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Analyzing the Impacts of Course and Training Institution Management on Education Services for Communities during the Covid-19 Pandemic

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Abstract. The unexpected and rapid spread of COVID-19 throughout the world has made the course and training institution management face various problems, such as adapting new learning habits by using blended learning, tutors and students who have not well mastered the utilization of online learning media, and tutors' ability to train the Learners to quickly adapt and utilize the new technology when learning from home. This study aimed to analyze the impacts of course and training institution management on educational services for communities during the COVID-19 pandemic. The analysis was conducted on six education program management indicators starting from planning to development. Furthermore, the impacts of course and training activities performed by the institutions during the COVID-19 pandemic were also analyzed. This study was participated by 27 course and training institutions in Tasikmalaya. A qualitative research method was performed to collect the research data. The research found that the course and training institution management was in accordance with the concept of education program management starting from planning to supervising. In addition, the impacts of course and training institution the management during the COVID-19 pandemic included: (a) developing the managers' ability to deal with the unexpected situations; (b) developing the tutors' and students' ability related to skills mastered after training and online learning media; (c) increasing the existence of institutions; (d) increasing the public trust to the related institutions. Meanwhile, the institutional infrastructure completeness was strengthened by making partnerships with the other institutions and the industrial world, as well as increasing the quantity and quality of graduates. However, the managers did not feel the impacts.

Key words: COVID-19, impact, management, training, education service, community

INTRODUCTION

Throughout the history of human development, this COVID-19 pandemic is a period which mostly has drawn the attention of people around the world. Sandford (2020) has estimated that approximately 4 billion people are now living in social isolation during the pandemic. When this COVID-19 pandemic has widely spread throughout the world, effective treatments are greatly required (Muhammad Hamdan Gul, Zin Mar Htun, Nauman Shaukat, Muhammad Imran, and Ahmad Khan, 2020) both from the government and WHO as the world health organization. The COVID-19 pandemic is a rare phenomenon in the world and impacts various human life sectors. To decrease the spread of COVID-19, the world health organization (WHO) and most governments have recommended that all people should stay at home (Thiago Matias, Fabio H Dominski, and David F Marks, 2020). The 2019-2020 period was considered as a challenge for both formal and non-formal education institutions. The educational efforts were, in facts, limited in space and time due to the outbreak of the COVID-19 pandemic in many countries throughout the world. Most countries in the world have re-

cently registered and confirmed millions of COVID-19 cases (Saleh A Alqahtani and Jorn M Schattenberg, 2020). To prevent from the spread of the COVID-19, a popular lockdown policy has emerged and resulted in various significant health, economic, environmental, social and, educational consequences.

The recent implementation of education should be adapted to the social developments and changes to improve the quality of human resources and increase the dignity of various community levels (Prasetyo *et al.*, 2021). If education is equally implemented, the development of knowledge and technology may only be enjoyed by certain community levels leading to various social problems, such as unemployment resulted from the large number of workforce with low education levels and skills. Large number of workforce with the relatively low education levels and skills is one main cause of low competitiveness in obtaining job opportunities both in home and foreign countries and eventually results in high unemployment and poverty.

Nowadays, the government has continuously strived to improve the education services for communities, to balance the number of people looking for educational institutions, and to prepare the prospec-

tive workers with competencies meeting the demands of job vacancies and keeping up with the development movement better. There are many ways to develop people's competencies and skills, such as conducting trainings or involving communities in trainings to develop their competencies and skills. Training and education were greatly attractive as mechanisms to achieve the individual development, capacity building, and institutional changes through the development assistance programs (Robert Cannon, 2001).

This study focused on analyzing the impacts of course and training institution management on educational services for communities during the COVID-19 pandemic. The possible impacts of those training programs included capacity building, institutional strengthening, and individual professional development in both long- and short-term periods. People generally tend to be interested in ensuring that the results of training can be effectively achieved and highly sustainable. Sustainable results actually depended not only on the number of trainings (Narayanasuwami, 1991) but also influenced by trainings related to the institutional strengthening, such as infrastructure development, relationship with industries and communities, as well as leadership and management. Sudjana (2004) stated that management is a special ability and skill to perform an activity together with others in achieving the organizational goals. according to Sudjana, the management functions included planning, organizing, mobilizing, supervising, evaluating, and developing.

The implementation of courses and trainings requires face-to-face learning activities as an introduction, strengthened by practices in the classroom. However, the implementation of government policies to prevent from the outbreak of COVID-19 has significantly impacted the management of courses and trainings during the COVID-19 pandemic. The trainings conducted during the COVID-19 pandemic provided their own challenges for managers, tutors, and students in adjusting with the new learning environments due to the recent COVID-19 pandemic conditions. The unexpected and rapid spread of COVID-19 throughout the world has made the course and training institution management faced various problems, including adapting new learning habits by using blended learning, tutors and students who have not mastered the utilization of online learning media, and participants' ability to quickly adapt and utilize the new technology when learning from home.

Trainings were actually designed for face-to-face teaching, while during the COVID-19 pandemic, tutors should be able to adapt themselves with the online teaching. Benjamin Luke Moorhouse (2020) mentioned that training should be completed by the

tutors who are capable of operating the recent development of technology and ready to give online courses in response to the recent issues on health emergencies. On the other hand, the managers were actually not ready to deal with this unexpected COVID-19 pandemic. Thus, they reduced the educational service intensity for communities. Therefore, this study tried to analyze the impacts of course and training institution management on educational services for communities during the outbreak of the COVID-19 pandemic.

METHOD

The research uses a qualitative approach with a descriptive method, where the data is obtained through two interviews, namely open interviews and closed interviews. Both interviews were collected and focused on managing courses and training institutions for education services for the community during the COVID-19 pandemic. Samples were taken from the management of courses and training institutions in Tasikmalaya City. A total of twenty-seven institutions are willing to participate in the research voluntarily. Those who join the research are the managers of courses and training institutions that actively provide educational services for the community so that they experience directly the impact of the management of institutions on community education services during the pandemic.

Researchers used closed interviews due to limited wiggle room in conducting semi-structured group interviews during the pandemic, so closed interviews were conducted through google forms distributed to all course and training institution managers. A total of forty-five closed interview statement questions were given to the managers of course and training institutions during December 2020. Interviews with the management were recorded, then interpreted by researchers and analyzed using descriptive analysis. Similar to closed interview data, the data is interpreted in accordance with the focus of the study so that descriptive data about the management of educational programs in the pandemic period. Researchers recognize the importance of audit trails (Thomas, 2006), so that all field records, transcripts, process records, and data analysis results are well maintained.

RESULTS AND DISCUSSION

The management of education programs is better known as education program management put forward by Sudjana since 2000 with six indicators, namely planning, organizing, mobilization, coaching, assessment, and development. *Management* which in some contexts both have similar meanings, with the

content of meaning to control which means *to* organize and manage (Husaini, 2004). Adisasmita (2011) suggests that management not only carries out an activity, but is a series of activities that include management functions, such as planning, implementation, and supervision to achieve goals effectively and efficiently.

Management is a special ability and skill to do a good activity with others in achieving the goals of the organization (Sudjana, 2000). The management of educational programs has long been studied in the management of educational programs, especially nonformal education. Courses and trainings are one type of educational program unit in Indonesia. The government's juridical governance explicitly regulates the management of education in the government regulation number 66 of 2010 on the management and implementation of education. Education management is the regulation of authority in the implementation of the national education system by the government, provincial government, district/ city government, education providers established by the community, and educational units so that the education process can take place in accordance with national educational objectives.

This study focused on analyzing six indicators of Sudjana education program management (2000) ranging from planning to development. These six indicators are considered relevant in examining the management of educational programs conducted by course and training institutions in the midst of the COVID-19 pandemic. These six indicators consist of planning, organizing, mobilization, coaching, assessment, and development (see Figure 1)
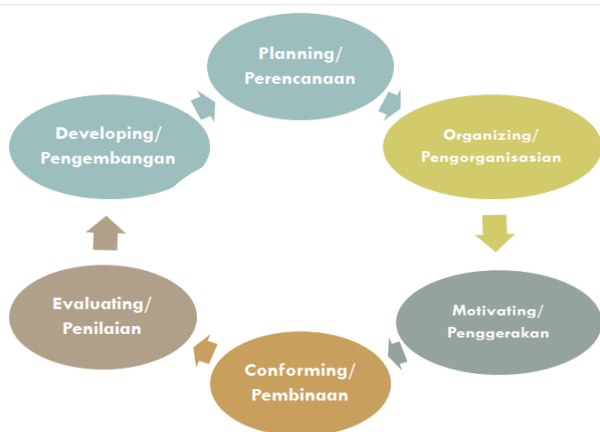
Figure 1. Education Program Management (Sudjana, 2000)

Overview of Management of Courses and Training Institutions in Tasikmalaya City

A total of 27 managers of courses and training institutions participated in this study through closed interviews with details of participants including: eleven people whose institutions are not yet accredited, five people whose institutions are accredited by a, two people whose institutions are accredited, seven people who are accredited institutions B, and two people who are accredited institutions A. 27 managers are managers of course institutions and training activities in providing educational services nonformal for the community in TasikmalayaCity.

The majority of them are unaccredited institution managers as well as in the application process. Respondents have diverse educational backgrounds, some have studied postgraduate education, some have completed undergraduate education, and some have completed high school education (for more details can be seen in table 1. below).

Table 1. Participant Institution Data

Accreditation of Institutions	Sum
A	2
B	7
C	2
Accredited	5
Not Yet Accredited	11
Total	27

Based on field observations conducted by researchers, there are actually 45 institutions registered to conduct course education and training services in Tasikmalaya City, but actively conducting educational services in the community only amounts to 27 institutions. After a closed-door interview, it was obtained that of the twenty-seven institutions that provide educational services in Tasikmalaya City, only three institutions did not continue their education during the pandemic.

This is related to the unpreparedness of the manager in dealing with impossible situations so that the manager has difficulty adopting new habits in learning that use *blended learning,* the ability of tutors and learners who have not mastered technology, especially in the use of online learning media, as well as the ability to train learners quickly to use new technologies when learning from home, (Hasanah, 2021). The pace of change is such that many agency leaders do not know how to adapt and change.

The COVID-19 pandemic around the world has accelerated the use of technology by many parties to encourage the creation of a fourth industrial revolution. Schwab (2016) mentioned that the fourth industrial revolution was digitization and automation of work. This proves that pandemics have caused unimaginable disruptions in the workplace and revealed gaps in the use of technology in the organizational space, but better use of technology has shown that learning technology is beneficial for quality devel-

opment, improving skill sets, and not an obstacle (Hughes, 2020).

Unlike the three institutions that are experiencing obstacles, as many as twenty-four courses and training institutions continue to conduct educational service in the pandemic. Although with limited wiggle room unlike before the pandemic, but they still try to meet the needs of the community towards education with the implementation of learning in the classroom still pay attention to health protocols.

The majority of managers agreed to continue to provide educational services for the community despite the limitations of the pandemic period. They revealed that the importance or adaptation of education services to the community. Not only that tutors as trainers and trainees, and institutions must work together to keep adjusting to changes after COVID-19. These adjustments include self-adjustment of their own technological skills devices. Hughes (2020) revealed that many educators have not used many of the most prevalent technologies for the success of the fourth industrial revolution until the time of the COVID-19 pandemic requires them to do so.

A total of twenty-four courses and training institutions in Tasikmalaya continue to perform educational services during the pandemic while keeping an eye on health protocols. Adaptation of new habits in learning conducted by the manager, among others, is to tell all tutors and students to prepare themselves in doing learning (*blended learning)* or learning conducted online for theory and offline learning in the classroom for practice, (Djibu and Shofwan 2019). In addition, some managers also take the time to find out and follow the development of COVID-19 cases on various social media. The analysis of the needs of the program is still carried out by all participant agencies, and all agree that they can determine the general purpose and specific purpose of the program to be implemented after conducting the needs analysis.

Although in its realization three institutions did not realize the results of their analysis in the form of educational services during the pandemic. This is inseparable from the consideration of each institution's capacity in facilitating the learning carried out. This is in line with Hughes' findings (2020) which reported that the COVID-19 pandemic forced some parties to quickly shift their learning to online platforms or remote technology in the middle of the semester (e.g. *Zoom, WebEx, Microsoft Teams,* etc.). The acceleration of adaptation using technology in learning is one of the obstacle factors in the implementation of educational services in today's society.

A total of twenty-four institutions that continue to perform educational services for the community in the future agreed that they used six indicators of Sudjana education management (2000) starting from the planning, organizing, mobilization, coaching, assessment, and coaching stages. These six indicators are prepared and designed after the analysis of people's learning needs. This is in line with traditional management functions (Haimann and Scott, 1970) starting from the planning, organizing, staffing, influence, and control stages.

Planning

Planning is a systematic process of making decisions about actions to be taken in the future (Sudjana, 2000). According to Waterson (Sudjana, 2000) planning is a conscious, organized, and continuous effort that is carried out to choose alternative actions to achieve the goal. According to Yehezkel Dror (Sudjana, 2000), planning is the process of preparing a set of decisions about future activities by being directed at achieving goals through the use of available means. While according to Friedman (1973) mentions that planning is a process that combines scientific knowledge and techniques in organized activities. According to Terry, George (1978) planning is the selection and linking of facts, making and using assumptions related to the future by describing and formulating certain activities that are believed to be necessary to achieve a certain outcome.

Planning is a benchmark in management for the achievement of the program objectives that have been set. Planning is the most basic early stage to conduct educational programs for the community. Based on the results of the interview obtained information that the majority of the management of courses and training institutions that will continue to conduct educational services in the pandemic, they reported that in the planning phase of the program there are several preparations including preparing assessment tools, preparing assessment techniques, preparing methods and teaching materials, preparing initial assessments and final assessments for participants, and organizing learning following the educational program to be implemented. The focus of education services in the future in this research is training.

Training is a planned and systematic effort to change or develop knowledge, skills, and attitudes through a learning experience, to achieve effective performance in an activity or various activities (Garavan 1997). Training and development are one of the three pillars of human resource development. Furthermore (Cannon, 2001) mentions that training and education have broad appeal as mechanisms for achieving individual development, capacity building, and institutional change in third world development.

Organizing

Organizing is the activity of establishing the relationship between humans and activities carried out to

achieve goals (Longenecher, 1973). This means organizing related to efforts to involve people into groups and efforts to divide work among members of the group to achieve organizational goals. According to Flippo &Musinger (1975), organizing is an activity of designing and establishing components of the implementation of an activation process. The purpose of organizing is to help people to work effectively together in an organizational or institutional forum. The organization is the process of managerial activities to form an organization that is tasked with implementing a predetermined plan to break the goal of the organization (Sudjana, 2000).

There are seven characteristics of organizing, namely: (a) related to the efforts of leaders or managers to combine human and non-human resources; (b) the existence of human resources consists of groups of people who meet the requirements of the organization's provisions (e.g. related to expertise, ability, a physical condition that corresponds to the demands of the organization; (c) the presence of non-human resources, such as buildings, equipment, tools, costs, and potential physical environments; (d) the integration of resources into the organization; (e) the division of duties, authorities, and responsibilities to carry out the organization plan; (f)human resources are the main and decisive role holders in achieving organizational goals.

Organizing is the stage of determining, grouping, and drafting various resources needed to achieve the program objectives. At the stage of organizing obtained information, all managers agreed that they determine the tutor, prepare the teaching materials per hour, determine the length of the program from start to finish, determine the duration of time, and determine the tools to be used according to the needs of the program. This means that in the organizing stage the manager strives to develop the wide variety of resources needed to achieve the program objectives. Haimann and Scott (1970) revealed that the process of organizing is closely related to the process of control through communication and decision making so that everything can be done if one seeks to integrate the diversity of these resources.

Mobilization

Motivating is an effort by the leadership to mobilize a person or group by developing motivation or *motive* in a person or group for performing tasks or activities given following the plan to achieve the goal yang has been set (Sudjana, 2000). Blanchard &Hersey (1982) mentions that the motivation that exists in a person is often in the form of needs, desires, stimuli, and words of the heart. According to Hulse (Sudjana, 2000) gives the understanding that motivation or *motive* is a force that is contained in a person's yang that moves the behavior of the person in achieving the goal. Gage &Berliner (Sudjana, 2000) mentions that motivation is a term that describes the efforts of giving power*(energized)* to a person to direct his activities.

Mobilization is an effort by the manager to develop encouragement or motivation in the tutor or subordinates to do their job properly, following the plan that has been set before, (Shofwan, et al, 2021). Mobilization emphasizes more on motivation, Gage &Berliner (1984) mentions that motivation is a term that describes the efforts of giving power*(energized)* to a person to direct his activities. Mover is related to the process of the implementation of an educational program as the realization of planning and organizing. The implementation of education programs is certainly tailored to the needs of the community.

All managers argue that their institutions continue to provide educational services even though it is felt that student participation is reduced in the future. So that the mobilization efforts are motivating tutors and students to maintain their learning enthusiasm during the pandemic. The manager also agreed to implement an educational program by paying attention to health protocols by equipping the room facilities with handwashing equipment. In addition, they also report that supporting facilities and infrastructure are prepared as much as possible to facilitate the implementation of programs, and rooms are set in such a way as to carry out learning di classes with a distant position.

Coaching

Coaching is a series of professional control efforts against all elements of the organization so that the elements function as they should (Sudjana, 2000). The focus of coaching in the organization is to utilize all resources following the plan to achieve the goals. Coaching is carried out so that the activities or programs that are running are always following the plan or do not deviate from the previously planned. The construction procedures according to Sudjana (2000) include: collecting information, identifying problems, analyzing problems, finding and establishing alternative problem solving, and carrying out problem-solving efforts.

Coaching is an effort to maintain, maintain or bring the situation as it should be. Coaching has a direction for utilizing all resources (human, resources, organization, activities) following the plan to achieve the goal. Coaching conducted by the manager, among others, is coaching tutors and students related to the use of online learning applications.

This shows that there has been an expansion of technology in learning by tutors and students during COVID-19, tutors will not only expand their

knowledge about the use of technology but also encourage them to become more experts in choosing the right technology to support learning. In line with previous findings that technological developments have had a major and significant change in education (Patrick, et al, 2016). Not only that technology is also evolving into various types and is being adopted in the learning environment (Huang, Liang &Chiu, 2013; Liu, Huang, Kinshuk &Wen, 2013; Liu &Shen, 2011).

