able to steer itself and control the behavior. Parent support not only provides the school facility, but can help to learn and solve problems together. Peer support has an important role in the establishment of norms for better or worse against the students have regularity in learning. The purpose of this study was, 1) to describe the parent support, peer support, and learning discipline, 2) examine the relationship of parent support with the learning discipline, 3) examine the relationship peer support with the learning discipline, and 4) examine the relationship of parent support and peer with the learning discipline. This study used a descriptive correlation quantitative method. The samples in this study of 192 people, selected by proportional stratified random sampling technique. Data were analyzed using descriptive statistics, simple regression, and multiple regressions.

Keywords: Parent Support, Peer Support, Learning Discipline

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Introduction

Any student who has been learning discipline will be able to steer itself and control the behavior of learning. Learning discipline shows values in the form of obedience, regularity, and order of the vision and mission of education to be achieved. Learning discipline included in factors affecting learning activities, a student is in school and home, because according to Hanafiah & Suhana (2012) one of the factors affecting the success of a student is learning discipline.

Learning discipline aims to help to change a child became more organized, and a variety of habits can be well controlled, and can be further improved by learning. As noted by Mudany, Sirengo, Rutherford, Mwangi, Nganga, & Gichangi (2013) the purpose learning discipline to assist children in control learning attitude, as well as the life and habit become irregular. In addition, Anderson, Funk, Elliott, & Smith (2003) suggested that parent support and a positive pressure will develop children's experiences in life.

Parent support is given when students will learn to grow from good study learning discipline. Papalia, Olds & Feldman (2009) explains that teenagers feel secure with strong ties and full support from a parent, allow and encourage their efforts to achieve self-reliance, as well as providing facilities that support. Parent support not only provides a learning facility, but help to learn and solve the problem together. Acharya & Joshi (2011) suggested that parent support could enhance problem-solving abilities in learning and can negotiate in the academic environment.

Learning discipline is also influenced by peer support, because in school many children are interacting with peer. In adolescence, children spend time with friends at school. As stated by Furrer, Skinner & Pitzer (2014) that when the student gets support from the peer, they will train communications, can resolve conflicts, and establish academic goals and appropriate conduct. A child can respect and appreciate the friend, while peer support had a positive influence on its development. Liu (2006) suggests that students receive support not only from a parent, but from peer too. In the school environment, first develop a sense of socializing with friends who have the same age. What has been directed by the parent at the time at home could evolve or change depending formed in the school environment.

Based on the above problems, that the learning discipline is very important in achieving objectives in learning activities. If learning discipline is applied to better learn and become habituation raised a good learning attitude in students. Researchers will design a guideline that connects between parent support and peers with student learning discipline of Vocational High School Agriculture 2 Tugumulyo Musi Rawas South Sumatra.

Method

This study used a quantitative approach with descriptive correlation. The sample is students of Vocational High School Agriculture 2 Tugumulyo class X, XI, and XII were enrolled in the academic year 2016/2017 were 192 students sampling using *Proportional stratified random sampling* technique.

The parent support, peer and learning discipline instrument used Likert scale. Yusuf (2013) suggests reliability is the consistency or stability score of a research instrument against the same individual and given at different times. Reliability tested results of parent support at 0.886, peer support at 0.896, and learning discipline at 0.877. The validity of the results overall for the number of items of parent support as many as 31 items, peer support as many as 31 items, and learning discipline as many as 30 items. To determine the relationship of independent variables and the dependent variable was analyzed by simple linear regression and multiple regression. Assisted data analysis using SPSS version 18.00.

Results and Discussions

Data in the research include parent support variables (X^1), peer support (X^2) and learning discipline (Y). Here is a description of the research data.

Parent Support (X^1)

Description of data parent support totaling 192 respondents shows that parents support Vocational High School Agricultural 2 Tugumulyo are in the higher category at 49.5%, and the high category at 41.7%, then in the average category at 8.33%, and the low category at 5.2%. And description can be seen Table 1.

Table 1. Distribution Frequent based Score-Category Parent Support

| Interval Score | Categories | Frequent (f) | Percentation (%) |
|----------------|------------|--------------|------------------|
| 131 – 155 | Higher | 95 | 49.5 |
| 106 – 130 | High | 80 | 41.7 |
| 81 – 105 | Average | 16 | 8.33 |
| 56 – 80 | Low | 1 | 0.52 |
| 26 – 55 | Lower | 0 | 0 |
| Total | | 192 | 100 |

Peer Support (X^2)

Description of data peers support totaling 192 respondents shows that peer support student of Vocational High School Agricultural 2 Tugumulyo are in the higher category was 44.3%, the high category was equal to 43.2%, then in the average category was 11.5%, and the low category was 1%. And description can be seen Table 2.

Table 2. Distribution Frequent based Score Category Peer Support

| Interval Score | Categories | Frequent (f) | Percontation (%) |
|----------------|------------|--------------|------------------|
| 131 - 155 | Higher | 85 | 44.3 |
| 106 - 130 | High | 83 | 43.2 |
| 81 - 105 | Average | 22 | 11.5 |
| 56 - 80 | Low | 2 | 1.0 |
| 26 - 55 | Lower | 0 | 0 |
| Total | | 192 | 100 |

Lea

Learning Discipline (X³)

Description of the data learning discipline totaling 192 respondents shows that the learning discipline in Vocational High School Agricultural 2 Tugumulyo are in the average category at 50%, most of the other students were in the higher at 35%, then the high category at 13% and in the low category at 2.6%. And description can be seen Table 3.

Table 3. Distribution Frequent based Score Category Learning Discipline

| Interval Score | Categories | Frequent (f) | Percontation (%) |
|----------------|------------|--------------|------------------|
| 127 - 150 | Higher | 67 | 35 |
| 103 - 126 | High | 24 | 13 |
| 102 - 79 | Average | 96 | 50 |
| 78 - 55 | Low | 5 | 2 |
| 30 - 54 | Lower | 0 | 0 |
| Total | | 192 | 100 |

Test requirements analysis performed on the data of this study is the test of normality, linearity test, and a test multicollinearity. The test of normality based on the results of data, that third normally distributed variables. The test of linearity based on the result of data, that relationship parent support with learning discipline is said to be linear with linear term $0.000 < 0.05$. Furthermore, the relationship peers support with learning discipline data otherwise linear with linear term $0.000 < 0.05$. The test of multicollinearity based on these results can conclude that don't happen multicollinearity between the variables of parent support with peer support.

Data in the research include parent support variables (X₁), peer support (X₂), and learning discipline (Y). Here is a hypothesis of the research data.

Relationship Parent Support with Learning Discipline

The analysis results of relationship parent support with student learning discipline as it can be seen that the R-value of 0.570, which showed the regression coefficients between parent support with learning discipline. R-square (R²) of 0.325, this means that 32.5% of the variation in the learning discipline can be explained by parent support, while the remaining 67.5% is explained by other variables.

Relationship Peer Support with Learning Discipline

The analysis results of relationship peer support with student learning discipline as it can be seen that the R-value of 0.553, which showed the regression coefficients between peer support with learning discipline. R-square (R²) of 0.306, this means 30.6% of the variation in the learning discipline can be explained by peer support, while the remaining 69.4% is explained by other variables.

Relationships Parent Support and Peer with Learning Discipline

The analysis results of relationship parent support and peer with student learning discipline seen that the R-value of 0.659, which showed multiple regression coefficients between parent support and peer with the learning discipline. R-Square (R²) of 0.434, meaning 43.4% of the various learning discipline can be explained jointly by the parent support and peer with learning discipline while the remaining 59.6% is explained by other variables.

In the discussion, data in the research include parent support variables (X₁), peer support (X₂), and learning discipline (Y).

Parent Support

The results of data analysis showed that the overall average parent support is in the highest category. This means that the parent support has a learning discipline has been good. In the study, Trivette & Dunst (2014) suggested that parent support was the initial support of relief and needs of the child. Parent support is needed for the improvement of learning in children. Parents not only provide facilities for the children, but need such as advice, a caring attitude, take the time to assist in learning and full attention to a child. This is supported by research Rianti & Rahardjo (2014) who argued that students have a high parent support it would be able to behave in a positive and responsible as a student. In addition, students can guide, direct, and regulate the behavior to form learning discipline. Students can to arrange a regular study habit so life more effectively. In this research, the achievement of eight indicators is the process of parent support for learning discipline.