Valuation

Assessment or evaluation is a systematic determination process about the value, purpose, effectiveness, or suitability of something following the criteria and objectives that have been set before (Steele,1977). Paulston (1972) mentions that judgment is the process of testing something as material to make decisions. Worthen and Sanders (1973) meant that judgment is the process of identifying and gathering information to help decision-makers. It is a process of identifying and gathering information to assist decision-makers in choosing alternative decisions (Worthen and Sanders, 1973).

According to Sudjana (2000) assessment is an activity that aims to know the achievement of the implementation of the program with the objectives of the organization that has been predetermined. Anderson (1978) formulated assessment objectives including (a) provide input for program planning; (b) provide input for program decision making; (c) provide input for modification of the program; (d)obtain information about supporting factors and program inhibitions; (e) provide input to understand the scientific basis for assessment.

Assessment is a systematic activity to collect, process, and present the necessary data or information as input to make decisions. Charles (1984) mentioned that the training program can be considered practical and effective by paying attention to the results of the evaluation of the implementation that has been obtained, (Siswati, et. al, 2021). At the assessment stage the majority of managers agree that they conduct daily evaluations at the end of the training, conduct a final evaluation at the end of the training after all the materials are delivered, the suitability of the evaluation results with the purpose of the training, the impact of the program obtained after the evaluation, decision making is made after the evaluation. Not only that, but the manager also includes indicators of enthusiasm and mood of students during the training in the assessment stage.

Development

Development is the initial activity of managing an advanced program. The initial management activities will be based on the results of the assessment of the program, if the results of the assessment of the program are not continued then there is no development, aright but if the program needs to be continued then automatically required development (Sudjana, 2000). Morrison, James L, et.al, (1984) mentioned that development is an effort to expand or realize potential, bringing a state in stages to state yang more complete, larger or better, advancing something from simple to more complex stages of change. Simply put, development is an effort to advance the program to a more perfect, broader, and more complex level of the program.

Program development is related to efforts to expand or improve a program both in terms of quality and quantity. Flying is the first step after obtaining information from the evaluation results. Development is carried out if there is a conformity between the needs of the program, the implementation of the program, and the results achieved. At the stage of program development, the manager agreed that the development of the program is related to improving the qualifications of tutors and improving the competence of students related to the use of online learning media.

The majority of them also agreed that innovation goes into program development. This evidence shows that COVID-19 is changing the use of technology in learning faster than planned, so that future program development is focused on the use of learning technology. But triennia are to focus on the trainees and ensure that the trainees can learn and immediately apply the skills they get to their jobs (Shank, 1998).

Impact of Management of Courses and Training Institutions in the Pandemic

The management of courses and training institutions during the pandemic has an impact on several things, including (a) the development of management's ability to deal with unexpected situations; (b) the development of the ability of tutors and learners not only related to the skills possessed after the training but also related to online learning media; (c) improvement of the existence of the institution; (d) increased public trust in the institution. As for the completeness of the institution's infrastructure, strengthening partnerships with other institutions and the industrial world, as well as increasing the number and quality of graduates, the manager does not feel the impact.

This shows that the impact of managing courses and training institutions in the pandemic period is very complex, not only related to the characteristics of learners but also the design and environment that underlying learning. These findings are in line with previous research by Baldwin and Ford (1988) which

stated that the impact of training is influenced by the complex variable relationship between training participants' characteristics, training design, and training implementation, as well as institutional work environment characteristics.

Therefore, tutors as educators should be good advocates for using technology by demonstrating their expertise in using learning technology. Technology has helped redefine instructor-led virtual training. Zoom technology has provided a way for better interaction between learners and instructors. In addition, the organization's leadership must also provide a technological infrastructure so that tutors and students have access to the technology needed to achieve the expected goals within the required time frame. Claretha Hughes (2020) mentions that support for internet access, hardware, and software is just one example of the diverse technology support needed.

CONCLUSION

Analysis of the impact of the management of courses and training institutions in the pandemic following the concept of education program management, which starts from planning, organizing, mobilization, coaching, assessment, and development. In addition, the impact of the management of courses and training institutions felt directly by the manager during the pandemic, including (a) the development of management's ability in dealing with unexpected situations; (b) the development of the ability of tutors and learners not only related to the skills possessed after the training but also related to online learning media; (c)improvement of the existence of the institution; (d)increased public trust in the institution. As for the completeness of the institution's infrastructure, strengthening partnerships with other institutions and the industrial world, as well as increasing the number and quality of graduates, the manager does not feel the impact.

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Development of Teaching Materials for Facilitation and Management of Changes in Community Empowerment

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Abstract. The facilitation and management of changes can support the success of community empowerment. In the process, appropriate facilitation and management of changes in teaching materials are needed. This study aims to construct the teaching materials for facilitation strategies and management of changes by Indonesian society's socio-cultural characteristics. The research and development method was carried out using the Borg and Gall model to achieve this goal. The result shows that the teaching material needed in the facilitation strategy and management of changes includes three aspects: knowledge, skills, and attitudes. Overall, facilitators know empowerment facilitation but still feel they lack facilitation skills in practices. The personal communication skills most needed are probing and paraphrasing. The collaboration skills most wanted to improve in the community group are building group dynamics and teamwork, building belief and confidence, encouraging full participation, supporting conflict resolution, encouraging inclusive solutions, giving and receiving feedback, encouraging mutual understanding, and monitoring the role and group level. The most preferred attitudes for a community empowerment facilitator are unconditional trust in group abilities, building empathy, building interest in others, and an unconditional positive outlook. According to the audience, suitable teaching materials use easy-to-understand language, illustrated pictures or videos that work well, and include real examples in the field. Teaching materials must be designed to be attractive and user-friendly. In this case, it can be done in further research.

Key words: community empowerment; facilitation; management of changes; teaching material

INTRODUCTION

Facilitation is an essential competency that a community educator must have (Sasmita et al., 2020). This ability will significantly assist the facilitator in carrying out participatory community education programs. The program is structured based on the objectives formulated, planned, implemented, and evaluated with the community (Laufer et al., 2019).

Facilitation skills must be prepared as best as possible in the higher education process to produce graduates as community educators (Ramadani et al., 2020). The preparation is started by looking at various things that make the learning process more comfortable. The learning process cannot be separated from the use of teaching materials. Teaching materials have an essential role in achieving these competencies (Indrawini et al., 2015).

Facilitation and management of changes are usually presented as a study only, but it is not easy to find its existence as teaching materials. Even though public education practitioners, including academics and their students, need this material in one package of teaching materials (Purnomo et al., 2020). Teaching materials can determine the success of learning.

Learning depends on the insight, knowledge, understanding, and level of creativity in managing teaching materials (Fajri, 2018). Teaching materials have a crucial role in the learning process. Teaching materials are all materials (information, tools, and texts) arranged systematically, which displays a complete figure of competencies that will be mastered by learners and used in the learning process to plan and study the implementation of learning (Ianah & Raharjo, 2014).

For learners, the function of teaching materials is also a tool in independent learning. They can learn anytime and anywhere and are adjusted to each learner's ability. Teaching materials can guide learners in directing their activities in the learning process (Nakazawa et al., 2014).

Some several benefits or uses are obtained by developing the teaching materials. The benefits of developing the teaching materials include: (1) teaching materials that match the demands of the curriculum and needs; (2) no longer dependent on textbooks which are sometimes difficult to obtain; (3) teaching materials become more prosperous because they are developed using various references; (4) increasing knowledge and experience in writing teaching materials; (5) teaching materials will be able to build effective learning communication; (6) obtained teaching materials that can assist the implementation of learning; (7) get the opportunity to study inde-

pendently with teacher guidance; (8) find the way more comfortable to learn every competency that must be mastered (Zuriah et al., 2016). Therefore it is necessary to develop the design of teaching materials regarding facilitation strategies and management of changes (Sasmita et al., 2020). This teaching material will help educators to be more effective in carrying out learning.

Nowadays, functional facilitation materials are relatively easy to find on the internet (Mulyadi et al., 2020). There are also quite a lot of materials regarding change management. The material for facilitation and change management is quite spread out and accessed by community education activists, facilitators in community empowerment, or social workers (Macknish & Tomaš, 2018). However, until now, the material has not been integrated into a package of teaching materials.

Teaching materials for facilitation strategies and management of changes are needed by the Community Education Study Program in Indonesia (Hazizah & Ismaniar, 2020). However, until now, there are no teaching materials that can be accessed by practitioners, academics, observers, and the learners themselves. This teaching material will contribute to the scientific development of community empowerment, where facilitation strategies and management of changes are needed as core competencies for community empowerment.

This thinking is also inspired by Ling How Kee Privatization of Social Work (Research and Practice in Sarawak), which must adapt to the social work approach because there are differences in socio-cultural characters between Western and Eastern society. Many teaching materials of facilitation strategies and management of changes have been found in the world.

However, the construction is not under the socio-cultural context of Indonesian society. Adjustment to the local context is critical. Learning from his experience when he tried to implement social work measures he had acquired in Australia to Malaysia, he got an unexpected response, namely being expelled with threats from residents. This experience is an essential point of adapting science to the Indonesian socio-cultural context (Sastriawan, 2017).

In this case, the problem is how to design the development of teaching materials of facilitation strategies and management of changes by the needs and sociocultural character of the Indonesian society (Rasyad et al., 2019). The design of the development of teaching materials is directed in modules that can be used for both practical and academic learning. This study is urgently needed by Higher Education, which produces facilitators under the socio-cultural Indonesian society.

The construction of this teaching material is also needed by community empowerment activists that can be used as material for refreshing facilitation competencies and managing community empowerment changes (Augendra Bhukuth, Bernard Terrany, 2020). This research's specific objective is to construct the module as teaching material for facilitation strategies and management of appropriate changes to the Indonesian socio-cultural context.

METHODS

This study uses a research and development method known as research and development (R&D) to achieve the goal. The research and development method is very appropriate to be used to produce specific products as well as produce a quality assurance instrument. Besides, this method can be used to measure the effectiveness of the products it produces. It is necessary to identify and analyze needs and test and improve it continuously (Yusanti & Rakimahwati, 2019).

This method allows teaching materials to be constructed in stages, from gathering information regarding the basic needs of facilitation, preparing the construction of teaching materials, testing quality and feasibility, trying out in practice, and evaluating the results. The research and development method is used to produce products that can be applied, which is more critical than merely improving learning outcomes (White, 2011). This research is applied research based on the statement of the National Science Foundation (Foundation, 2018).

This research is a longitudinal study carried out in stages over a while (in a few years). This research activity produces information on users' needs (need assessment), while development activities are carried out to produce a learning device. As previously stated, this research does not stop at the need assessment or need analysis but continues with making development plans, conducting exploration by collecting and analyzing data, conducting expert validation, and empirical testing.

The following is a development procedure after a needs analysis is carried out, namely: (1) Planning; (2) Exploratory studies; (3) Development of initial product forms; (4) Validation: a) Expert validation and b) Field test; (5) Data collection and analysis; and (6) Revised learning models and tools based on the validation results. The research and development method has the characteristics that differentiate it from other research methods. The model uses in this research and development is Borg and Gall model. There are several steps modified based on that model as below: (1) Needs analysis; (2) 2) Analysis of curriculum; (3) Analysis of learning resources; (4) De-

termine learning resources; (5) Compiling teaching material map; (6) Making teaching materials; (7) Validation of teaching materials; (8) Revision of teaching materials; (9) Trial of teaching materials; (10) Revise the teaching materials; (11) Dissemination of teaching materials.

RESULTS AND DISCUSSION

Based on the needs analysis, it is known that facilitators need teaching materials of facilitation and management of changes in the field of community empowerment and prospective facilitators who are still studying in higher education (Imam Shofwan, Ghanis Putra, 2019). Because of this result, the initial teaching material is constructed and summarized in the structure below.

The structure of the facilitation material is a series of materials that must be mastered by the facilitator. Based on the competency, here is the material structure as well as the competence of a facilitator (Action for the Rights of Children (ACR), 2005; Ellerani & Gentile, 2013; Laufer et al., 2019; Sasmita et al., 2020; Splete & Hoppin, 2000).

Table 1. Structure of Teaching Material of Facilitation

Facilitator Competencies	The aspect of Facilitator Competencies
Knowledge about facilitation	Knowledge of problems and solutions in society
	Knowledge of community empowerment
	Andragogy knowledge
	Facilitation concept
Personal communication skills	Encourage dialogue
	Paraphrase
	Probing
	Ask and answer questions
	Observation and listening
Group-centered skills	Support problem solving
	Encourage inclusive solutions
	Encourage mutual understanding
	Monitor role and group level
	Build group dynamics and teamwork
	Encourage full participation
	Give and receive feedback
	Building trust and self-confidence

Facilitator Competencies	The aspect of Facilitator Competencies
Skills centered on planning	Support, personal monitoring, and evaluation
	Supports action planning
	Monitor the meeting process
	Suggest the meeting process
	Assist in setting a realistic agenda
Necessary attitudes for working with others	Empathy
	Interest
	Unconditional positive outlook
	Unconditional trust in group abilities

The construction of the initial teaching materials has been assessed and validated by experts, then revised and tested. The trial results show that teaching materials still require further improvement and development. In the trial process, respondents were dominated by those who were/had learned about community facilitation and empowerment. Very few of them are trained, become trainers, and become facilitators of community assistance.

So that with these characteristics, the information conveyed is the information it gets in the form of concepts and theories. In comparison, experienced can confirm concepts and theories with field experience and even formulate new knowledge.

Overall, the respondents understood what the facilitator's main tasks were. Following are the results of the identification of verbs that describe the facilitator's duties in the community empowerment process.

Table 2. Indicator verb for community empowerment facilitator task

Type of Task	Result of task indicator verb identification
Main task	Facilitating, empowering, accompanying, assisting, increasing participation, motivating, increasing capacity, disseminating information or programs, managing
Additional task	Teaching, mentoring, reporting, practicing,

The facilitator's understanding is in line with Kolb's understanding that people called in to facilitate groups may be expected to lead, mediate, train, present new information, make process suggestions, serve as peacemakers, or take notes (Kolb et al., 2008). According to Schwarz, the term "facilitator"

refers to people who fulfill various roles in a group, including a leader, mediator, substance expert, and instructor (Schwarz, n.d., 2002).

The function of the facilitator in the facilitation process consists of the following: (a) managing group discussions and processes in such a way as to enable group members to have positive experiences; (b) provide services that promote valuable results in group dialogue, analysis and planning; and (c) provide techniques or practices that make it easier for groups to interact and achieve goals (Thorpe, 2016).

To carry out these duties requires competence. The following is a list of facilitator competencies (Thorpe, n.d., 2016): (1) Listening actively; (2) Creating a climate that supports interaction & discussion; (3) Use body language and non-verbal effectively; (4) Encourage group involvement and problem/task ownership; (5) Observe and pay attention to nonverbal in-group members; (6) Use humor effectively; (7) Dealing with annoying individuals whose behavior is detrimental; (8) Stimulates group insight and creativity; (9) Use questions skillfully; (10) Monitor group dynamics; (11) Help the group clarify goals and establish ground rules; (12) Maintain adherence to ground rules; (13) Using appropriate techniques for assignments and groups; (14) Paraphrase and summarize content segments; (15) Clarifying perspectives on disagreement; (16) Focus the group's attention on substantive issues in the conflict; (17) Show evidence of previous planning & preparation; (18) Provide feedback and encourage process skills; (19) Keeps the group focused on issues; (20) Complete follow-up activities; (21) Remain neutral on assignment results; (22) Follow the set time-frame; (23) Use technology and visual aids appropriately.

The top three competencies are (1) Active listening, (2) Creating a climate that supports interaction & discussion, and (3) Using the body and non-verbal language effectively. The competency of "active listening" is rated as the most important competency of a small group facilitator.

The following competencies appear in the top lists for facilitators: (1) Listening actively; (2) Deal with annoying individuals whose behavior is detrimental to the group; (3) Observing and paying attention to body language and nonverbal communication among group members; (4) Using questions skillfully; (5) Helps the group explain the purpose of the meeting and establish ground rules; (6) Maintain adherence to ground rules; (7) Creating a climate that supports inter-action & discussion; (8) Encourages group involvement in and ownership, problems, and tasks.

The audiences conveyed the characteristics of a good facilitator based on a general understanding and scattered concepts. There are several characteristics of a good facilitator's attitude, namely: (1) learning

from each other and mutual respect; (2) Be equal and familiar; (3) Listening and not dominating; (4) Not patronizing; (5) Impartially and not formally criticize; (6) Be open and humble; (7) Be positive; (8) Always make eye contact with participants; (9) Pay attention to the participants who are the most silent; (10) Creative and always creative (Avery, 2016; Mochran, 2018).

The facilitator must also have values that are very useful in participatory decision-making. There are four core values of participatory decision-making. These four central values can only occur if stakeholders take an active part in the decision-making process (Klassen & Kim, 2019). The four values are mutual understanding, full participation, inclusive problem solving, and shared responsibility. (1) Mutual Understanding: For the stakeholder group to reach an agreement on an ongoing basis, members need to understand and accept each other's reasons for their individual needs and goals. This necessary sensitivity to acceptance and understanding allows others to develop innovative ideas that can unify each person's views; (2) Full Participation: During the participation process, all stakeholders are encouraged to be actively involved and say what is on their minds. In many ways, this will strengthen the stakeholders themselves. They become courageous in addressing difficult problems. They learn how to express their needs and opinions mutually. Moreover, they learn to find and understand all the stakeholders involved' different opinions and backgrounds in that process; (3) Inclusive problem solving: Inclusive problem solving is wise problem-solving. The solution to these problems occurs by incorporating the views and needs of all people. This problem solving has power because it shows the real picture and the views of healthy and influential, and the truth proposed by marginalized groups, the marginalized, and the weak; (4) Shared responsibility: During the participation process, stakeholders feel a great sense of responsibility to create and develop sustainable agreements. They understand that they must be willing and able to carry out their proposals; thus, facilitators will do their best to give and receive input before they make a decision. The condition contradicts the old assumption that everyone must be responsible for the consequences of decisions made by only a few actual figures.