Peer Support

The results of data analysis showed that the overall average peer support students have known nine indicators of peer support at the high category. In the study Mead, Hilton & Curtin (2003) suggested that peer support can help develop skills in reducing discomfort when developing the dynamics of relationships with friends. Peer support will help to understand the various situations to feel the comfort and tolerance. This is supported by research Cowie & Wallace (2000), the peer support provided with rewards such as praise, invites to behave well in obeying the rules, and help when experiencing difficulties in learning. This condition implies that the peer support must be developed and improved in many positive things for students.

Learning Discipline

The results of data analysis showed that the overall average learning discipline in the high category. In the study Bager-Elsborg (2017) suggests that in improving the learning discipline not only knowledge, but also their communication, emotional responses, and understanding of their discipline experience. Students who have studied with good discipline will result in higher learning outcomes than students who have low learning discipline. Based on preliminary information obtained from teachers known that there is a study conducted student indiscipline. However, based on the results of research conducted by the researchers, Data obtained learning discipline included in the high category. It can happen, because at the time of the initial information given teachers are viewed by some students only. While the research conducted by researchers saw overall student learning discipline with sample of 192 students. Based on the above, it is understood that discipline is very necessary to learn the various levels of education, from primary school to the university level. That's why a counselor seeks to develop the learning discipline. In a study conducted Samiawan (in Ifnaldi, 2014), a student has learned that good discipline is student who has schedules the task of the teacher and understands the lessons and motivation to learn at school and at home.

Relationship Parent Support with Learning Discipline

The results showed that parent support is a significant positive associated with the learning discipline. The discovery was based on a series of data analysis showed that the association of parent support with learning discipline by 32.5%. This means that parent support is one of the factors that contribute to the learning discipline. Parent support can influence their children with emotional encouragement to come to a place of learning. Research conducted by Dennis, Phinney, & Chuateco (2005), parent support means the type of communication to help a person feels about the situation and were able to control the situation. The results also reinforced by Rogers (2011), the learning discipline that is used by teachers in several kinds of exercises learning, so it can be more positive and productive learning. Support level to be effective in influencing the parent to learn the learning discipline. That is, the high learning discipline can be seen from how the parent provides support to the student. In this case, the parent is the main support for continuing education because they are the largest donor in the overall educational process. This will affect developing and improving the learning discipline.

In the research Ventura & Miller (2005), many parents, especially single parents who work all day so the lack of time to keep an eye on the children in the study. A child needs the support of parents to learn regularity able to run well. This is reinforced by research Tan, Ismanto & Babakal (2013), parent support is characterized namely: care, warmth, approval and positive feelings towards the child's parents. This means

that a child will have to learn a good order if it has the support of parents is also positive. Based on the description of the relationship of parent support with learning discipline, developing and improving learning discipline, must first developing and improving parent support.

Relationship Peer Support with Learning Discipline

The results showed that peer support is a significant positive associated with learning discipline. The discovery was based on a series of data analysis showed that the peer support relationship with the discipline learned by 30.6%. That is, peer support is one of the factors related to the learning discipline. This research can be understood that the higher peer support, the higher learning discipline. This means that the peer support determines the level of learning discipline. Support obtained teenager from the peer in providing information related to efforts to establish identity, but it can also provide feedback on what teenager do in the group and social environments, and provide the opportunity to test in various roles to resolve the crisis of identity formation optimal. It is proposed by Santrock (2004), peers who like to impose and the conflict will hamper the development. Peer support required in developing a child's social life to be skilled and able to understand and choose the more positive thing.

Peer support influence learning discipline. That is, the high learning discipline can be seen from how the peer support. Therefore, the level of peer support in both the giving and receiving of aid is based on certain principles such as shared responsibility and help each other among friends influence in developing and improving the discipline of learning in students. Based on the description of the peer support for the learning discipline, to developing and improving learning discipline, it first has to develop and improving peer support.

Relationship Parent Support and Peer with Learning Discipline

The results showed that the parent support and peer together positively associated significantly with the learning discipline. The discovery was made based on sequence analysis of the data that the regression coefficient of 0.659. The coefficient of determination (R-square) parent support and peer support with learning discipline is equal to 0.434. That is, the relationship variables parent support and peer support together with learning discipline learned by 43.4%, while the remaining 56.6% is explained by other variables not examined in this study. It is revealed that with relationship parent support and peer together have a significant positive with learning discipline.

In a study conducted by Nura'eni (2015), parent support is necessary to succeed child, because children feel valued and cared for by a parent. It was also disclosed in the parent support research give the contribution to learning discipline, meaning that in the effort to developing the relationship for parent support. This is reinforced by research from Tarmidi & Ade (2010), the parent support is an important social support system in adolescence, compared with other social support system and associated with a student's academic success. It is also expressed in the research Grusec, Danyliuk, Kil & O'Neil (2013), parent support affect the student who has a learning discipline. parent support gives the contribution to learning discipline, meaning that in the effort to develop the learning discipline for parent support. In a study conducted Satria (2009) and Hurlock (2002), peer support to improve learning discipline in different ways: a relationship of mutual understanding and respective issue, give advice, and sympathy, which can not be obtained from the parent. Based on the description of the relationship of parent support and peer with learning discipline, the level of parent support and peer to developing and improving learning discipline.

Conclusions

Based on the findings and discussion of research results that relationship parent support and peer with the learning discipline. In general, parent support at the high category, this means good support from parents have a role such as providing a good compliment spirit and prizes when students succeed in learning, take the time and watched as the learning activities undertaken by students. In general, peer support at the high category, this means good support from peers have roles such as providing a positive spirit, reprimand if done wrong, and take the time and watched as learning activities conducted both individually and in groups. In general learning discipline at the high category, this means that students are able to have regularity in learning and being able to comply with existing regulations at school and at

home well, forming a schedule of learning activities, and completing the tasks assigned by the teacher on time.

There is a significant positive relationship between parent support with student learning discipline. That is, the higher parent support, the higher student learning discipline. This means that students who receive support from either parent of emotional, esteem, high instrumental able to improve student learning discipline. In terms of getting positive reinforcement verbal and non-verbal, provide facilities and purposes in learning to students, giving attention and advice to students, and considering the students in learning activities. There is a significant positive relationship between the peer support with student learning discipline. That is, the higher peer support, the higher student learning discipline. This means that students who get support from peer either of emotional, esteem, high instrumental able to improve learning discipline. In terms of giving positive reinforcement verbal and non-verbal, able to provide solutions when the students have difficulties in learning, provide information and advice on learning and student care. There is a significant positive relationship between parent support and peer support together with the student learning discipline. That is, the high-low learning discipline students learn not only associated with one variable, but related together with the support of parent and peer support. In other words, the higher parent support and peer support, the higher learning discipline. This means that students who get support from parent and peer support either of emotional, esteem, high instrumental able to improving student learning discipline.

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Development of annual program guidance and counseling in higher education

Fandy Kurniawan^{*)}

Universitas Negeri Yogyakarta

^{*)}Corresponding author, ✉e-mail: kfandy2016@gmail.com

Abstract

This study aims to develop and determine the feasibility of the annual program of guidance and counseling in higher education. The method used in this research is Research and Development (R & D) Research and development carried out by adopting the concept of research and development by Borg and Gall. Based on product test using inter-rater agreement models, it is concluded that the product has fulfilled the content validity of 0.76 or can be categorized as valid (good). Furthermore, based on the results of Focus Group Discussion (FGD), it is concluded that the product can be categorized well, but needs to be refined by making improvements given.

Keywords: annual program, guidance and counseling, higher education.