These values need to be embedded in attitudes. There are necessary attitudes that must have to work with others: (1) Empathy; Empathy is putting themselves in someone else's shoes to understand their perspective on a problem. Empathy is essential when working in society to understand the variety of conditions, situations, and interests. Empathy can be difficult because we have to break free from our assumptions and perceptions and try to put ourselves in their

shoes. The challenge in group facilitation and working in the community is that the facilitator has to empathize with many people simultaneously; (2) Interest; Interest is interested in people, situations, and life. Interest is the facilitator's strength to be able to listen actively. It can have an impact on the birth of a sense of appreciation and enthusiasm for conveying information. The community will feel confident in sharing their thoughts with the facilitator if they feel interested in their life and not just aspects related to the facilitator profession; (3) Unconditional positive outlook; A positive outlook is unconditional, meaning that it always respects humanity and each individual's uniqueness and respects every potential. They accept people who do not mean that the facilitator must like and agree with the community. If the facilitator cannot respect and respect the community, it will be difficult for him to facilitate them; (4) Unconditional trust in group abilities; A facilitator must be able to be neutral towards the content conveyed by the community (Sasmita et al., 2020). Content neutrality lies in the unconditional belief in the group's potential to find reasonable solutions and decisions on their problems. It means that no matter what composition the group consists of, the facilitator believes that the solution lies and that a facilitator's role is to help generate these answers.

The priority that respondents want to improve is personal communication skills. This skill is a fundamental skill in building relationships and cooperation. These personal communication skills consist of (1) Encouraging dialogue; (2) Paraphrase; (3) Probing; (4) Asking and answering questions; and (5) Observation and listening. The next skill is the skill of facilitator in facilitating groups. Group-centered skills consist of (1) supporting conflict problem solving; (2) promote inclusive solutions; (3) promote mutual understanding; (4) monitor roles and group levels; (5) build group dynamics and teamwork; (6) encourage full participation; (7) give and receive feedback; and (8) building trust and self-confidence.

Based on information from respondents, the facilitator was also faced with program organizational matters. In such cases, planning-centered skills are required. These skills are (1) support, personal monitoring, and evaluation; (2) supporting action planning; (3) monitor the meeting process; (4) advise the meeting process; (5) assist in setting a realistic agenda.

They often learn various attitudes, values, knowledge, and skills through questions and discussions, supported by videos and reading materials in the form of textbooks and modules. Some are happy with learning directly with the trial and error method. Referring to Edgar Dale's learning pyramid, the learning pattern that respondents often and likes to use is an active learning model (Herdiana, 2013; Nielsen, 2015). This active learning model consists of engaging in discussions, expressing opinions, presentations, simulations, and real-time hands-on practice.

CONCLUSION

Facilitation is one of the competencies that must be mastered by community educators so that the teaching materials must be well prepared. This teaching material is essential to compile so that community educators get a complete picture of the facilitation strategy and change management so that the community empowerment process can be carried out in an effective and fully participatory manner. Overall, facilitators know empowerment facilitation but still feel they lack facilitation skills in practices. The personal communication skills most needed are probing and paraphrasing. The collaboration skills most wanted to improve in the community group are building group dynamics and teamwork, building belief and confidence, encouraging full participation, supporting conflict resolution, encouraging inclusive solutions, giving and receiving feedback, encouraging mutual understanding, and monitoring the role and group level. The most preferred attitudes for a community empowerment facilitator are unconditional trust in group abilities, building empathy, building interest in others, and an unconditional positive outlook. Teaching materials must be designed to be attractive and user-friendly. Based on this research, further research is recommended to formulate teaching materials according to their needs. Teaching materials and learning media should still support the active learning process. This model is believed to be more easily absorbed by facilitating around seventy to ninety percent of the total material.

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The Effectiveness of Production-Based Learning Models in the ICARE Approach to Entrepreneurial Literacy Ability

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Abstract. Entrepreneurship training activities in the literacy village program are one of the national literacy movement programs. Learning citizens with limited characteristics need effective learning skills to achieve the goals of literacy skills in the industrial era 4.0. The purpose of this study was to test the effectiveness of the Production Based Training learning model with the ICARE approach on entrepreneurial literacy skills of women participating in entrepreneurship training in literacy villages. The research method used is a quantitative approach pretest-posttest one group design with data analysis using SPSS t-test. The research population is the community of women as learning citizens in the literacy village program. The sampling technique was simple random sampling. Data collection techniques used observation, questionnaires, and performance ability tests. The results showed that the ICARE-based Production-Based Training learning model was effective in improving entrepreneurial literacy skills significantly as indicated by the high insight into entrepreneurial knowledge and attitudes as well as pioneering entrepreneurial skills with critical thinking skills, communicating, collaborating, and developing creativity in problem-solving to pioneer entrepreneurship. The impact of this research is to provide increased literacy skills, especially for marginalized women in pioneering and developing entrepreneurship.

Key words: learning model production based training; ICARE approach; entrepreneurial literacy ability

INTRODUCTION

One of the main objectives of resource development is to improve the quality of women by increasing education, productivity, and the ability of competitive character. These three goals can be achieved through training programs aimed at increasing entrepreneurial literacy skills for women of productive age. Meanwhile, there is a problem that the literacy ability in Indonesia has decreased in 2019 compared to the previous year, women's literacy skills are lower than men, as well as women's participation in jobs lagging 33 points compared to men which reached 84% (Baisa et al., 2018).

The urgency of this research is the ability of women to be competitive if they have literacy competencies. Competition in the 21st century requires creative resources, critical thinking, persistence, adaptability, communication, and cooperation, leadership, social awareness, and culture (Morocco, C. C., Aguilar, C. M., & Bershad, 2010). Understanding literacy is not only a transformation of individuals but also social transformation. Low levels of literacy are highly correlated with poverty, both in an economic sense and in a broader sense. Learning from the experiences of developed countries that have high reading interests, such as Finland, America, and South Korea, they have become influential countries in the global world (Eisenberg, 2014).

The women's empowerment program in Indonesia by increasing literacy skills and competitiveness is still facing tough challenges, so it demands better strategies and more creative breakthroughs. The government has declared the National Literacy Movement in a literacy village forum in 2016, with action activities for the adult community through entrepreneurship training programs (KP dan Kebudayaan, 2017). The implementation of entrepreneurship training programs in literacy villages at the same time in the framework of gender issues and social inclusion in sustainable development has experienced technical problems in the management of the learning process and real action after training (Rindarti, 2019). Therefore, facilitators with conservation value characteristics are needed to manage learning with innovative and effective models and approaches.

An effective learning model in the community entrepreneurship training program targeting housewives is learning that positions students' targets as learning subjects (participant-centered learning), the learning process for adults (andragogy) is more demanding for dialogue and problem-solving practices and producing products to improve the quality of life (Hurt, 2016). The learning model that meets the above assumptions is the Production Based Training (Mitasari & Rusdarti, 2019) learning model with the ICARE approach (Introduction, Connection, Application, Reflection, Extension) (Mahdian et al., 2019).

Therefore, this study aims to test the hypothesis of the effectiveness of the application of the ICARE-based Production Based Training learning model on increasing literacy skills and the ability to start a business for women in entrepreneurial training programs in literacy villages. Literacy skills are more focused on scientific literacy, information and communication technology literacy, financial literacy, and cultural literacy that supports entrepreneurial management (KP dan Kebudayaan, 2017). The ability to pioneer entrepreneurship includes the ability to compile business planning and carry out business (Djibu & Shofwan, 2019).

Sustainable development that aims to provide equal justice and welfare for citizens, especially vulnerable and marginalized groups, cannot run if understanding and understanding between parties regarding the principles of gender and social inclusion have not been used as the foundation of development (Hendriks, 2019). Strategies for solving problems for the acceleration of sustainable development must include awareness of the elements of social and gender inclusion. This means that development programs that are equitable and visionary will be more dignified and humane if implemented with the principles of social and gender inclusion. The results of Reichborn's researchers explain that there are different strategies for entrepreneurial learning from a gender perspective (Reichborn-Kjennerud & Svare, 2014).

The 21st century is a century based on science and technology. Responding to the demands of these developments, high-level literacy skills are required. The level of community literacy has a positive correlation with the quality of life and the progress of the nation (Morocco, C. C., Aguilar, C. M., & Bershad, 2010). 21st-century literacy skills, it is explained that there are 4 abilities, namely: (a) critical thinking skills, (b) ability to develop creativity (creativity), (c) ability to communicate (communication), both orally, in writing, and symbols which can be understood using internet technology, and (d) the ability to collaborate (collaboration) (Wijaya et al., 2016).

Starting from the description above, understanding the concept of literacy is more than just reading and writing. The concept of literacy based on Law No.3 of 2017 article (KP dan Kebudayaan, 2017) is the ability to interpret information critically so that everyone can access science and technology to improve the quality of life (Hendra Hidayat, 2015). The Ministry of Education and Culture (2016) emphasizes that there are 6 components of literacy, namely: (a) literacy, (b) numeracy literacy, (c) scientific literacy, (d) information and communication technology (ICT) literacy, (e) financial literacy, (f) cultural literacy and citizenship. Thus 21st-century education is education that integrates knowledge skills, skills, and attitudes,

as well as mastery of ICT in life. In this study, literacy skills are integrated with the competence of pioneering entrepreneurship for women in a non-formal education program, namely entrepreneurship training organized by literacy activists in village communities in a literacy village forum.

In 21st century learning, there is a change in the learning paradigm, namely, from the teaching paradigm to the learning paradigm. Learning is not only carried out as a transfer of knowledge but an activity that students must actively engage in to build their knowledge based on their potential (Siswati et al., 2020).

A learning model that can facilitate the achievement of literacy skills in the 21st century is production-based training. The learning model is centered on students with activities to equip them with critical thinking skills to solve problems, investigate an object systematically, critically, and logically, find patterns in concrete and abstract situations, communicate in new learning situations, and use new projects. in real life, and have the ability to apply the knowledge that is understood or found in work practices (Yang et al., 2018).

The PBT model is an education and training process that integrates with the production practice process, so that students gain learning experience in contextual conditions following the workflow of industrial production starting from planning, implementing, and evaluating products or product quality control to post-production services. The syntax of the PBT learning model is (a) planning products, (b) making products, (c) evaluating product results (product quality assurance), (d) market the product. Thus the application of the PBT learning model is very appropriate to achieve the competence of training graduates (Ganefri & Hidayat, 2015). The basic competencies to be achieved in the entrepreneurial training program in literacy villages are not only scientific literacy from an abstract conceptual aspect but applying scientific literacy into the real practice of pioneering productive entrepreneurship is useful in providing added value in income for families and communities (Ganefri & Hidayat, 2015).

The innovative implementation of the Production Based Training / PBT learning model in this study is to apply the ICARE approach (Introduction, Connection, Application, Reflection, Extension). The five elements of the learning process in the ICARE approach are integrated into the Production Based Training / PBT model so that it can make it easier for entrepreneurial training students to practice the knowledge or experiences that have been learned in everyday life in pioneering entrepreneurship. Several research results explain the effectiveness of the ICARE approach in digital image processing training

(Ardiyani et al., 2017), learning process science in chemistry (Mahdian et al., 2019), and problem-solving skills in mathematics (Yumiati & Wahyuningrum, 2015).

The ICARE approach has never been applied to adult training learning in the context of non-formal education (Saepudin et al., 2020). The steps of the learning process using the ICARE approach are as follows: (a) Introduction or introduction. In the initial steps of learning, the facilitator explains the objectives and results to be achieved by the training participants, performs perceptions by showing the phenomenon contextually. (b) Connection (connecting), the facilitator organizes the material into sub-topics so that it is easy to learn, connecting each sub-topic with tasks that are applied in life and previous learning experiences, (c) Application (applying and applying), the facilitator provides challenges and activities that enable training participants to apply or practice the knowledge they have acquired at the connection stage by providing real-world problems. (d) Reflection, the facilitator asks the trainees to reflect on what they have learned. The facilitator helps organize their thoughts about what learning experiences they have just learned in writing, then allows them to explain it or discuss it to expand the information. (e) In the extension (expanding and evaluating), the facilitator provides the opportunity for training participants to apply entrepreneurial management information and develop their creativity in the practice of pioneering entrepreneurs that are suitable for business opportunities in the community.

The purpose of entrepreneurship training in the literacy village program is to equip literacy skills training participants and develop the ability to start an entrepreneur following their potential and environmental potential which is carried out with an entrepreneurial spirit (Arbarini & Subyantoro, 2017). The strategy to achieve the goals of literacy villages through entrepreneurship training is different from the previous strategy, namely the one home one library movement which was carried out in the Saptosari sub-district, Gunung Kidul Regency (Muslimah, Ani, 2019). The effectiveness of the application of the learning model is measured based on the achievement of entrepreneurial literacy skills as well as the competency standards of entrepreneurial training graduates. In line with the results of applied research in developed countries, that vocational training (entrepreneurship) is effective in contributing to the socio-economy (Asadullah & Zafar Ullah, 2018). Likewise, research on the application of the PBT model is effec-

tive for teaching craftsmanship and entrepreneurship to students of SMAN Ungaran and is effective in increasing entrepreneurial skills in vocational education and training in tertiary institutions (Kusumaningrum et al., 2015).

METHODS

This study was designed using the experimental research method pretest-posttest one group design, to find the effect of certain treatments on others under controlled conditions. This method is used based on the consideration that the nature of experimental research is to try something to determine the effect of a treatment. Besides, the researcher wants to know the effect of the independent variable on the dependent variable being investigated or observed. The population of this study was housewives of productive age who were interested in participating in entrepreneurial training activities in strengthening the Ceria literacy village program in Pagersari Village, Patean District, Kendal Regency.

The determination of the Ceria Literacy Village to be a study site was based on the consideration of having various multiliterate programs, including entrepreneurial training activities. Public. Simple random sampling technique (Simple Random Sampling), to provide equal opportunities for each member of the population to be the research sample. The results of the study formulated a comparison of the measurement results of the dependent variable (Y) of entrepreneurial literacy skills, to see the impact of the ICARE approach to the PBT learning model, as the independent variable (X). The research data were obtained from primary data sources for training participants and training facilitators.

The data were obtained using non-participatory observation techniques with focused observation sheet instruments on a tiered scale to measure the application of the PBT learning model with the ICARE approach while measuring the literacy skills of training participants using test techniques, the performance test instrument used the rubric of the ability to solve problems by collaborating and thinking critically and the ability to communicate new ideas and creativity. Analysis of the two similarity test data means pre-test and post-test data aims to determine whether they have an average that is not significantly different. The hypotheses tested are Ho: $\mu 1 = \mu 2$ and Ha: $\mu 1 \neq \mu 2$ Description: $\mu 1$: Average pretest data, $\mu 2$: Average posttest data. The difference test uses the paired t-test formula.

RESULTS AND DISCUSSION

Description of the Implementation of Production Based Training (PBT) Model Training with the ICARE approach (Introduction, Connection, Application, Reflection, Extension)

Based on the results of the descriptive data analysis of the 15 training participants' questionnaire and 3 training program managers, the qualifications of the trainer's ability in the learning process by applying the ICARE PBT approach at the product planning stage were included in the very good category with an achievement score of 97.8%. By implementing the learning process at the product planning stage, it is very much following the provisions of the ICARE PBT approach. The qualification of the trainer's ability in the learning process at the stage of making the product is included in the very good category with an achievement score of 94.7%. This very good category means that the learning activities carried out by the trainer in the entrepreneurial training program in the product-making stage are very much following the principles of the ICARE approach PBT model process.

The qualification of the trainer's ability in the learning process at the stage of evaluating the product is included in the very good category with an achievement score of 94.7%. This very good category means that the learning activities carried out by the trainer in the entrepreneurial training program at the product evaluation stage are very much following the provisions of the PBT model process and very much following the ICARE approach, namely reflection activities (Mahdian et al., 2019). The trainer has involved students to assess the business products produced, in terms of suitability with consumer (market) needs, in terms of production creativity to increase selling value/ price, and assessing product packaging for marketing promotion.

The final syntax of the PBT model is to market products and development activities on the ICARE approach, entering the criteria that are quite good, the percentage of achievement is 71.75% of the learning principles. Taking into account the descriptive data above, it can be concluded that the trainer's ability to apply the ICARE-based PBT learning model in general at every step of the learning has been done very well, except in the step of marketing a product or service, which is done quite well.

Hypothesis Test of the Effectiveness of ICARE-Based PBT Learning Model on Entrepreneurship Literacy Ability and Entrepreneurship Pioneering.

Presentations on the learning outcomes of training participants before and after participating in training programs that apply the ICARE-based PBT model can be tabulated based on the following three aspects.

Table 1. Learning Outcomes of Training Participants Before and After Training to Implement the ICARE-Based PBT Model in Literacy Village

Before Training	Percentage of Literacy Achievement	After Training
64,66%	Entrepreneurial Knowledge	88,33%
60,44%	Entrepreneurial Attitude	85,88%
41,40%	Entrepreneurial Pioneering Skills	79,60%
55,5%	Average	84,60%

Based on table 1, it can be explained that the learning outcome specs have the highest increase in entrepreneurial pioneering skills, namely, there is a difference in learning outcomes of 38.2%, while the increase in learning outcomes in the attitude aspect is 25.44% and the knowledge aspect is 23.7%. To determine the significance of differences in the level of achievement of learning outcomes before and after the application of the ICARE-based PBT learning model, the following hypothesis was tested.

Hypothesis testing is performed by analyzing the different test data or Paired Sample t-Test using the SPSS program statistics. The prerequisites that must be met are: (a) the data must be normally distributed, (b) the two samples must be paired (two measurements are made of the same sample), (c) The type of numerical data. Based on the results of the normality test, it is known that the significance value is 0.092> 0.05, it can be concluded that the residual value is normally distributed.

There is a difference in the mean score of entrepreneurial literacy learning outcomes before and after participating in the training program by applying the ICARE-based PBT model of 103.86 and the posttest score of 160.53, a difference of 56.67 scores. The amount of percentage increase in pretest to posttest scores is

$$\frac{160,53 - 103,86}{103,86} \times 100\% = 54,56\%.$$

Based on the results of the compare paired sample t-test analysis, it is known that the correlation between the initial and second entrepreneurial literacy skills scores is 0.707 at a significant 0.003 <0.5%, that is, an increase in the learning outcomes score of entrepreneurial literacy skills training from the initial (pretest) to final (posttest) is evenly distributed in other words, the pretest data has a significant relationship with the posttest data. Furthermore, to test the significance of this difference in mean score and data correlation, a paired samples test was conducted.

It is known that the value of Sig (2-tailed) t = 23.067 at a significance of 0.000 <0.05, it can be concluded that there is a significant or real difference between the learning outcomes of the first entrepreneurial literacy ability (pretest) and the second entrepreneurial literacy ability. That is, the hypothesis Ha accepted, stating "the application of the ICARE-based PBT learning model can effectively improve the entrepreneurial literacy skills of trainees in training programs in literacy villages".

The ICARE-based PBT learning model significantly succeeded in improving the learning outcomes of the training participants' entrepreneurial literacy competencies in literacy villages. The results of this hypothesis testing corroborate the research results of Genefri and Hendra Hidayat (Ganefri & Hidayat, 2015) which have been published in the reputable international journal "Procedia - Social and Behavioral Sciences", which has tested the effectiveness of implementing product-based learning models in vocational education and training to help students prepare themselves. entering work, and developing critical thinking, and having a good moral attitude. The difference with this research is in the context of non-formal education or community education, namely that the literacy village does not have a standardized curriculum.

The training program begins with an analysis of the training needs of the community or training participants and the needs of the organization, as a basis for setting the objectives of the training program (Siswati et al., 2020). This is according to the recommendations of the training design theory from Leonard Nadler, the training curriculum is prepared after carrying out several activities, namely, (a) identification of needs and organization, (b) specific performance abilities, (c) identification of the needs of training participants, (d) setting training objectives. The syntax equation lies in planning to make products according to the results of business opportunity analysis, making products, evaluating products, and making business plans.

The results of this study corroborate some of the following research results: (Mitasari & Rusdarti, 2019) the application of the PBT (Product Based Training) model is effective in improving the skills of craftsmanship and entrepreneurship in Vocational High Schools, Ni Kadek Dwi Ardiyani's research (Ardiyani et al., 2017) application of ICARE (Introduction Connection Application Reflection Extention) effectively achieving the objectives of learning digital skills in vocational high schools, Mahdian's research (Mahdian et al., 2019) the application of ICARE was effective in achieving the goals of learning science in high schools and Yumiati's research (Yumiati & Wahyuningrum, 2015) the application of

the ICARE learning model in higher education was effective in achieving problem-solving abilities in the mathematics. Thus the ICARE learning model is very convincing to be effective in achieving learning goals, both learning outcomes in the aspects of knowledge and skills in various types of fields of science and education levels.

The effectiveness of the application of the ICARE model as one of these learning models can be analyzed that in the introduction, connect and application stages are based on the understanding of constructivism theory (Jerome Brunner's thought) how to learn meaningful with the discovery process in people's lives, students actively construct learning outcomes based on previous learning experiences, trainees are motivated and guided to think critically, so they can find and apply new ideas to solve problems in real-life contexts, according to the thinking of Jean Piaget and John Dewey. Vygotsky's thinking is also the basis for the effectiveness of the application of the ICARE model, namely the intellectual abilities of trainees develop because they are faced with challenges of new knowledge and seek to solve problems in the context of the socio-cultural environment. In the application of ICARE learning, there are social interaction activities with more capable learners and peers, training participants move into the closest development zone, so learning becomes easier and the results are optimal.

Problem-solving according to the real-life context in this study is more focused on the interests of empowering women who are more productive and can manage entrepreneurs (Djibu & Duludu, 2020). Eliminating women's discrimination to gain access to participate in the development, strengthening women's social inclusion programs starting in the smallest unit in the family environment (Su et al., 2020). The development of women's potential through training programs in this literacy village is following the recommendations of the ministry of women's empowerment and child protection of the Republic of Indonesia (Baisa et al., 2018) and following the policy of the Ministry of Education and Culture of the Republic of Indonesia regarding independent learning, which interprets educational change to bring a climate of innovation, training participants gain knowledge, entrepreneurial attitudes and skills, as a provision for the ability to face challenges, it is necessary to have superior human resources with character in order to exist in the midst of rapid changes in the 21st century.

The Production Based Training learning model with the ICARE approach is in line with the action perspective entrepreneurial education philosophy, which is oriented to the theory of Kolb's theory (Murphy & Costa, 2015)states that a person learns from the discovery of conceptions and experiences.

Effective learning is seen when a person develops through the four stages of the learning cycle, namely, (a) concrete experiences, (b) reflective observation, (c) abstract conceptualization, (d) active experiments. The application of the Production Based Training model with the ICARE approach to entrepreneurship training in this study is very relevant to the learning principles proposed by David A. Kolb so that it is also effective in achieving entrepreneurial training objectives. This finding can simultaneously break the criticism of Reichborn-Kjennerud and Denis Hyams, et al (Reichborn-Kjennerud & Svare, 2014) against Kolb's experiential learning model, which allegedly lacks focus on practical applications in entrepreneurial education settings.

Entrepreneurial literacy skills as a result of learning training programs owned by housewives in literacy villages are evaluated based on the impact of changes in literacy aspects of knowledge, skills, or behavior towards better entrepreneurial startups, according to the purpose of holding entrepreneurship training (Sutarto et al., 2021). The percentage of learning outcomes achieved in the knowledge aspect is 88.33%, a very high category. The training participants know the personality (psychic) of a successful entrepreneur, strategies for getting business opportunities, how to prepare business plans, how to evaluate products that meet consumer needs, how to increase productivity, manage benefits and risks in competition.

The percentage of learning outcomes in the aspect of entrepreneurial attitude is 85.88% in the very high category, the training participants have the spirit of continuous learning from their experiences in pioneering entrepreneurship, striving harder to succeed, handling business planned, honestly, economically, and disciplined. The percentage of achievement of learning outcomes in the skills aspect is 79.60% in the high category, indicating that the training participants have to learn a lot of practice (application stage) and practice developing it (extension stage) to continue learning with people who have succeeded in entrepreneurship, in the practice of pioneering entrepreneurship can interpret information from social media by using a healthy mind (logical), willing and able to work hard and diligently in producing goods and services and try more appropriate and efficient ways of working, and have sufficient administrative skills to support entrepreneurial functions, for example, financial and administrative administration correspondence or documentation (Gachuru, H. M., & Mwirigi, 2014).

This evaluation measure entered at level 2 of the Kirkpatrick measurement. Measurement of learning outcomes can be done by creating comparison groups or how to conduct training evaluations by conducting pre-tests and post-tests, in which participants are given a test before the training is run and after the training is carried out (Al-Fraihat et al., 2020). Therefore, the research design to analyze the effectiveness of the application of the learning model on entrepreneurial literacy skills using experiments.

The experimental design used was a quasi-experiment without a control group, due to the limited number of training participants who actively participated in the training program in the literacy village (Uduji et al., 2020). To obtain internal validity, namely ensuring that the manipulation of the application of the ICARE-based PBT learning model has an impact on differences in entrepreneurial literacy learning outcomes, conditions are carried out to prevent things that threaten internal validity, including instrument factors, maturity, test procedures, drop out, researchers hope.

CONCLUSION

The Production Based Training learning model with the ICARE approach (Introduction, Connect, Application, Reflection, Extension) is effective in increasing entrepreneurial literacy skills for women who participate in training programs in literacy villages. The Production Based Training learning model with the ICARE approach is based on the understanding of constructivism theory, meaningful learning methods with the discovery process, students actively construct learning outcomes based on previous learning experiences, training participants are motivated and guided to think critically so that they can apply new ideas in an effort solve problems in the real-life context of starting a business. The learning model ineffective training for adults is learning that can involve trainees in planning learning programs, the learning process facilitates learning needs to solve real problems in their lives, so that theory and practice are integrated, involving previous learning experiences they have had, involving they are in the assessment or reflection activities and give the confidence to develop themselves according to their respective abilities

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Learning Style System for Learning Achievement in Equality Education

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Abstract. Humanity is currently in deep sadness due to the outbreak of Coronavirus Disease (Covid-19) which has hit almost all parts of the world. Indonesia spontaneously implemented policies of learning from home, working from home, and worshiping at home. One of the learning methods used by the Indonesian education system is online or the abbreviation for the network. Online or online is a learning method that is carried out online. While online courses are courses that are wholly or partly held online or online, using learning management. This study aims to determine the effect of the learning style system on student achievement inequality education. The method used in this research is experimental. The study population numbered 120 students who were selected using a simple random sampling technique. Data collection was carried out by distributing learning style questionnaires and documenting student report cards within 1 semester. This study uses quantitative data analysis techniques, normality and homogeneity tests, and ANOVA tests. Hypothesis testing used a one-way ANOVA test with data processing using Lisrel. The results showed that the learning style had a significant influence or contribution to the learning achievement of students. This can be seen from the results of the significant value of 0.500 so that the significance value of the ANOVA test of students is more than 0.45. Novelty is product style learning system, this is very important for education

Key words: learning style system; learning achievement; students

INTRODUCTION

Education is a conscious and planned effort to create an atmosphere and learning process so that students actively develop the potential of students to become human beings who believe and fear God Almighty, have a noble character, are healthy, knowledgeable, competent, creative, independent, and become citizens. a democratic and responsible country (Sugiarti et al., 2020).

For the learning process to run well, the learning process will not be separated from two things, namely learning and learning (Daresh, 2006). Learning is an activity that is carried out consciously to achieve goals(Allen, 2012). According to (Education, 2002), Learning is an adaptation or behavior adjustment that takes place progressively (Bynum, 2011). According (Nguyen et al., 2017) that learning is a behavior change, whereas behavior is an action that can be observed (Amin et al., 2013). In other words, behavior is an action that can be observed or the result is caused by an action or several actions that can be observed. (Boutros & Joseph, 2007)

Learning is a conscious effort made by individuals in changing behavior through training (Shofwan et al., 2019) and experiences involving cognitive, affective, and psychomotor aspects to achieve certain goals (Lumpkin, 2004). Thus, it can be said that learning will bring changes to the individual who

learns, both from knowledge, skills, attitudes, interests, character, and also self-adjustment. Learning shows the activities carried out by someone conscious or deliberate (Berman & Julie, 1994). This activity refers to the activeness of a person in carrying out mental aspects that allow changes to occur in him (Suhandi, 2016). Thus, it can also be understood that a learning activity is said to be good if the intensity of a person's physical and mental activity is getting higher (Neumann, 1995). Conversely, even though someone is said to be learning if their physical and mental activity is low, it means that the learning activity does not understand that they are doing learning activities. (Sugiarti et al., 2018)

Learning activities are also interpreted as individual interactions with their environment (Claudet, 2006). The environment in this case is other objects that allow individuals to gain experiences or knowledge, either new experiences or knowledge or something that has been obtained or discovered previously but raises attention again for the individual so that it allows interaction (Cullen et al., 1999). So it can be concluded that learning is an activity. which involves interactions between individuals and their environment, whether consciously or deliberately so that individuals gain experience or knowledge that is beneficial to the individual by involving physical or mental activity, it cannot be said that the individual is learning. The following are some groups of theories

that provide specific insights into learning: Learning styles are always related to perception, especially in seeing, listening, doing, and imitating body movements (Normore, 2006). Learning styles are different from one another to another, how to get information is different (Ibrahim & Al-Mashhadany, 2012). By making optimal use of learning styles, it can make it easier for individuals to absorb and manage information from outside(Dean, 2001). In practice, teaching and learning activities require communication between teachers and students so that interaction occurs because it affects student learning achievement (in Lestari & Sulistari, 2019).

Learning achievement is something that is needed to determine the changes that occur during learning activities. Maslow has the opinion that learning achievement in school is one of the worthy and important goals for education which is the peak experience (Sugiarti et al., 2018).

Learning achievement is indicated by scores or numbers that indicate the values of several subjects (Shofwan et al., 2019) learning achievement is the success of students in learning subject matter at school which is expressed in the form of scores obtained from tests results regarding several certain subject matter.

Research conducted (Chen et al., 2008) states that learning styles significantly affect learning outcomes. The results of this study are evidence that learning styles influence individual learning achievement.

In previous research, the influence of learning styles on learning achievement by (Sugiarti et al., 2020) in her research that has been researched there is an influence which results are significant, between learning styles and learning achievement.

METHODS

The research design used was a facto exposure research design. This type of research examines the causal relationship that cannot be treated (treatment) or manipulated because of the program, activities that have occurred. The existence of a causal relationship that occurs based on theoretical studies, that a variable can be the cause or background of certain variables.

In this study, the variables used by the researcher cannot be manipulated or treated because they have occurred naturally. The variables used by the researcher consisted of two variables, namely the independent variable including visual learning styles, audio learning styles, kinesthetic learning styles, and the dependent variable in the form of student learning achievement.

The population in this study were all Junior students (Troena et al., 2015). Darul Karomah Singosari

class ix totaling 110 students. In this study, the simple random sampling technique was used because the entire population had the same opportunity to become a sample, namely Junior students ("Solid waste division funds school environmental programs," 2001). Equality education starts from grade vii, viii, and ix, whether male or female. By using this technique the researcher took 600 students, there were two instruments in this study, namely a questionnaire and documentation. The questionnaire used in this study is a questionnaire about learning styles that contains statements about learning styles (visual, audio, kinesthetic). While the documentation in question is the documentation of the student's report card scores for one semester.

This study uses quantitative data analysis techniques, namely data analysis techniques in the form of numbers expressed in certain units that are easily defined in certain categories. The data that has been collected is then analyzed the data.

Before analyzing the questionnaire data, the validity and reliability of the questionnaire must be tested. According to (Shofwan et al., 2019) validity is the ability of a test to indicate how close the scale of the score appears to be to the scale of the pure score. As a result of a measurement process, the view-score x will not be the same as the pure t score, unless the measuring instrument concerned has a perfect measuring function or can take measurements without error.

Meanwhile, reliability is the reliability or consistency of measurement results, which implies how high the accuracy of the measurement is. Measurements are said to be inaccurate if the measurement error occurs randomly (Sugiarti et al., 2020). This study, using two types of statistical analysis, namely the ANOVA test (analysis of variance) to measure the effect of learning styles on student achievement.

RESULTS AND DISCUSSION

Based on the formulation of the problem that has been made, objectively describing the effect of learning styles on learning achievement. To determine whether there is an influence or contribution of learning styles on learning achievement, an ANOVA (analysis of variance) statistical test is performed to calculate the effect of the variables x1 (visual learning style), x2 (audio learning style), and x3 (kinesthetic learning style). To the y variable (Indonesian learning achievement). Before carrying out the ANOVA test, it is necessary to do a normality test and a homogeneity test first. The normality test is used to determine whether data has a normal distribution or not. In this study, the Kolmogorov-Smirnov normality test technique (k-s test) was used by using

a normal p-plot chart. Following are the results of the normality test (Altınkurt & Yılmaz, 2011).

Based on the results of the calculations in the table above, a significance value of 0.602 was obtained. So it can be concluded that the data is normally distributed because the significance value is greater than 0.05. The homogeneity test is a test used to determine whether or not the variances of two or more distributions are equal. The following are the results of the homogeneity test.

Based on the results of calculations using SPSS 16.0 for windows, a significance value of 0.794 is obtained, which means it is greater than 0.05. So, it can be concluded that the data is homogeneous. After the normality test and homogeneity test are carried out, then an ANOVA test (analysis of variance) is carried out to find out the difference or similarity of the two data averages from two or more groups. This study using the one-way ANOVA test. The following are the results of the ANOVA test calculations using spss (statistical product and service solution) 16.0 for windows. Based on the ANOVA test that has been carried out using spss 16.0 for windows, the significance value is 0.990 so that the significance value of the ANOVA test for students is more than 0.05. So, it can be concluded that the learning style does not have a significant influence or contribution to the learning achievement of students. Things like this can happen because there are other factors that more influence or contribute to learning achievement outside of the variables examined in this study. Learning styles have the possibility of affecting achievement but only slightly and do not appear in the results of this study.

The results of the study show that learning styles have a weak influence on learning achievement. According to Dunn & Dunn (in Syawaladi, 2010), several factors support student learning styles, namely environmental, emotional, sociological, physiological, and psychological factors. If these factors have an effect following the learning styles possessed by students, the learning outcomes will be very significant.

The results of this study are consistent with research conducted by Unaifah and Suprapto, learning styles do not have a significant effect on learning achievement (Huffman, 2015). According to (Choi, 2014) learning achievement is influenced by several factors, namely, internal factors and external factors. In external factors, there are school factors that affect students' ability in problem-solving, namely teachers in teaching, teacher-student relationships, student-student relationships, teaching aids, and school time (Bynum, 2011).

According to Ngalim Purwanto (in Aliskhatin, 2020: 12) factors that affect learning achievement are

external factors and internal factors, namely 1) External factors are factors that come from outside the students which include: the natural environment and the social environment, instruments in the form of curriculum, teachers or teachers, facilities and facilities as well as administration. 2) Internal factors are factors that come from within students which include physiology in the form of physical and sensory conditions, and psychology in the form of talents, interests, intelligence, motivation, and cognitive abilities.

Based on this opinion, if it is related to learning styles, learning styles can be included as internal factors, especially in terms of cognitive abilities. Cognitive abilities are the construction of thinking processes, including the process of remembering and solving problems. In this process, the learning style acts as an intermediary or a way for students to be able to remember and solve a problem.

Better at spelling it out loud than writing it downm. And prefers spoken jokes to reading comics (Khoeron, 2014: 294) Several strategies can be taken to facilitate the individual learning process with an auditory learning style, namely:1) Invite children to participate in discussions, both in class and in the family 3) Encourage children to read the subject matter aloud 4) When studying, it should be accompanied by the strains

CONCLUSION

Based on the results of the study, it can be concluded that the descriptive statistical test results for the three learning styles used by students have different results, namely for the use of visual learning styles by 55% in the medium category, the use of audio learning styles by 58.3% in the category. moderate, and the use of kinesthetic learning styles by 48.3% in the medium category. These results are taken based on the acquisition of the largest percentage in the three categories in each learning style. Second, based on the results of the descriptive statistical test for the Indonesian language learning achievement of Junior students obtained results of 37.5% in the medium category. This category has a range of values between 80 and 84. The rest is included in the high and low categories. And third, based on the results of the Anova test (Analysis of Variance) which has been carried out using SPSS, the results obtained a significance value of 0.990 for class IX, which means the significance value of the ANOVA test for Junior students. Class IX is more than 0.05. So, it can be concluded that there is no significant influence or contribution from the VAK learning style (Visual, Audio, Kinesthetic) on the learning achievement of students.