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Introduction

The era of globalization exposes the whole country to complex and rapid developments and changes. Every component of society within a country, required to race, improve its competence. The global situation makes life more competitive and opens opportunities for anyone to achieve better status and life. The positive impact of global conditions is to encourage individuals to continue to think and improve their ability, and not satisfied with something that is achieved at this time. Correspondingly, globalization has at least three impacts for undergraduate and postgraduate students, (1) influencing career goals, (2) providing insight into ethical and social issues, (3) enhancing self-development (Litzelman et al., 2017, p. 2)

Efforts to bridge these impacts need to be prepared by qualified individuals. One of the main supporters for achieving the goal of individual formation in this case the student is the quality of higher education quality. The quality of higher education is not enough to be done through the transformation of science and technology, but must be supported by the development of the ability of students to process themselves in choosing and making decisions for the achievement of all life goals. Such an ability not only concerns the academic aspect, but also involves non-academic aspects. This is corroborated by Kemer who revealed that in a recent study, students have high needs in academic, relational, emotional, and career issues (Kemer & Myers, 2011, p. 114)

Academic aspects can be established by developing curriculum applied in the higher education, while non-academic aspects are the responsibility of the Guidance and Counseling Service Unit (ULBK). Gladding revealed that the counseling unit at higher education should be able to understand how students learn, grow, and grow (Gladding, 2015, p. 500). In addition Gibson and Mitchell also revealed that the role of counselors in higher education plays an important role in educational, social, and emotional

development of students (Gibson & Mitchell, 2016, p. 105). Both opinions reinforce that the presence of Guidance and Counseling Services Unit (ULBK) is very central in a higher education.

Jing Sun points out: "The significance of guidance in the university contexts from two perspectives, (i) the needs of students, and (ii) development of the university" (Sun & Yuen, 2012, p. 204). Based on that opinion, it can be concluded that the importance of Guidance and Counseling in higher education is to bridge the needs of students and develop the quality of the higher education. For students, Guidance and Counseling services can help them in optimizing their potential, setting goals and deciding on future career direction. While for higher education, Guidance and Counseling services can help improve the quality of their graduates, thus enhancing the higher education reputation.

Efforts in delivering students to have a healthy self and mental development, through ULBK was not an easy matter. This happens, because students are faced with complex problems. There are some things that students must face when jumping into the world of Higher Education (1) intensified competition, (2) a lot of focus on the future, (3) increasing uncertainty, (4) dependence on technology, (5) stress always haunting (The Jed Foundation and Education Development Center Inc, 2006, pp. 1–2). In line with that opinion, Ruckert points out: "The rank order of problems presented by students at the counseling center is like this: (1) Problems with academic work and achievement. (2) Enquiries about psychotherapy. (3) Problems with academic orientation and motivation. (4) Depression. (5) Problems with learning. (6) Anxieties / Phobias (Rückert, 2015, p. 38). In addition, the problems faced by students when studying at higher education are: (1) Saturation and Laziness, (2) Inability to manage time, (3) Finance, (4) Social environment, (5) Place boarding, (6) Love and promiscuity (Sudarman, 2004, pp. 36–38).

The problems faced by the student, increasingly increasing in number, Rockland-Miller revealed: One of the most notable findings of this study was that increases were reported in 14 of 19 client problem areas. Also notable was that the number of students reporting with depression doubled, the number of suicidal students tripled, and the number of students seeking services after a sexual assault quadrupled (Rockland-Miller & Eells, 2010, p. 40).

Description of the problem in the discussion above, was found in many neighborhoods of the University of Yogyakarta and Universitas Sebelas Maret Surakarta. One of the students at Sebelas Maret University expressed a deeply depressed feeling. The student has been too busy engaging in non-academic activities that resulted in a financial coffers to sustain life as a student and forget one of his main duties as a student is to make the final assignment, until he unknowingly arrives at the end of the study boundary as a student. While at Universitas Negeri Yogyakarta there are students who have no passion to live after being haunted by feelings of guilt for falling into promiscuity that take him as a sexual criminal. The consequences of such promiscuity lead him to the tremendous anxiety in him. The two real issues, illustrating the complexity of student problems in the field.

Although students are faced with many problems as mentioned above, there are not many students who meet counselors in the Unit Guidance and Counseling Services in each university. Han Sumi points out that despite having mental health problems, most students are reluctant to seek counselors to help solve their problems and only 40% of students use counseling and guidance services at higher education (Han & Heo, 2008, p. 2).