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Online Positive Attitude Training: Increasing Resilience Amidst Pandemic

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Abstract. The Covid-19 pandemic has a major impact on mental health conditions of humans in general and students in particular. To be able to cope with stressful conditions and other negative emotions during a pandemic, the ability to survive and rise is needed. The ability to adapt positively to stress, crisis, and adversity while remaining healthy is definition of resilience. Therefore, this study aimed to determine whether online positive attitude training in identifying, integrating and actualizing self-potential can increase the level of students' resilience during this pandemic. The subjects of this study were 50 students from various Universities, 25 students participated as the experimental group and 25 others participated as the control group. Mann Whitney U statistical test was used to compare the resilience of the experimental and control groups during the pre-test and post-test. The results of the Man Whitney U statistical test showed a significance value of $p = 0.006$ ($p > 0.05$) which indicates that there was a significant difference between resilience scores of the experimental group (mean rank = 31.10) and the control group (mean rank = 19.90). It was concluded that online positive attitude training was able to increase the level of student resilience amidst pandemic. This study shows that online training can actually be an effective method of educating or improving certain skills.

Key words: resilience; online training; experiment

INTRODUCTION

It has been more than one year since the Covid 19 pandemic first broke out. This pandemic is known to have first spread and was identified from China, precisely in the city of Wuhan. The case of the Covid-19 Virus first appeared in Indonesia around March 2020. The pandemic not only caused casualties due to health problems but also appeared a variety of other problems such as disruption of economic conditions and disorders of the mental health conditions of the community.

Various mental health disorders are identified by the appearance of symptoms such as poor sleep quality, distress related to news about the Covid-19 pandemic, anxiety, and panic attacks (Casagrande et al., 2020). Xiong et al. (2020) reported that during this pandemic many symptoms of psychological disorders appear in several countries such as depression, post-traumatic stress disorder, and psychological distress.

Many studies have shown that the impact of a pandemic is felt by various groups, regardless of age, religion, race, or gender. In the Philippines it was reported that students experienced moderate to severe distress due to this pandemic (Tee et al., 2020) while in Bangladesh it was reported that children experienced some suffering as a result of this pandemic in the form of depression, anxiety and sleep disturbances (Yeasmin et al., 2020).

Casagrande, Favieri, Tambelli, and Forte (2020) state that poor sleep quality, distress and anxiety are believed to be related to the Covid-19 pandemic. In several countries such as China, Spain, Italy, Iran, America, Turkey, Nepal, and Denmark, it is reported that a pandemic causes anxiety, depression, post-traumatic stress disorder, psychological distress, and relatively high stress (Xiong et al., 2020).

Not only psychological impact, the existence of this pandemic has also triggered an increase in cases of domestic violence and family conflicts (Radhitya et al., 2020). Some of the causes of this problem are due to the quarantine factor at home and the economy deterioration conditions. During this pandemic, many families are experiencing economic downturns due to the mass layoffs and the downturn of various businesses. Parents who experience stress due to economic and work pressures often triggered to do domestic violence to the children (Lawson et al., 2020).

The violence that occurs in a family not only in the form of physical violence but also often in the form of psychological violence. Multiple roles that arise when working at home also have the potential to create a stressful interaction, conflict, and domestic violence at home. Pandemic stress, high anxiety, and depressive symptoms found in children are associated with stress felt by parents (Brown et al., 2020). The devastating effects of COVID-19 have raised serious concerns about mental health in many countries, both amid the pandemic and in the future. Recent data

from China show that the impact of the COVID-19 pandemic on psychological distress is very significant (Qiu et al., 2020; Wang et al., 2020).

Various studies have discussed the impact of a pandemic on human mental health conditions. The results show that most people in the United States who have no history of mental health conditions are at risk of experiencing psychological distress due to the COVID-19 pandemic (Holingue et al., 2020). Furthermore, Holingue et al. (2020) explained that there are some findings that stress due to pandemics is a risk factor for more severe mental disorders.

Some behaviors such as continuous use of online media to post about the corona virus, to report that this pandemic is causing major changes to personal life, and to build the perception that the virus is a threat to the US economy, personal health or individual finances are also one of the factors triggering the emergence psychological pressure on society. Studies revealed that These various behaviors not only affect the mental condition of individuals who consume and spread the news online but also the society in general.

Holingue et al (2020) stated that 15% of the sample studied had 2 symptoms of psychological disorders for at least 3 days during the past week; 13% had three or more symptoms. Pandemics also generate feelings of loneliness which then results in sleep problems in adults (Grossman et al., 2021). Another impact that arises from a pandemic is that people are then asked to stay at home. Individuals who remain at home have limited access to movement, this condition can actually cause disturbances such as sleep disturbances, namely difficulty falling asleep and waking up too early (Pinto et al., 2020).

Home quarantine was found to be associated with symptoms of depression, anxiety and stress. In addition, continuous media exposure related to coverage of the corona virus pandemic can also increase mental pressure on viewers (Riehm et al., 2020). The findings show that those who actively use social media to access information related to the pandemic have a negative impact on coping and then have a greater risk of experiencing higher levels of post-traumatic disorders and anxiety symptoms, as well as lower resilience (Levaot et al., 2020).

Resilience is such an important aspect that every individual must improve during this pandemic situation. Resilience is the ability needed to deal with various serious events and various situations that are completely uncertain such as the situation during this pandemic. Resilience ability is needed to deal with various existing problems because with resilience a person will be able to manage the effects of the various difficulties that exist (Caton, 2020). The social support that individuals receive is believed to be closely related to one's resilience. Riehm et al. (2021)

reported that participants with low and normal resilience abilities experienced increased mental stress in the early months of the pandemic when compared to participants who had high resilience abilities. People who have high resilience tend to only experience low anxiety during a pandemic (McCleskey & Gruda, 2021). Low resilience strengthens the link between sleep problems and anxiety related to the pandemic (Grossman et al., 2021).

The ability to be resilient will help us to adapt in an uncertain situation and be able to reduce the risks posed by disasters (Rana, 2020). According to Singh et al. (2019) the ability of resilience will help us deal with daily stress and be able to help someone to use more positive stress coping strategies. The importance of resilience is to make children feel more valuable so that they can increase their self-esteem and self-confidence (Zhao et al., 2020).

Resilience will be positively related to psychological well-being, that is, when someone is resilient, their psychological well-being will also be good (Souri & Hasanirad, 2011). That's why this study aims to measure whether online positive attitude training conducted by researchers is able to increase the level of student resilience during this pandemic situation.

Various studies have shown that resilience is an important factor that needs to be developed during a pandemic situation. Since many studies have shown that the impact of a pandemic is felt all over the world. In several countries such as China, Italy, Iran, Spain, America, Nepal, Turkey, and Denmark, pandemic has caused anxiety, depression, post-traumatic stress disorder, and psychological distress (Xiong et al., 2020).

Meanwhile several studies have identified that resilience has a negative correlation with the level of depression, anxiety, and stress in individuals facing a pandemic situation (Al-Issa, 2020; Anyan & Hjemdal, 2016; Barzilay et al., 2020). Research conducted in Ghana on 533 adolescents has proven that resilience has a significant negative effect on stress, anxiety, and depression levels in adolescents (Barzilay et al., 2020). Adolescents who have high levels of resilience will have a lower tendency to experience stress, anxiety, and depression, compared to adolescents with low levels of resilience (Barzilay et al., 2020).

This result is also supported by another study conducted by Taş (2019) on 349 students in Turkey. This study showed that resilience has a significant negative correlation with depression and stress in students. Furthermore, it was also stated in this study that a high level of resilience in students would reduce their levels of depression and stress (Taş, 2019). Supporting various studies that have been described

previously regarding the important role of resilience in improving mental health conditions during a pandemic, other research conducted on 278 junior high school students in Wuhan also showed that resilience has a negative correlation with negative life events and student depression levels. Based on this research, it is known that the higher the level of student resilience, the lower the impact of negative events and the level of depression they experience (Jia et al., 2019).

Various studies have shown evidence that resilience is also a protective factor against students mental health conditions (Hutchins & Enomoto, 2020; Jia et al., 2019; Yuan, 2021). A research conducted by Yuan (2021) showed that resilience has a positive correlation with emotional intelligence in students. This means that the higher the level of students' resilience, the better they are in managing emotions (Yuan, 2021). The ability to be resilient will help students to adapt in an uncertain situation and be able to reduce the risks posed by pandemic situation (Rana, 2020).

According to Singh et al. (2019) the ability of resilience will also help students to use more positive stress coping strategies against problems. Resilience can also make students feel more valuable so that they can increase their self-esteem and self-confidence in dealing with various situations (Zhao et al., 2020). This variety of evidence shows the important role of increasing resilience, especially for students, during a pandemic.

The purpose of this study was to determine whether online positive attitudes training was able to increase student resilience during a pandemic. The training module used in this research was developed using the concept of strengths-based approach. Strengths-based approach focuses on developing one's potential or strength. The online training provided to the experimental group consisted of eight sessions. The title of the module used in this research is "Identifying, Integrating, and Actualizing Self Potential", created by the researchers.

METHODS

The research design used in this study was a pretest post-test non-equivalent group design (Morgan, Gliner, & Harmon, 2006). This means that there are two groups in this study, where one group gets treatment, while the other group does not get the same treatment. This study involving 50 respondents, with 25 respondents were involved as the experimental group, and 25 other respondents acted as the control group.

Participants come from various Universities and different departments. Participants who were involved in this study had previously registered and filled in the informed consent regarding their involvement in this study. Determination of the types and members of the group is done by simple random technique. The method used in this research is experimental research design.

The data were collected through the pretest and posttest measurements in the control group and the experimental group. In this study, data was collected through the Connor-Davidson Resilience Scale (CD-RISC) questionnaire which was distributed during the pre-test and post-test. The CD-RISC is a resilience level measurement tool that is compiled based on the literature related to resistance from the fields of developmental psychology and psychiatry.

The CD-RISC consists of 17 domains developed on a scale of 25 items (Connor KM, Davidson JRT. Depression and Anxiety 2003; 18: 71-82). In the original validation study, the mean scores in a specific population were reported as follows: US general population 80.7; Primary care patients 71.8; Psychiatric outpatients 68.0; General anxiety 62.4; PTSD sample 47.8 / 52.8.

In this study, the experimental group received treatment in the form of Online Positive Attitude Training. This training was packaged in a module entitled "Identifying, Integrating, and Actualizing Self Potential", the approach used is based on the concept of strengths-based approach which focuses on developing one's potential or strength (Amaral et al., 2013; Colomina & Pereira, 2019). Meanwhile, the control group did not get any treatment.

The online training provided to the experimental group consisted of 8 sessions including opening and closing. There are 6 training sessions which have daily assignments on every session. before being applied to the experimental group, this module had been tested previously on 25 students from various departments at Diponegoro University. Post-test measurements were carried out on the seventh day after the entire series of assignments were collected by online training participants in the experimental group. The post-test on day seven was given simultaneously to the control group and the experimental group.

The following is an overview of the training sessions and the objectives of each session: Session 1, Introduction, the goal is to build rapport and awareness of participants about the importance of realizing their potential and strengths. Session 2 sets goals, with session's aims to help participants identify goals that can be used to guide actions and behavior. Session 3, identification of strengths, this session aims to invite participants to find and assess the strengths and resources attached to them. Session 4, identification of environmental resources, participants were assisted to identify resources in the environment that can be

useful or possible to be accessed. Resources can be individuals, associations, institutions, or groups. Session 5 examines relationships, aims to identify the relationships that individual has that can encourage hope: By finding strengths and connecting to connections (with other people, communities, or cultures). Session 6 is building a strategy, trying to get participants to determine their strengths first and then to find possible solutions to achieve the goals that have been set. Session 7 takes decisions, aims to direct and help individuals to be able to improve their ability to see the various choices made and encourage appropriate decision making. The 8th session is the closing session which aims to close the entire series of training activities.

The data obtained in this study is then processed using an application program that has the ability for high statistical analysis and a data management system in a graphical environment, namely the Statistical Package for the Social Science (SPSS). The comparative hypothesis test for 2 related samples was processed by the Wilcoxon sign rank test while the comparative hypothesis test between the control group and the experimental group (comparative test for 2 independent samples) was carried out using the Mann Whitney U Test.

RESULTS AND DISCUSSION

In this section, the results of the different tests between the pretest and posttest scores in the control group and the experimental group will be presented. The tests were conducted to see if there is a difference between the pretest and posttest scores within the two groups. The difference test within each group was carried out with the Wilcoxon Signed Ranks Test. Furthermore, the difference test between groups was carried out, namely by comparing the results of the control group post-test score with the experimental group post-test score which was measured using the Mann-Whitney test. The following is the test results for the difference between the pre-test and post-test CD-RISC scores in the Control group

Table 1. Control Group Pre-test and Post-test score

		N	Mean Rank	Sum of Ranks
Post Test control - Pre Test control	Negative Ranks	9[a]	9.61	86.50
	Positive Ranks	14[b]	13.54	189.50
	Ties	2[c]		
	Total	25		

a. Post Test of control group < Pre Test of control group

b. Post Test of control group > Pre Test of control group

c. Post Test of control group = Pre Test of control group

Based on the data above, it can be seen that in the control group there were 9 participants who obtained lower post-test scores than their pre-test scores, and there were 14 participants who obtained post-test scores higher than their pretest scores while 2 participants obtained the same score at the pretest and post-test.

Table 2. Control Group Test Statistics[a]

	Post Test (Control) - Pre Test (Control)
Z	-1.570[b]
Asymp. Sig. (2-tailed)	.116

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the results of the Wilcoxon Signed Rank Test above, it is known that the z value obtained in the control group is -1.570 with a p value (Asymp.Sig. (2-tailed) of 0.116 (greater than 0.05) so it can be concluded that there is no significant difference between the pre-test and post-test result measuring the level of resilience in the control group.

The following is the test results for the difference between the pre-test and post-test CD-RISC scores in the Experiment group

Table 3. Experiment Group Pre-test and Post-test score

		N	Mean Rank	Sum of Ranks
Post Test Experiment - Pre Test Experiment	Negative Ranks	5[a]	11.10	55.50
	Positive Ranks	18[b]	12.25	220.50
	Ties	2[c]		
	Total	25		

a. Post Test Experiment < Pre Test Experiment

b. Post Test Experiment > Pre Test Experiment

c. Post Test Experiment = Pre Test Experiment

Based on the data presented as above, it can be seen that in the experiment group there were 5 participants who obtained lower score on their post-test than on their pre-test scores. This means that they actually experience a decrease in their resilience score after receiving the treatment. Based on the data, it can be seen also that there were 18 participants who obtained post-test scores higher than their pretest scores. It means that there is an improvement on their resilience after the treatment. While 2 participants

obtained the same score at the pretest and posttest, which means that their resilience score did not decrease nor improve after the treatment.

Table 4. Control Group Test Statistics[a]

	Post Test Experiment - Pre Test Experiment
Z	-2.516[b]
Asymp. Sig. (2-tailed)	.012

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the results of the calculation of the Wilcoxon Signed Rank Test, it is known that the z value obtained is -2.516 with a p value (Asymp.Sig. (2-tailed) of 0.012 (less than 0.05) so it can be concluded that there is significant difference between the pre-test results. and post-test measuring the level of resilience in the experimental group.

The following are the results of the post-test score differences between the control group and the experimental group

Table 5. Control group-Experiment group Post-test score

Group	N	Mean Rank	Sum of Ranks
Resilience Post-Test Experiment	25	31.10	777.50
Post-Test Control	25	19.90	497.50
Total	50		

Based on the data above, it can be seen that with the same number of samples in each experimental and control group, the mean rank of the experimental group was 31.10 while the mean rank of the control group was 19.90. This means that the mean rank of the experimental group is higher than the mean rank of the control group. Likewise, the sum of ranks of the experimental group was 777.50, much greater than the sum of ranks of the control group, which amounted to 497.50. This data shows that there is a difference between the mean resilience score between the control and experimental groups, but whether this difference is significant or not can be further known in Table 6.

Based on the output of test statistics in the Table 6, it is known that the Asymp. Sig. (2-tailed) of 0.018 is smaller than the probability value of 0.05. This means that it can be concluded that there is significant difference between the post-test resilience scores in the experimental group and the control group. So it can be concluded that online positive attitude training

conducted by researchers has major impact on participant resilience score.

Table 6. Control group posttest-Experiment group posttest Test Statistics[a]

	Resilience
Mann-Whitney U	172.500
Wilcoxon W	497.500
Z	-2.722
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Group

The conclusion of the calculation results above can be described as follows, the Wilcoxon Signed Rank Test concluded that there is no significant difference between the level of resilience in the pre-test and post-test result in the control group. Meanwhile, on the experimental group it is seen that the z value obtained from Wilcoxon Signed Rank Test is -2.516 with a p value (Asymp.Sig. (2-tailed) of 0.012 (less than 0.05) so can be concluded that there is significant difference between the pre-test and post-test resilience score in the experimental group.

Furthermore, it can be concluded that there is a difference between the post-test resilience scores in the experimental group and the control group. Based on the output "test statistics" in the Mann-Whitney test above, it is known that the Asymp. Sig. (2-tailed) of 0.018 is smaller than the probability value of 0.05. So it can be concluded that there is an effect of online positive attitude training conducted by researchers on the level of participant resilience.

As previously explained, this study aims to determine whether online positive attitude training can increase the level of student resilience. Researcher chose students as subjects in this study departs from various data which reveal that the pandemic has changed educational activities in the world, including in Indonesia and its impact certainly affects the mental health of students (Azzahra & Paramita, 2019; Wargadinata, Maimunah, Febriani, & Humaira, 2020). The learning process which initially takes place face-to-face, massively must adapt quickly to online learning. Every component involved, both teacher and student, is forced to adapt to this situation quickly. This condition of course has an impact both positively and negatively, physically and psychologically for various parties (Djaja, 2017; Rahmatih & Fauzi, 2020; Yuliani et al, 2020). To overcome the various negative impacts, real action from various parties is needed.