In line with this, although counseling services are already available and ready to assist the students, few new students take advantage of the counseling facilities (The Jed Foundation and Education Development Center Inc, 2011, p. 2). This phenomenon can occur, because not yet optimal role and function of guidance and counseling in Higher Education and program of guidance and counseling service in Higher Education, not yet targeting all students.

One effort to finalize the role of ULBK is to develop a comprehensive program of Guidance and Counseling in a comprehensive manner, so that it can be a basic foot in implementing services for students. Efforts to carry out need assessment as a basis for formulating guidance and counseling programs in higher education, required standard and valid instruments. At least in an effort to uncover the needs of students there are 2 valid and valid instruments, namely the Inventori Tugas Perkembangan Perguruan Tinggi (ITP PT) and Alat Ungkap Masalah Umum Perguruan Tinggi (AUM UMUM PT).

The development of an annual program model of guidance and at the Universitas Negeri Yogyakarta and Universitas Sebelas Maret is deemed necessary to be developed, as this annual model of

guidance and counseling can be an alternative in the process of achieving developmental tasks, which is expected to be an essential tool for life in phase next.

Preparation of an annual program model of guidance and counseling is very important because it is expected to become a reference for Counselors in Higher Education in preparing guidance and counseling programs designed to achieve goals. The purpose of guidance and counseling is to maximize student potential and help address the problems faced by them. Counseling and guidance programs are also being made to help all students develop their potential through the provision of development assistance and special assistance to individuals regarding personal, social, career, or other unique educational needs (Gysbers & Henderson, 2014, p. 140).

In product development, in this case the annual model of guidance and counseling needs-based, researchers expect specifications and product details to be developed, including as follows:

1. The annual program of guidance and counseling will be prepared based on the needs of the students.
2. The annual program of guidance and counseling, prepared based on measurement instruments of Inventori Tugas Perkembangan Perguruan Tinggi (ITP PT) and Alat Ungkap Masalah Umum Perguruan Tinggi (AUM UMUM PT). to support the need assessment process.
3. Guidance and counseling programs have the following structure: (a) Rationale, (b) Legal Basis, (c) Vision and Mission, (d) Description of Needs, (e) Purpose, (f) Service Area, (g) Action Plan, (h) Theme Development / Topics, (i) Evaluation, reporting and follow-up, (j) Facilities and Infrastructure, (k) Budget.

Method

Based on the consideration and conformity between the problems, objectives, and research focus, this research uses research and development method or often also called Research and Development (R & D). According to Borg and Gall, "educational research and development (R & D) is a process used to develop and validate educational production." (Borg & Gall, 1983, p. 772) While Sukmadinata argues that research and development is a process or steps to develop a new product or refine an existing and accountable product (Sukmadinata, 2009, p. 164).

Based on the opinion of some experts above, it can be concluded that research and development or also called Research and Development (R & D) is a process to develop a new product and improve the existing old products, and validate the product developed or enhanced.

The reason for choosing the type of research and development or so-called Research and Development (R & D) is that based on the preliminary study results that have been conducted, it is learned that a lot of problems experienced by students, both academically and socially. In addition, the guidance and counseling services unit at the university still has not developed a standard guidance and counseling program for students. During this counseling and guidance programs in higher education are also less targeted to all students, so many students who have not enjoyed the service program that is implemented by the unit of guidance and counseling services.

There is a series of steps that must be taken in developing a product, namely "research and information collecting, planning, preliminary form of product development, preliminary field testing, main product revision, field testing, operational product revision, operational field testing, final product revision, and dissemination and implementation " (Borg & Gall, 1983, p. 775).

In developing the model of this program, it will refer to the series of phases proposed by Borg and Gall, but with little modifications to the needs of the study. In this research, program development program which is done is as follows:

1. Conduct a preliminary study to collect information through, (1) Need Assessment, and (2) Formulate the problem.
2. Planning, that is by identifying and defining the model of annual program of guidance and counseling in higher education and the formulation of goals.