Resilience is such an important aspect that every individual must improve during this pandemic situation, this is quite reasonable, considering that resili-

ence ability is needed to deal with various existing problems and various difficulties that exist (Caton, 2020; Kimhi, Marciano, Eshel, 2020; Kimhi & Eshel, 2019). McCleskey and Gruda (2021) explained that people who have high resilience tend to only experience low anxiety during a pandemic. The level of community resilience during a pandemic is important to be monitored by various interested parties such as health workers, educators, and the government as policy makers (Azzahra, 2017; Berking & Wupperman, 2012; Haddadi & Besharat, 2010). Riehm et al. (2021) reported that participants with low and normal resilience abilities experienced increased mental stress in the early months of the pandemic when compared to participants who had high resilience abilities. Therefor based on the aforementioned explanations, efforts to increase community resilience need to be of real concern from various parties including educators.

Based on the explanation above, the researcher realizes that resilience enhancement activities need to be carried out for all levels of society, including students. One of the most feasible efforts to do at this time is by providing online training. However, based on the literature review that has been conducted, not many trainings have been scientifically tested for their effectiveness to increase individual resilience, especially in Indonesia. Therefore, it is hoped that this research can become a reference to fill the gap in the literature. Based on statistical calculations, the online training provided in this study was proven to be able to increase the resilience score in the experimental group. The results of the calculation of the Wilcoxon Signed Rank Test on control group concluded that there is no significant difference between the pre-test and post-test result measuring the level of resilience in the control group. Meanwhile, based on the results of the calculation of the Wilcoxon Signed Rank Test, on the experimental group it is known that the z value obtained is -2.516 with a p value (Asymp.Sig. (2-tailed) of 0.012 (less than 0.05) so it can be concluded that there is significant difference between the pre-test and post-test results measuring the level of resilience in the experimental group.

Furthermore, based on the output "test statistics" in the Mann-Whitney test above, it is known that the Asymp. Sig. (2-tailed) of 0.018 is smaller than the probability value of 0.05. This result means that it can be concluded that there is a difference between the post-test resilience scores in the experimental group and the control group. So it can be concluded that there is an effect of online positive attitude training conducted by researchers on the level of participant resilience. Online training conducted in this study uses a strength-based approach which is an attempt to apply the theory that individuals have the ability and

potential to be able to determine their own destiny in everyday life (Mc Chasen & Wayne, 2005). This approach seeks to build one's strength by inviting individuals to see themselves as resourceful and tough when faced with difficulties. This approach operates on the assumption that individuals have the power and resources to help themselves. In contrast to a weakness-based approach, which often ignores the strengths and potentials of individuals (Pulla, 2012). These findings illustrate that online training is basically proven to be able to increase participant resilience. however, with the limited number of subjects in this study, the results obtained are not fully generalizable to the entire population.

CONCLUSION

Based on this study, it is known that there is difference in resilience scores of the pre-test and post-test result in the experimental group. Meanwhile there is no difference between the result of the resilience scores in the pre-test and post-test results in the control group. The Mann-Whitney test conducted also proved that there was a significant difference between the post-test scores of the control group and the experimental group. This illustrates that online positive attitude training conducted by researchers is proven to have an influence on the participants' resilience scores. This result indicates that online training is basically able to have an effect on changes to the subject effectively. Online training and interventions can actually have an impact on participant in accordance with expectations even though it is not delivered face to face. However, this study also has limitations that need to be considered. The number of samples in this study was relatively small so that it was not optimal enough to be generalized to the population. The sample used is also students who have been educated and are accustomed in using online learning system, so that the results cannot be generalized to the general population. It is necessary to carry out further research on various types of populations with various characters and backgrounds.

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Implementation of Web-Based SECI Knowledge Management Model For Coastal Communities

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Abstract. The marine industry is an important resource in human life. The demand for seafood continues to increase almost all over the world, but catches continue to decline. Therefore, there is a need for a fisherman knowledge management system. The system becomes a collection of processes that coordinate information, knowledge, and experience that run and work together, so that the fishing community has an integrated system in catch management. This study aims to model knowledge management about the sustainability of capture fisheries and document the knowledge of fishermen. This study uses a qualitative approach with the Achieve method which seeks to describe the following objects or subjects as they are to convey facts and information systematically. The survey locations were carried out in several areas in 6 coastal locations in East Nusa Tenggara Province. The results of the practice in the fishing community become the basis for content in media creation. With the program, it can be seen from the activeness of coastal communities in conveying information. The same understanding of the benefits of information systems in web-based programs follows the existing concepts, such as togetherness, participation grows through consensus and shared vision, ideals, hopes, goals, and needs. Second, extending from the bottom, participation is not forced from top to bottom or controlled by individuals or groups through power mechanisms. Participation grows based on the awareness and needs felt by the community.

Key words: knowledge management; knowledge sharing; catch fisher; SECI; web

INTRODUCTION

Collaboration is the keyword for fishers who want to survive in a competitive environment and guarantee sustainable capture fisheries to take place (Garcia & Rosenberg, 2010). Anglers who want to win in the competition are no longer allowed to rely solely on specific individual abilities or rely on the knowledge possessed by their group (Phelps et al., 2012). The best results can only be obtained through collaboration between individuals and more creative collaboration between different perspectives and skills (Urbancova, 2013).

As the best example, many fishermen in Japan are ultimately successful thanks to their ability and expertise in managing "organizational knowledge creation," where they create new knowledge and apply it to their groups, visible from products, services, and systems(Ceballos et al., 2017). Ahern et al., (2014) said these continuous innovations have become a characteristic of fishermen's success in Japan, which has changed from traditional to modern.

As the largest archipelagic country globally with a manageable sea area of 5.8 million km^2 and has a vast diversity of marine and fishery resources, Indonesia should improve fishermen's ability professionally. (Menteri Kelautan dan Perikanan, 2016). In conditions of considerable maritime potential, while the

domestic resource utilization system is not yet right, naval utilization requirements are not optimal (Cao et al., 2017). The shape of the fleet that is still dominated by small vessels, fish trade that is not profitable for anglers, and law enforcement is not right, resulting in SDI utilization that has not improved local fishers' welfare. (Kusumastanto & Wahyudin, 2012). Small-scale capture fisheries undertaken by fishermen have an essential role in food security and overcoming poverty for fishing communities (FAO, 2019).

Octoriani et al. (2016) state that many Fish Resources worldwide are close to overexploitation. Unreported catch from small-scale fisheries can lead to unrecognizing conditions of over-exploitation (Olopade et al., 2017). Therefore, this capture fishery needs to be guaranteed its sustainability (DLPF - The David and Lucile Packard Foundation., 2015). An appropriate assessment of the level of sustainability of capture fisheries is necessary for management purposes to ensure the sustainability of capture fisheries is sustainable.

The demand for seafood continues to increase due to global human population growth, affluence, and per capita consumption (Fallis, 2013). The supply of seafood is also growing, although wild fish stocks are declining, with phenomenal advances in aquaculture, namely the cultivation of aquatic organisms. Aqua-

culture supplied 42% of the world's fish in 2012 and is expected to exceed capture fisheries production by 2030 (Cao et al., 2017).

The balance between these two seafood production systems has profound implications for global food security, income distribution and ecological sustainability (van den Burg et al., 2021). Among them: collaboration, innovation, adaptation, mastery of technology and markets, and management of the intellectual assets of the group (OECD, 2016). These challenges encourage the emergence of the need for the application of knowledge management (Li et al., 2019).

A knowledge management system can define as a collection of processes that coordinate information, knowledge, and experiences that run and work together (Koenig, 2011). A knowledge management system is an integration of technology and mechanisms built to support knowledge management processes (Yee et al., 2019). The process that occurs is based on the knowledge management system concept of discovering, capturing, sharing, and applying knowledge (Dalkir, 2011). So that by using the Knowledge management system, anglers expect to coordinate and facilitate work in increasing the productivity of the catch.

Nonaka & Takeuchi (1996) argued that an explicit codified knowledge management program's success in individuals and groups to internalize and personally interpret the codified knowledge they have acquired and knowledge management systems. This knowledge will be in four ways, which is called the SECI model, namely Socialization (S), Externalization (E), Combination (C), and Internalization. The implementation of SECI's web-based knowledge management model to develop fishermen's capacity is indeed a breakthrough that will make fishers more independent and empower themselves better.

The knowledge of the fishing community is an important one to develop (Chen et al., 2020). Implementing the knowledge base of many coastal communities supports them where they have institutionalized local wisdom based on experience (Berkström et al., 2019). Based on this evidence, fisherman-based knowledge management should be more comfortable in convincing local governments to implement sustainable improvements (Farr et al., 2018).

Acceleration of sharing knowledge about the power and utilization of fisheries and marine resources in the area is the study's aim. Besides, this research is to identify and analyze the empirical conditions of resource-based capabilities and their impact on knowledge capability management. Aims for input for the development of further knowledge web models.

METHODS

This research is a qualitative descriptive study using achieve research that seeks to describe the following objects or subjects as they are to convey facts and information systematically (Saunders et al., 2008). The application of knowledge management based on the SECI model for anglers is the focus of this research (Berkström et al., 2019). A written understanding guide for anglers to obtain more in-depth information to get an overview of fishermen management performance in East Nusa Tenggara's six coastal provinces. This research shows knowledge management based on the SECI model in East Nusa Tenggara Province's coastal area.

Fishers' identification of media needs is carried out through FGD and Documentation Studies by involving experts to develop the SECI model. Design is designing media content using the SECI method; At this stage, it generates best practices on which to base content creation. Development, namely the creation of media using planning from the previous location.

Implementation of media trials carried out on users. Evaluation is the last stage in the form of improvement feedback for the media (Berkström et al., 2019). The indicator of success is the production of web-based knowledge sharing media so that the knowledge assets of fishers and their communities are maintained based on best practice.

RESULTS AND DISCUSSION

This analysis looks at the size of the organization, business strategy, and environmental uncertainty. The method in this analysis is to conduct FGD. The determining factors in the successful development of the Design and Implementation of Knowledge Management Systems Using the SECI Model, namely Human Resources (HR), Facilities and Infrastructure; Institutional; Budget; Technology services. The Government of West Manggarai, East Nusa Tenggara, Indonesia, encourages every coastal village to use a web-based information system to facilitate the fishing community in a broad sense of implementation programs and activities realization of implementation activities out in coastal towns.

Also, a web-based information system can be used to promote the potential and advantages of coastal villages through training. The use of integrated websites is significant to be developed in the government. It has an impact on presenting data, information quickly and accurately. The emergence of the program originated from the Komodo village community's desire to be led by the Lurah or village head of Komodo. The role of assistant staff in the village is as a facilitator to help realize the program.

Especially in the third concept, participation is an active process, meaning that the person or group involved takes the initiative and uses their freedom. The initial process of forming the Design and Implementation of a Knowledge Management System Using the SECI Model carried out cooperatively between residents of coastal communities and village government officials.

At the stage of identifying knowledge goals, what is to be achieved with knowledge management will be mapping normative, strategic, and operational knowledge related to the coastal fishing community—the achievement of normative knowledge of coastal fishing communities based on norm values. The strategic understanding that is wanted to be achieved is an increase in performance through the target community as the next generation. Meanwhile, operational knowledge can be expected to carry out processes or business activities used to manage fishermen's business processes.

Identifying the knowledge in coastal fishing communities in NTT with a focus group discussion (FGD) involves community leaders as the primary source of seeking development needs. According to Berkström et al., (2019) Resource persons provide a variety of information that can help develop knowledge management designed according to community needs. This is also supported by the existence of several supporting documents from information from community sources that have been documented in paper form.

The next process is carried out in four stages of knowledge development based on the SECI model, including; 1) Socialization, as a process transfer between people through conversation (tacit knowledge to tacit knowledge). The stage is socialization carried out using direct interviews and FGDs between the coastal fishing community; 2) Externalization, a process where the articulation of tacit knowledge becomes a concept that can be clarified. The results of interviews and discussions were converted into written form. 3) Combination, where this process combines the explicit ones that become a system knowledge management. There is a process transfer from detailed knowledge to direct knowledge. The process is the schedule of regular events warmed into a calendar event; 4) Internalization, a process where all document data, information, and knowledge can be read and studied by others or explicit in tacit knowledge.

This stage is a building system that can manage all information and data obtained. Identification of coastal fishing communities is mapped, extracted from the tacit experience and existing explicit knowledge. The identification illustrated is through the following. 1) Profile of the coastal fishing com-munity, where this profile contains the condition of the fishing community regarding history, knowledge, local wisdom, customary law, and community life with applicable norms; 2) Activities and performance of coastal fishing communities, where this knowledge becomes the basis for obtaining information related to community activities of coastal fishing communities; 3) Philosophy of the coastal fishing community, which contains various information about the philosophy community life which becomes the order of life; 4) Forum is a forum for interaction in the context of knowledge sharing which focuses more on distribution and sharing of information related to coastal fishing communities; 5) Rituals and arts, which describe knowledge pertaining to rituals and skill in the form of dance, music, and sacred ceremonies; 6) The organization contains various information about organizations in the coastal fishing community; 7) The download feature is a page that functions to download the available documents; 8) Museum, where this describes knowledge related to historical records, community activities, historical travel, agriculture, and transportation.

This section will show the knowledge management based on the analysis of the coastal fishing community's profile and condition. Knowledge Management includes 1) a database that accommodates people's needs in knowing knowledge consisting of history and philosophy, culture, ethics and norms, and sharing of knowledge and culture; 2) Media which may include the content picture, text, video, and audio; 3) Knowledge which is the space for processes implicit, explicit, tangible, and intangible; 4) Document includes program, rules, organization, and legality; 5) a database is a unit of all information which provides for knowledge. The following picture shows the model knowledge management.
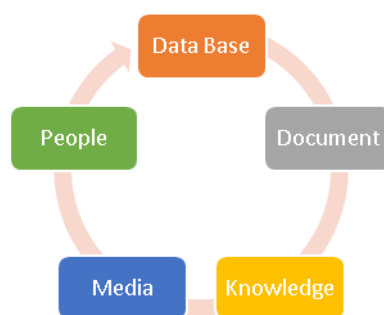

Figure 1. Rule web Based Knowledge Management system

The model knowledge management fishermen's in Figure 1 is a model that shows the cycle of the fishermen's knowledge management process. The cycle starts from the following. 1) There is a group of people, in which the community is a collection of fisher-

men who have culture, history and philosophy, ethics and norms, and have a knowledge sharing culture, namely the culture to share knowledge with others, the ability to utilize technology, experience, history and learning about the cultural wealth of fishermen; 2) From the people, the next flow is the media as a means of delivering information so that later can be carried out sharing which includes media in the form of images, text, video and audio; 3) The media will enter into the process knowledge which provides for tacit knowledge, explicit knowledge, tangible and intangible; 4) After this has been processed into the experience that is already owned, then the documentation process is in the organization which is an institution that has legality, rules and programs that can be run by the community; 5) The entire process that has been passed will be stored in a database which will later be used in development by going through the same process knowledge management system on an ongoing basis.

Socialization was also carried out several times by incorporating professional fishermen such as fishermen in Japan or abroad. It must be following the concept of participation of the fishing system, the fifth and sixth phases. The community's voluntary participation in the change is determined by themselves and community involvement in self-development, life, and the environment (Retnowati et al., 2020). Furthermore, the community's involvement can be seen in filling in the Web-based information system training data. Youth groups and various elements of the village community help collect population data by visiting house to house. The data collection is carried out from place to house to get valid data, and filling out a questionnaire is being accompanied by youth groups.

After that, the village government staff collaborated with Karang Taruna and carried out data entry into computer files. The data collection process is three months. The public's enthusiasm for this program is also evident from their openness to fill in data so that the data collection process becomes valid. Community participation in the formation and filling of data on the application of web-based information systems was raised by village government staff, community leaders in line with the ladder of participation.

Arnstein (1969) participation is how people can engage in social change to share in influential groups' benefits. Arnstein (1969) has created eight participatory measures. For the first ladder, it is called manipulation, and the second is calm. There will be no participation in the first and second steps.

Participation is crucial to the success of the program as stated by Chirenje et al. (2013) that in developing a community-based village information system, participation is one of the important elements for the

success of this program. Participation is expected to start from the planning stage, problem formulation, decision making, capacity building, utilization to evaluation and monitoring. Chirenje et al. (2013) report that cooperative behavior ripples in human networks to people separated by up to three degrees.

Furthermore, thirdly, conveying information. Fourth, consultation and the fifth partnership. The third to fifth step category is called the level of tokenism. Tokenism is the degree to which people are heard and allowed to debate, but they cannot assure that decision-makers will accept their views. Programs that can be seen from the community's coastal activeness in conveying information (Andrews et al., 2021). With the same understanding of information systems' benefits on web-based programs following existing concepts, such as togetherness, participation grew through consensus and shared vision, ideals, hopes, goals, and needs.

Second, extending from below, participation is not imposed from the top down or controlled by individuals or groups through the mechanism of power. Participation grows based on the awareness and needs felt by the community (Burgess-Limerick, 2018). Finally, trust and openness participation can be fostered on the basis of mutual trust and openness. For the application of information systems to web-based programs, the factors that encourage participation are togetherness.

The community is jointly involved in filling in data and activating web programs. The desire for a program to emerge from the village was not a program that was driven by the program growing from below. Apart from that, this program is an initiative of the community; of course, something emerges and is trust and openness. Participation determines the application of information systems in web-based programs. As stated, in building a community-based application of web-based information systems, participation is essential for this program's thriving community (Yannuar et al., 2018). Participation is expected from planning, problem formulation, decision making, capacity building, utilization, and evaluation and monitoring stages.

The benefits of implementing web-based information systems, of course, really depend on the services felt by the community for the program (Love et al., 2020). According to the Combine Resource Institute, the implementation of web-based information systems has several benefits, one of which is for planning development, in development planning resulting in a series of decision-making processes through deliberation planning discussions with the community (Van Bruinessen, 2013). With the application of a web-based information system, village has

a data center that can be used to make planning discussions with the district.

The coastal communities in the region need support to increase their knowledge about the use and management of the fishery and marine resources, while at the same time influencing local governments to increase their inside is insignificant. Arshad et al (2020) said that support services from the government become an integral part of a program.

Choo & de Alvarenga Neto (2010) found that knowledge-based organizations either flourish or flounder based on strategy and structure. The present findings demonstrate that management is also a critical determinant of knowledge networks and production of knowledge assets (de Castro et al., 2013). Therefore, there is a need to build a better model of accelerating and enhancing coastal communities' knowledge capacity in the region.

Knowledge-based development is a vision of development that considers knowledge as the central structuring element of a development strategy for organization (Carrillo, 2014). so that in its application it needs to be developed and evaluated according to needs.

The combination of production, post-production, and marketing is the biggest problem that needs to be addressed immediately to improve coastal communities' welfare. even though the knowledge system has been established (Wignaraja, 2003). Based on these studies, it shows that building knowledge of the ability model. In the future, an evaluation system is also needed in this program. evaluating the knowledge gained from the learning activities by the test of content measures whether learners have correct knowledge or not (Silamut & Petsangsri, 2020).

However, the relationship between Task-Technology Suitability and utilization is not strongly validated, at least for the current study's target sample and KMS targets for fishermen. Although the effect of task and technology on utilization was supported through the qualitative analysis of the interviews, this was not the case in the quantitative analysis of the survey.

CONCLUSION

The application of information system can accommodate all information related to fishermen in coastal areas. Khoon & Ramaiah (2014) explained what distinguishes this information system from other websites is the setting of website users to suit their overall needs. Sections involved in implementing a web-based information system such as village government officials and website managers. The application of web technology for information systems used in medium and small industries is very important,

because information systems can help increase productivity and competitiveness (Schubert & Leimstoll, 2007). This is quite evident from the large interest in the use of the web. The application of information system is a program that grew out of the needs and desires of coastal village communities. With the same interests, public participation will be raised, and needs to be accommodated by the government. In this case, the government, in delivering their policies are also based on the needs and interests of fostering the fostered community.

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Community Development: Optimizing The Independence Attitudes of Al Muttaqien Saving and Loan Cooperative Members

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Abstract. This research was conducted to obtain information about the optimization of the independent attitude from members of saving and loan cooperatives in terms of community empowerment context. This research was conducted at the KEBAL Al Muttaqien Saving and Loan Cooperative that involved the management and members as research subjects. This study uses a qualitative method with a case study approach. The information found from this research is the success of the management in implementing the improvement of members' independence by emphasizing the strengthening aspects such as material, intellectual, and management independence. It can be concluded that the development efforts have been made by prioritizing the capacity of the community to develop, be independent, and be able to manage the natural resources around them. Thus, empowerment activities are implemented so that people can participate in achieving independence. KSP KEBAL has performed its role as an empowerment agent to provide strength to the community as an empowered group. The independence of cooperative members is a measure of the successful efforts in carrying out its organizational and business activities.

Key words: community empowerment, independence, cooperatives

INTRODUCTION

The phenomenon of poverty is a social problem that is a serious problem in developing countries, including Indonesia. The problem of poverty is a complex and multidimensional problem related to social, cultural, economic and other aspects (Mukul Sharma ed., 2004). The Central Statistics Agency in 2019 stated that the number of poor people in September 2019 was 24.79 million people. Poverty has decreased, the Central Statistics Agency (2019) also stated that poverty in 2016 was at 27.77 percent points, in 2017 it was at 26.58 percent points, in 2018 it was at 25.67 percent points and in 2017. 2019 was at 24.79 percentage points, so it can be said that the Indonesian government has succeeded in seeking poverty alleviation. Implementation of Poverty Reduction Policies Through MSME Empowerment Syntax Idea, Vol. 2, No. 6, June 2020 27 The problem of poverty must be resolved together, both from the government and the community. The government and society must cooperate with each other in alleviating poverty.(Fidianing Sopah, 2020).

The efforts to reduce poverty is a shared responsibility between the central government and local governments. The government's effort in realizing society to be free from the shackles of poverty is by striving to increase community independence in various ways, one of which is by carrying out community empowerment activities. According to Bhinadi (2017:1). Unemployment is a social problem that requires serious handling because it will have an impact on other social problems such as criminals, poverty and societal ills.(Edy et al., 2020b).

Empowerment can be used as a means of improving people's welfare through various aspects, including social, cultural, political and economic aspects. Empowerment is derived from the basic word Daya which etymologically means ability (Sulistiyani, 2004; Michelle Kaminski, n.d.)(Rebecca Gill & Shiv Ganesh, 2014); (Peter A. Heslin, n.d.). Empowerment is an effort to build power, which is done by encouraging, motivating, and raising awareness about the potential that is owned and then trying to develop it. Empowerment is done not to make people experience dependency (charity), but must teach independence to those who are empowered. With the empowerment of persons with disabilities, it is hoped that it will bring about change for them by increasing their social and economic welfare. And can make them accepted again by the community in the surrounding environment.(Tukiman, Temi Puji Lestari, Esti Puji Rahayu, 2021)

Empowerment in essence tends to give strength to certain groups to be more empowered (Pranarka & Vidyhandika: 1996); (Genevieve Smith, 2015). Thus, from this empowerment, the end of empowerment is to create self-reliance in the community by maximizing the implementation of community empowerment values with the aim of the community being able to participate directly in planning, implementing, and experiencing the results of development (Auken,

n.d.); (Chen, S., Hsiao, H., & Chang, 2013). This activity is known as the participatory development concept. This participatory development is equal with community empowerment because participatory development activities as well as community empowerment activities are carried out with the aim of preparing an advanced community for prosperity and have independence so that they can escape the cycle of poverty and underdevelopment. For this reason, the concept of empowerment becomes an activity in pursuit of human and economic development that still prioritizes in increasing the capacity of the community so that they can continue to develop their capacity in order to manage their local natural resources (Theresia Anita Christiani1, 2020); (Widyatmini,Izzati Amperaningrum,Teresa Indiwati, n.d.). Empowerment is carried out so that the community plays an important role in increasing community independence (Harahap, 2012).

Human Resources availability quality is believed to be the key success is the key to success an organization or company (Samuel Mayanja1*, Joseph M. Ntayi2, J. C. Munene3 & Waswa5, 2019, Constanze Eib 1 and Siegert 2, 2019); (John Potter, 2016); (Duvall, 2006). Thing thus making human resources existing in an organization or the company plays an active role in carry out its organizational strategy for the achievement of the organization's vision and mission already made at the beginning the organization. SME development is very important in order to raise people's economy, the concept of development covers various fields in multidimensional social life centered on welfare public (Shaun Paul Digan, Gurjeet Kaur Sahi, Stanzin Mantok, 2019). Building community welfare aims to improve and improve the quality of life, and produce progress and look far ahead. The concept of welfare development needs to be understood as a process involving major changes in social structure, public attitudes, and national institutions, as well as the acceleration of growth economy, reducing inequality, and eradicating absolute poverty, because Therefore, in the dynamics of building a prosperous society, understanding is needed holistically, so that in practice it is not only seen as an "activity and for economic purposes.

Therefore, companies are required to invest human resources that existing and future human resources so that they can continue to work competently so that organizational goals can be achieved effective and efficient. Major problems in management human resources faced by various organizations is the absence careful planning, proper procedures neatly structured and systematic in carry out functions and activities human resource management. However, the organizational culture that is within each organization itself.

As the organizational structure should systematically planned, effort human resource management often wrong in applying competence with the type or unit of work. Good and patterned work standards every organization should have this thing it is possible that all employees can work with roles that have been created by organization, namely SOP (Operational Standards) Company). Eliminate culture seniority in the company with a good competitive culture, so that it will there is a competitive climate based on work performance is no longer working long. (Jeni Andriani, 2019).

The communities can be said to be independent if they are able to manage, produce, and analyze strategies to provide real and effective contribution to themselves or certain groups. This is the embryo of the cooperative concept that provides provisions for independence and welfare in the form of mutual cooperation or cooperation.

Cooperatives are business entities based on economic democracy whose main goal is to improve the welfare of members in particular and society in general and to participate in building the national economic order in order to create a just and prosperous society.(Edy et al., 2020a; (Chusmeru, Masrukin, & Pangestuti, 2017; (Khoo-lattimore, 2017)

Cooperatives are economic organizations that are owned and operated by a person for the common good. Cooperatives base their activities on the principle of the people's economic movement based on the principle of kinship. Currently the need for information is very large. Both individuals, organizations and a business entity really need information for their interests.(Tampubolon, 2018).

The existence of the Savings and Loans Cooperative (KSP) is currently felt to be very helpful for the community, especially those who are members. Cooperatives are closely related to SMEs, where cooperatives have a very important role in developing the community's economy. With the existence of savings and loan cooperatives, people who need money loans for capital can be helped, because the requirements and procedures are not difficult and convoluted with relatively light interest.(Hasanah & Hanifah, 2020).

Koperasi means "cooperative" which leads to the meaning of cooperation. The meaning of this term is emphasized by Arifin Sitio (2001: 13) making cooperatives (Koperasi) have a relationship between humans as individuals in community life. Cooperatives (Koperasi) is an organization that operates in the social economy which functions to improve, repair, and build an economic system through the spirit.(Edy et al., 2020; (Pigg, 2014). Cooperatives have a function to develop the potential and economic capabilities of their members which can then be expanded and help the community around the cooperative so as to create

improvements. The remaining operating income (SHU) of the cooperative is also an important element in improving the welfare of its members. SHU is distributed to the members of the cooperative based on the members' agreement which is accumulated from the calculation of member services to the cooperative.(Herdiansah et al., 2020)

Initially, the cooperatives developed in Indonesia were in the form of consumption cooperatives, but the activities of consumption cooperatives were considered to be more failures, then a cooperative was developed that was more in line with the needs of the community by providing business capital in the form of saving and loan cooperatives (Rahardjo, 2011:7; (Ouédraogo, n.d.). Furthermore, cooperative activities are carried out in the form of self-help whose main objective is to provide welfare for the community and all members of the cooperative itself. Moving on the basis of (Tukiman, 2021) kinship illustrates the existence of human self-awareness so that we can work together to create cooperatives based on a people's economy.

In an effort to promote cooperatives, the growth of cooperatives and their business growth from time to time needs to be improved, so that cooperatives grow into a substantive and integral part of the national economy. Apart from that, economic democracy contains elements of equity, kinship, social conditions, and welfare for all Indonesian people. The Influence of Member Participation on the Success of Cooperatives This is because the development of economic democracy is also implemented through the growth of cooperative businesses (Astri Oktaviani, Ace Suryadi, 2020). In its development, the cooperative was faced with many problems and weaknesses that hindered it. Because of this, problems and obstacles to the development of cooperatives must be faced and resolved. The problems faced in general can be caused by various factors, both internal factors and external factors. Both internal and external factors that become obstacles in the development of cooperatives are closely related to the success of the cooperative itself. In this case, especially the human resource factor is very dominant in the development and success of a cooperative. For this reason, the development of human resources in cooperatives needs to be continuously improved, both members, administrators, and supervisors in cooperatives, so that they are able to run the cooperative economy in a professional and reliable manner. Generally, cooperative problems are caused by low participation of members in cooperatives, poor management of cooperative management, lack of capital, and lack of cooperative development in terms of quantity and quality. Jochen Ropke (2003:170) suggests that the success and development of cooperative businesses are influenced by internal

factors, including; (1) management, (2) services, (3) capital, (4) member participation, while external factors include government guidance. Cooperatives as an organization consisting of a collection of people require contributions from their members in the form of participation. The participation of cooperative members is important in efforts to develop cooperatives, because the facts show that the participation of members in cooperatives is able to create progress or setbacks for cooperative businesses. With the principle of identity in which members of the cooperative are both owners and customers or service users, it means that the cooperative is highly dependent on the active participation of its members.(Wawan Yuswono, 2018)

In cooperative activities, active community participation is required so the cooperative activities can run well. Member participation is an important point for the survival of the cooperative, where the development of cooperative institutions can be viewed from the level of participation of these members. The independence of members can also be seen from the level of participation in cooperatives because the awareness of cooperative members is a benchmark in developing the economic order of the cooperative's activities.

Al-Muttaqien Family Savings and Loan Cooperative abbreviated as KSP KEBAL is a saving and loan cooperative that has various achievements. KSP KEBAL was incorporated on December 31, 1999 in Sukagalih Village, Sukajadi District, Bandung City. Present as a solution for society that is created from the community and for the community in meeting the needs of the community, the existence of KSP KEBAL is an alternative to empowerment in terms of the people's economy.

KSP KEBAL as a cooperative with various achievements in West Java and has succeeded in carrying out a series of community empowerment activities and increasing the active role of community participation in cooperatives. This cooperative has succeeded in forming an attitude of community independence (Grashuis;). The value of independence is included in the main objective of empowerment activities. For this reason, the research will describe the actualization of the optimization of community independence that has been successfully carried out by the KSP KEBAL saving and loan cooperative as an effort to improve their welfare.

METHOD

This study uses a qualitative method with a case study approach. This research study emphasizes the meaning of the perceptions of the research subject (Sugiyono, 2011). This research was conducted at the

KSP KEBAL Institution. The data presented in this study is the result of a review of the activities to optimize the independence that has been felt by members and communities. The study population was the members of the KSP KEBAL community. The selected respondents were 5 respondents with cooperative members. The members of the cooperative were selected with the criteria of being permanent members of the saving and loan cooperative KEBAL Al Muttaqien for <3 years and having/owning a small or medium business. Data collection techniques in this study were carried out using interview, observation, and documentation techniques.

Interviews were carried out by conducting in-depth interviews in order to obtain data regarding the independence felt by members of the KEBAL Al Muttaqien Saving and Loan cooperative. Data management uses subject triangulation by linking the results of interviews, observations, and documentation. Research results that are not included in the predetermined instrument will be reduced to cleaning.

RESULTS AND DISCUSSION

Cooperative development is still facing problems both in the field of institutions and in the field of cooperative business itself. These problems can sourced from within the cooperative itself or from from the outside. Independence is also defined as a change in a person that is the result of one's own experience and practice without depending on others

Independence in this case is a manifestation of a person's ability to exploit his potential in fulfilling his life's needs, which is characterized by the ability and freedom to determine the best behavior (Hubies 1992). According to BPSK, PKM, and LPM Unibraw (2001) in Kurniawati (2010) explains that independence includes four main elements as follows: *Material independence*. Productive ability to meet basic material needs as well as reserve funding mechanisms to be able to survive at critical times; *Intellectual independenc*. The formation of a base of autonomous knowledge by societies which enables them to cope with more subtle forms of domination arises beyond the control of that knowledge; *Management independence*. Autonomous ability to foster self and become and manage collective activities so that there are changes in life situations.

If studied in depth, material independence is not the same as the concept of being able to meet one's own needs. Material independence is the productive ability to meet basic material needs as well as the mechanism for reserve funds to be phased in during times of crisis. Intellectual independence is the formation of a base of autonomous knowledge by communities which enables them to cope with the more

subtle forms of domination that arise outside of control of that knowledge. The definition of management independence is the autonomous ability to foster themselves and undergo and manage collective activities so that there are changes in their life situations.

Cooperative management in terms of thinking, capital and sustainability must be independent. The independence of the community members of the cooperative in managing their cooperative is very important because the success of the cooperative is determined by the members of the cooperative itself. Members as owners and users of cooperatives must be able to carry out their rights and obligations as regulated in their respective cooperatives.

Based on research findings, the level of community independence after becoming a member of a cooperative has increased both in terms of intellectual, material and self-management. The following is a description of the findings obtained in the field:

Aspects of Intellectual Independence

The information obtained from research finding is society has met their needs in increasing intellectual abilities. Not a few people who are able to have their own business from cooperative activities. Optimization in improving the independence of the management of cooperative members in terms of knowledge about entrepreneurship is increasing and the motivation in developing skills in creating new products is getting higher.

After becoming a member of a cooperative, the members are trained in providing knowledge to others about cooperatives. They are able to give influence to other community groups by joining the cooperative program, it can have a positive impact on themselves and the environment. The cooperative members who were interviewed responded that the community was always given experience to be able to communicate and introduce cooperative activities. Cooperative members can provide information to other people about being part of a cooperative, making it easier for people to open a business by providing capital from the cooperative.

Respondents also provided answers regarding optimization in increasing the independence of the management of cooperative members in terms of independence in the intellectual aspect, it can be seen from the ability of members to introduce cooperative programs to others, namely by sharing experiences that saving and loan cooperatives are able to make community micro-businesses run smoothly, good, and able to make the community obtain capital without many and simple conditions, such as completing the requirements for photocopying ID card (KTP), photocopy of family cards, photocopies of electricity bills, salary slips, and collateral that will be obtained

later. So, from this activity, the members of the KEBAL cooperative will increase.

The level of intellectual independence shown by the community or members of the cooperative is a step of the management in optimizing the attitude of independence in the aspect of intellectual independence to all members of the cooperative.

Aspects of material independence

In this aspect, people are in the category of good material independence. Optimization in increasing the independence of the management of cooperative members from a material perspective can be seen from the success of the efforts carried out by cooperative members that have entered into successful achievements. This is evidenced by the reduction in loans in the form of main capital to run a business that previously had received a roll of funds. Something that is needed, needed for further study or needed in everyday life, will generate motivation to learn it. Besides attention, motivation has an important role in learning activities. Motivation is the energy that moves and directs a person's activities.(Saripah & Shantini, 2016)

Respondents also revealed that the financial reserves owned by the cooperative members were sufficient to meet the needs of both for business or other living needs. Cooperative members are given opportunities in the form of training to manage finances from cooperative management. The results of the interviews conducted showed an increase in the ability to manage the management of incoming money and money going out of activities carried out by the management. The success of increasing community independence in fulfilling material needs was successfully carried out by inviting the community to participate in training and catch-up activities done by cooperatives. With the optimization of cooperative members, become empowered by increasing the economy in meeting the needs of themselves and their families.

Aspects of management independence

Optimization in improving the independence of the management towards cooperative members from a management perspective has been successfully carried out. Respondents provide information that the ability to independently manage members in terms of establishing communication in terms of networks or relationships can be formed. This ability increases knowledge of business development by cooperative members.