3. Develop the initial product type that is the annual model of guidance and counseling program in higher education
4. Feasibility test, at this stage the initial draft of guidance and counseling program of learning is validated through two stages: theoretical validation and validation of practitioners.
 - a) Expert validation, the initial draft of the annual model of guidance and counseling courses in higher education will be validated by two theorists to obtain assessment, feedback and suggestions as a revised material of the developed program. The draft model of an annual program of guidance and counseling in a university that has been validated by experts in theory is then revised in accordance with the advice and input of both experts.
 - b) Validation of practitioners, draft model of annual program of guidance and counseling at higher education that have been revised in accordance with suggestions and input from experts then discussed in the Focus Group Discussion (FGD) forum by practitioners to get qualitative assessment. The draft model of guidance and counseling programs at higher education that have been given input by practitioners is then discussed with a counselor in ULBK for improvement and adjustment of circumstances in the Higher education.
5. Revision of the final product, final product revision is made based on analysis, discussion and input of validation activity result.
6. Final program, final program is a model of guidance and counseling programs in higher education based on the results of validation, discussion, analysis, and revision.
7. Dissemination and Implementation The research and development model of Borg and Gall in the development of guidance and counseling programs in higher education is not carried out until the dissemination and implementation stage of the product due to several considerations including:
 - a) In terms of time to implement the model of guidance and counseling programs in Higher Education takes a long time that is for six months.
 - b) Theoretically the research and development as described by Borg and Gall has 10 steps one step at stage four is product validation. Until this stage there has been a product that has been produced but has not been tested its effectiveness. However, the resulting product has been tested its feasibility by validators through theorists and practitioners.

Results and Discussions

In this section will be described data test results obtained from expert Guidance and Counseling and, prospective users of the product counselors at ULBK Universitas Negeri Yogyakarta and Universitas Sebelas Maret Surakarta. Experimental and Counseling expert test data were obtained from two Guidance and Counseling experts. Test data of prospective users of the product were obtained from two counselors at ULBK Universitas Negeri Yogyakarta and one counselor at ULBK Universitas Sebelas Maret Surakarta.

1. Description of Results of Annual Program Model Development Guidance and Counseling Before Validation

The annual model of guidance and counseling programs at Universitas Negeri Yogyakarta and Sebelas Maret University will be based on the Comprehensive Guidance and Counseling Program according to Norman C. Gysbers. This comprehensive guidance and counseling program has four components, namely: (1) basic services, (2) responsive services, (3) individual planning, (4) system support (Gysbers & Henderson, 2014, p. 72). The guidance and counseling program has the following structure: (a) Rationale, (b) Legal Basis, (c) Vision and Mission, (d) Description of Requirement, (e) Objective, (f) Service Area, (g) Operational Plan (H) Development of themes / Topics, (i) Evaluation, reporting and follow-up, (j) Facilities and Infrastructures, (k) Budget Costs. The instruments used in this study are the Inventori Tugas Perkembangan Perguruan Tinggi (ITP PT) and Alat Ungkap Masalah Umum Perguruan Tinggi (AUM UMUM PT). In addition, there are drawing attention is all the development process up to the implementation of guidance and counseling program, which is given a touch of technology and information.

2. Exposure Data Validation Test Result

Experimental data obtained through the assessment of acceptability of the annual program model of guidance and counseling at University of Yogyakarta and Universitas Sebelas Maret Surakarta were analyzed quantitatively by using inter-rater agreement model analysis in order to see the

reliability level of the guidance based on the assessment of two experts. Data analysis techniques using inter-rater agreement model (Gregory, 2013) are presented as follows:

| | | | |
|------------------------|-------------------------|------------------------|-------------------------|
| | | Expert Opinon 1 | |
| | | Low Relevanca (1-2) | High Relevanca (3-4) |
| Expert Opinion 2 | Low Relevanca (1-2) | A | B |
| | High Relevanca (3-4) | C | D |

Figure 1. Inter-rater Agreement Model

After the assessment of acceptability of the annual program of guidance and counseling at Universitas Negeri Yogyakarta and Universitas Sebelas Maret Surakarta from the first expert and the second expert was analyzed, the data obtained as follows:

Table 1. Tabulation of Acceptability Assessment Results

| Relevance | Tally | Amount |
|-----------|--------------------------|--------|
| A | - | 0 |
| B | - | 0 |
| C | III III | 8 |
| D | III III III I | 26 |

Based on the results of the tabulation of acceptability assessment by the first expert and the second expert, then to determine the expert test result index can use the following formula:

$$\text{Expert Test Index} = \frac{D}{A+B+C+D}$$

By using the formula can be seen that the index of expert test results of 0.76, it can be concluded that the annual model of guidance and counseling programs at Universitas Negeri Yogyakarta and Universitas Sebelas Maret Surakarta have a high validity or good, because the category of test index validity model annual program of guidance and counseling at Universitas Negeri Yogyakarta and Universitas Sebelas Maret Surakarta conducted by the expert refers to the classification of validity put forward by Guilford (1956), namely: $0.80 < r_{xy} \leq 1.00$ is categorized as having very high (very good) validity, $0.60 < r_{xy} \leq 0.80$ is categorized as having high validity (good), $0.40 < r_{xy} \leq 0.60$ is categorized as having moderate (moderate) validity, $0.20 < r_{xy} \leq 0.40$ is categorized as having low validity (less), $0 < r_{xy} \leq 0.20$ is categorized as having very low validity (ugly), and $r_{xy} \leq 0,00$ is categorized as invalid.

Although the overall model of guidance and counseling programs at higher education that have been developed as a whole has been considered feasible, experts and practitioners continue to offer suggestions and criticisms that can be used to improve the model of the annual guidance and counseling program at higher education.

. The validation results of this annual model of guidance and counseling program developed, further strengthened with the results of previous research. Among the research conducted by Luky Kuriawan entitled "Development of Comprehensive Guidance and Counseling Services Program in SMA". The research uses standard instruments to reveal the needs of high school students, to be used by teachers of counseling and counseling in the high school. The results obtained an assessment of 81.96 and based on defined effectiveness criteria included in either category or eligible to be implemented (Kurniawan, 2015, pp. 1–3).

Furthermore there is research from Hardi Santosa. The study is entitled "Personal Social Counseling and Counseling Program to Develop Sexual Behavior of Adolescent Health (Development Study In High School Sma Kartika Siliwangi 1 Bandung)". This study aims to produce a program of personal social counseling and counseling from the results of need assessment which aims to develop students' healthy sexual behavior. The results of the study showed: (1) in general the student's sexual behavior is at the level of alert towards the need for development; (2) the handling of student sexual behavior problems is carried out with responsive service with reactive sporadic approach; (3) guidance and counseling program at SMA Kartika Siliwangi 1 Bandung has not yet used a new paradigm of comprehensive guidance and counseling with prevention and development approach; (4) Personal-social guidance and counseling programs to develop healthy sexual behavior of adolescents refers to comprehensive counseling and counseling with a prevention and development-oriented approach; and (5) personal-social counseling and counseling programs have proven to be effective in developing healthy student sexual behavior. (Santosa, 2013, pp. 1–3).

Based on the above explanation, including exposure of the validation test of the annual program model of guidance and counseling and the results of previous research, making the model of the annual program of guidance and counseling at Universitas Negeri Yogyakarta and University Sebelas Maret Surakarta become more stable and fit to be used as a reference for counselors at UPT LBK University in carrying out guidance and counseling services.

Conclusions

This research and development has resulted in the product of an annual program model of guidance and counseling in higher education. This product is developed in order to be used as an annual model of Guidance and Counseling which is prepared based on the instrument need assessment that has been standard and valid. So it is expected to be a reference for ULBK counselors in providing optimal service for students. The process for producing this product can be explained as follows:

1. Expert test results concluded that the product has fulfilled the content validity of 0.76 or can be categorized valid (good). The product is enhanced by making improvements from some of the criticisms and suggestions provided by experts.
2. Focus Group Discussion (FGD) results from practitioners concluded that the product can be categorized well. According to the assessment of ULBK counselor of Universitas Negeri Yogyakarta and Universitas Sebelas Maret Surakarta as practitioners, it is concluded that the product can be categorized well, but needs to be refined by making improvements given by practitioners until the final product is ready for use.

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