Respondents gave a statement that the management was able to provide direction to cooperative members in carrying out their duties to carry out activities together with other members. The values of

good cooperation between cooperative members are seen in increasing the ability of mutual cooperation in order to achieve the goals of the cooperative organization. Members implement the value of independence in terms of management by obediently providing installment fees in accordance with applicable regulations. It is important for members in managing the flow of business financing expenditures. Members are proven to be able to manage this so that the business carried out can run smoothly. In this aspect, the level of community independence shows good success.

Community empowerment is a method that is carried out in order to help increase and develop the people's economy by referring to social values. This idea is centered on the human aspects, participation, empowerment, and sustainability (Chambers in Hadi 2010). In line with Verhagen, as quoted by Hikmat (2004) states that self-help is a means to achieve independence. The meaning of independence itself is an atmosphere or certain condition that makes an individual or a group of people who have reached that condition no longer depending on the help or generosity of third parties to secure individual or group interests. The main purpose of empowerment activities according to Kesi Widjayanti (2011:16) is to make the community independent so that it is able and reaches for existing resources so that it becomes productive and helps development. It can be concluded that an independent community group means a group that is capable of developing adequate organizational, productive and analytical skills so as to be able to design and implement a strategy that can contribute effectively.

Cooperatives are a populist economic movement to revive the culture of mutual cooperation in the community in building an economic system, carried out independently with the aim of prospering the community in general and members in particular. The principle of kinship reflects the awareness of the human conscience to cooperate in cooperatives and to become a populist economic movement where people who want to progress together work together to form cooperatives.

The results showed that in general the level of community independence of the members of the KSP KEBAL Al Muttaqien has been successfully carried out. Society has realized and understands about its ability to manage themselves independently with the aim of changing behavior to be more beneficial for themselves and for others.

The independence of cooperative members is a strengthening that aims to encourage the performance of cooperative institutions so that they can carry out institutional development activities in utilizing their resources optimally. The independence stage is fo-

cused on developing human resources, business capital and product marketing networks. Management at this stage is carried out independently by the community, with periodic guidance and supervision. Control and assistance is carried out to facilitate the management of cooperatives in forming partnerships and fully surrender the available time and effort and the participation of members (Maulana Mahrus Syadzali, 2020).

This is in accordance with what Hubies (1992) argues that independence is defined as a manifestation of a person's ability to exploit his potential to fulfill his / her life's needs, which is characterized by the ability and freedom to determine the best behavior. Nasdian (2014) categorizes independence as material independence, intellectual independence, management independence.

CONCLUSION

Community members of KSP KEBAL Al Muttaqien have realized and understood their ability to manage themselves independently with the aim of changing behavior to be more beneficial for themselves and for others.

The cooperative management has succeeded in optimizing the independence of the community members of the KSP KEBAL Al Muttaqien. Judging from the level of intellectual independence, most members understand their rights and obligations as members and understand the services that exist in cooperatives. Judging from the level of material independence, the community members of KSP KEBAL Al Muttaqien have been able to take advantage of the services provided by the cooperative for productive businesses and have savings that can be used in critical times. Judging from the independence of management, the community members of the KSP KEBAL Al Muttaqien can work together well with other members in every program carried out by the cooperative. Cooperative management both in terms of thinking, capital and sustainability is carried out independently. The independence of cooperative members in managing their cooperatives is very important because the success of cooperatives is determined by the cooperative members themselves. Members as owners and users of cooperatives must be able to carry out their rights and obligations as stipulated in their respective cooperatives.

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Job Analysis and Design of Educational Jobs in Indonesia

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Abstract. Human resource management is required to enhance the effectiveness and creation of a suitable organizational system in sustaining the culture and organizational climate. In order to establish optimal job qualities that influence the quality of work life in an organization, it is important to comprehend job design. The purpose of this study is to describe the job analysis and design of education work at the educational unit level. The method used is descriptive qualitative by describing the problem clearly with the source of the library research with metaphysical realism as the approach. The data sources of this research are secondary data, including journals, online newspapers, web and literature books related to job analysis and educational work design, both domestic and foreign sources. Job analysis has an important role in an educational organization in order to place people in a certain position or position. With job analysis, school organizations can form effective human resource procedures to select, promote, train, assess and provide compensation. Job designs are made by schools to organize tasks that are on target, assign tasks to people with the abilities and skills that must be possessed to do these tasks in order to achieve the vision and mission of the school.

Key words: education, job analysis, job design

INTRODUCTION

The success of managing an organization or company is largely determined by human resource utilization activities, therefore, human resource management is needed to increase the effectiveness and development of an appropriate organizational system in maintaining the culture and organizational climate. Based on this, it is necessary to have an understanding of job design which will arrange work assignments to meet organizational and technological needs in determining ideal job characteristics that determine the quality of work life in an organization. Job design includes perceived work demands, job control and social support that lead to higher output (Love & Edwards, 2005). As Thompson (1967;120) notes, ''the more serious the individual believes the consequences of error to be, the more he will seek to evade discretion.''.Individuals become more reactive (Tetlock, Skitka, & Boettger, 1989) when accountability is raised, reflecting a method individuals use to cope with the workplace (Tetlock, 1985). Apart from job design and human resource management, it is also necessary to know about the characteristics, standards and abilities of the people in each job. This information can be obtained through job analysis. Positions need to be designed in such a way that the holder (executor) of the position is productive and gets job satisfaction.

In realizing its existence, an organization needs appropriate human resources, both in its function and in placing it in a position. Organizations, without the support of appropriate employees/employees in terms of quantitative, qualitative, strategic and operational, the organization/company will not be able to maintain its existence, in the future (Thamrin, 2020). Therefore, it is necessary to take management steps to ensure that the organization has the right workforce for various positions, functions, jobs that are in accordance with the needs.

Planning for future human resource needs and planning for meeting human resource needs are part of planning goals and implementing programs in developing and advancing the organization. During its development, human resource planning also includes data studies that can be used to measure the effectiveness of ongoing programs and provide planning information for meeting the needs for future revisions. Thus, human resource planning is a process of formulating qualitative and quantitative strategies through certain stages with the aim of organizational effectiveness and efficiency in achieving its goals.

Job analysis and job planning activities are very important for an organization. Various actions in human resource management depend on job analysis information as part of the work plan that has been carried out. At least ten important meanings of job analysis; First, job analysis information provides an overview of the challenges that come from the environment that affect the work of workers in the organization. Second, eliminating job requirements that were unnecessary because they were based on discriminatory thinking. Third, job analysis must also be able to find elements of work that encourage or hin-

der the quality of work of organizational members. Fourth, planning employment for the future. Fifth, job analysis must be able to match incoming applications with available vacancies. Sixth: Job analysis is very helpful in determining policies and training programs. Seventh, compile a plan for developing the potential of workers. Eighth, in the interests of setting realistic work performance standards. Ninth, job analysis information is very important as well as its meaning and role in assigning employees so that it is in accordance with their knowledge, skills and experience. Tenth, information about job analysis is also very important in formulating and determining a fair and appropriate system and level of rewards (Siagian, 2014).

Job analysis is a strategic part in clarifying the work of employees. This implies that the scope of work and the consequences of work received by each employee will be appropriate and effective. Thus, coordination and abuse of authority in a job can be avoided. Job analysis remains an organizational need to clarify every job and position. This job analysis will clarify the leadership and members of the organization about the work content. Therefore job designs and analysis are techniques used to maximize worker performance, and it entails modifying procedures and job contents to improve workers' motivation, satisfaction, and production capacity (Knapp & Mujtaba, 2010). Job design/analysis is the process of incorporating dynamic processes and contents into the description of a job in order to make it more appropriate to employees (Morrison, Ross, Morrison & Kaman, 2019).

As materials for determining employee duties and responsibilities, job analysis and workload are mandatory for planning future human resource needs in an organization. However, the trend in job analysis and workload is not in accordance with implementation. One of the factors that causes the quality of job analysis results and low workload is because the process does not involve correct procedures or techniques. Good training and development creates learning organizations, resulting in quantifiable performance and enhance organizational performance (Niazi, 2011). For this reason, these activities need to be carried out using methods that can be scientifically justified so that the calculation of employee needs in human resource planning is more rational and according to needs and the results can be used as guidelines for recruiting, selecting, and placing employees in the organization. (Gianatri, 2016).

Job analysis is an activity or process of collecting and compiling various information about jobs, tasks, types of work, and operational responsibilities to realize organizational goals (Arifin, 2014). The data collected from job analysis can be used for various purposes, one of which is to estimate the needs of employees (Sedarmayanti, 2014). Workload analysis is a series of systematic stages carried out to determine the level of effectiveness and efficiency of the organization's work based on work volume (Adi, 2014). In the process, this activity involves certain procedures or techniques in measuring or calculating the amount of workload for each position in the organization. Calculation of the workload needs to be done using a method that can be scientifically justified so that workforce planning is more rational and according to needs. This can be started with the implementation of work measurement (Hendratmoko, 2017). Additionally, Hackman and Oldham (1975) (1976) centered on the five intrinsic job qualities of autonomy, skill variety, task identity, task importance, and job feedback.

Based on this phenomenon, this study aims to examine descriptive analysis of occupation and job design in education, in a structural educational organization. This is because job analysis and job design are also needed as a necessary classification in the recruitment of an educational organization. In essence, job analysis and job design provide job-related information that is used by professional human resources to explain job descriptions, job specifications, and job assessments.

METHODS

This research uses descriptive qualitative methods, which means analyzing and then describing the problem clearly, sourced from library research with metaphysical realism as the approach (Muhadjir, 2000). The data sources of this research are secondary data, including journals, online newspapers, web and literature books related to job analysis and educational work design, both domestic and foreign sources. Qualitative data analysis consists of three activity lines that occur simultaneously, namely categorization, data reduction, data presentation, and drawing conclusions or verification (Huberman, 1992).

RESULTS AND DISCUSSION

Formulation of Educational Job Analysis

Everyone in the organization can understand their duties and obligations appropriately, it is necessary to formulate a work guide called Job Analysis. Job analysis is carried out with the aim of obtaining information relating to the form of work and the person required in a certain position/job. Job analysis is often considered the foundation of a human resource system in an organization (Juntak, 2013). Restructuring, quality improvement initiatives, human resource planning, job design, training, career

development, and work performance appraisal systems are forms of actualization of the results of job analysis. Job analysis is the first step in almost all organizational personnel functions, be it business, non-profit, or government (Muspawi, 2017). The job analysis process will produce at least three components, namely; formulation of positions both structural and functional for each work unit, job descriptions for both structural and functional positions and job maps in the form of stretches of all positions as an overall picture in organizational units (Marhaeni, 2019).

In relation to the context of the work analysis of human resources for education, what must be used as a basis in the work of analysis is to refer to the standards of educators and education personnel, namely; (1) Educators must have academic qualifications and competence as learning agents, physically and mentally healthy, and have the ability to realize the goals of national education. (2) Qualification of educators is the minimum level of education that must be fulfilled by an educator as evidenced by a relevant diploma and/certificate of expertise in accordance with statutory provisions. (3) Competence as a learning agent at primary and secondary education and early childhood includes; pedagogical competence, personality competence, professional competence, social competence, having special skills that are recognized and required can be appointed as educators after going through a feasibility and equality test, academic qualifications and competencies as learning agents developed by BNSP and stipulated by a Ministerial Regulation.

Human resources will be willing and able to work properly if they are placed in a position in accordance with their interests, educational background and abilities, and if the job is suitable for their placement they are able to meet the needs of life. Explicit and detailed knowledge about each position is needed, among others, for the purposes of: a. Recruitment, selection and placement of educational personnel/labor. b. Determine the amount of wages c. Designing career paths for workers/employees d. Establish an appropriate and fair workload e. Designing effective education and training programs.

In addition to providing benefits to the organization, job analysis is also useful for employees to achieve their personal goals. By being placed in a position in accordance with their qualifications, it means that employees have been given the opportunity to develop themselves and realize their potential optimally.

Job analysis is an activity to record, study and conclude information or facts related to each position systematically and regularly, namely: what an employee does in that position, the authority and responsibility of an employee, the reasons for the work to be done, how to do it, doing a job, tools and materials used in carrying out the job, the amount of wages and the length of hours worked, education, experience and training required, skills, attitudes and abilities needed to do the job. When performed well, good job design draws high-quality workers into the company (Garg & Rastogi, 2006). Jobs may be made better through good design to help workers meet their goals (Dewhurst et al., 2009; Sonawane, 2008).

Information gathering for job analysis can be carried out by means of; distributing questionnaires (list of questions/questionnaire) to office holders, conducting direct interviews with employees, and making direct observations on the implementation of work or studying the diary book of information obtained.

The results of this Job Analysis will provide an overview of the duties and responsibilities of each worker. The use of Job Analysis is generally used for 3 element namely, first element is Institutional which has several duties in compilation of new supporting organizations, perfecting the current organization, and reviewing the allocations of task, powers and responsibilities for each position. Second element is Employment which has obligation in recruitment selection/placement, job evaluation, career planning, transfer/promotion/rotation, and training program. Last is the Management which has responsibilities in the management of an organization, and determining the work procedure.

Actually what is used from a job analysis activity for matters or activities as mentioned above are the results obtained from the job analysis process. These results come from job data which are then arranged systematically and organized into job information. This description of job information is usually called a job description.

Job analysis includes two elements, namely: A. Job Description, is a systematic record of the duties and responsibilities of a certain position, which is written based on existing facts. The preparation of this job description is very important, especially to avoid differences in understanding, to avoid multiple jobs, and to know the limits of responsibility and authority of each position. Things that need to be included in a job description generally include; job identification (contains information about the name of the position, part and number of the position code in a company), job summary (contains a brief description of the position; which also provides a brief definition that is useful in addition to information on job identification), tasks that are must be exercised, supervision to be exercised and received, relationships with other positions, assets, equipment and materials used, and working conditions. Job

Specifications are the minimum requirements that must be fulfilled by a person holding a position in order to carry out his assigned duties properly. These job specifications can be compiled together with job descriptions, but can also be compiled separately. Some things that are generally included in job specifications are educational requirements, training and work experience, knowledge and skills requirements, physical and mental requirements, and age and gender requirements. Numerous job qualities are determined by the larger physical and organizational setting in which work is conducted. The most frequently studied work characteristics in the literature on work design are physical demands (i.e., the amount of physical activity and effort required to perform a job (Edwards, Scully, & Brtek, 1999; Stone & Gueutal, 1985)) and work conditions (i.e., components of the work environment, such as noise, health hazards, and temperature; (Campion & McClelland, 1991; Edwards et al., 1999)).

Job analysis is basically a process of collecting, researching, deciphering job data in stages. In this study, has several stages in job analysis, namely; 1. the preparation and planning stage; 2. the data collection and; 3. data processing stage. In each stage of the implementation is described as follows:

Preparation and planning stage

At this stage some of the activities carried out are reaffirming the organizational structure which will be the reference for the next process including the names of positions and places, an inventory of positions in each work unit and arranged according to a hierarchy and coded identification, determine the data collection method to be used and prepare the tools and the same needed (forms etc.), form an analysis implementation team and explain the methods to be used, communication/explanation by the company leadership to all work unit heads and all employees about the purpose and the purpose of the job analysis to be carried out. This is done to prevent misunderstandings and wrong perceptions and expectations.

Data Collection Stage

Position data collection can be done in several ways, namely; Observation and Interview method Observation method means that the executor of the job analysis observes directly at the place how the job task is carried out and records it to be processed into information. Whereas in the interview method, the analysis officer directly interviews the incumbent by asking questions that are prepared in advance and recording the answers to be processed into the information needed. Questionnaire method (List of Questions), data collection is done by distributing a list of questions to all employees to be filled in. Reference study method, this method relies on knowledge, existing references and comparisons with other organizations. Combined method, this method means using several of the above methods at once.

Data Processing Stage

After the data collection process is complete, data processing is carried out by determining the factors of the job appraisal, weighting the value of each factor, analyzing the results of the interviews and questionnaires that have been filled in, analyzing job requirements, compiling job descriptions, making job appraisal patterns as a basis. from determining other personnel systems, preparing recommendations for workforce planning, procurement patterns, employee selection and placement, remuneration systems, employee training and development, personnel administration systems and procedures.

Job analysis is an activity that is very useful for various purposes of organizational design and job design. Efforts to improve the quality of education from year to year have always been a government program. One of them is the enactment of law number 20 of 2003 concerning the National Education System and further explained in Government Regulation number 19 of 2005 concerning National Education Standards. The quality of education is determined by the integral refinement of all education components, such as teacher quality, equitable distribution of teachers, curriculum, adequate facilities and infrastructure, a conducive atmosphere for teaching and learning activities, and improved teacher quality supported by government policies. The teacher is the central point of improving the quality of education which is based on the quality of the teaching and learning process. Therefore, increasing the professionalism of human resources (HR) teachers is a must.

Educational Job Design

Job Design is a function of determining individual or group work activities in an organizational manner (Fidiyah et al., 2015). The goal is to regulate work assignments to meet organizational, technological, and behavioral needs. Job design is absolutely necessary for every organization because in job design, what is done is assembling a number of tasks into a job or a group of jobs so that the work is clearly directed and the work can be done efficiently and effectively. Job design always affects all the basic conditions of individual behavior in the organization by motivating employees. Through a clear job design, task significance, the diversity of tasks performed can develop employee abilities (Garibaldi et al., 2013).

Job design generates job descriptions and job specifications. Job design is the process of determining how a job will be performed and the tasks in that job. In this case, job analysis and job design can provide the same information when job analysis and design are done correctly. The results of the information contained in the job design are; type of work, job situation, job structure.

In the job design there is a job description. Job description, which is a written list of tasks that must be done by an employee for that job. Clearly and concisely, the job description must describe the name of the position, department, to whom this position is responsible (supervisor or manager in charge of it), working hours required, job summary, main responsibilities or duties, the relationship of this position with other parts of the organization. company. The job description must be structured in such a way that it describes not only the responsibilities that lie within it, but also the related interests of the responsibilities for a job.

Job specifications are information that contains personal qualifications so that they can do the job optimally. Job specifications contain information on the requirements of the job holder's qualifications related to educational background, professional qualifications, technical needs, work experience, and competencies that must be possessed (Harjanti, 2014). Furthermore Job performance, according to Birdsall (2018) and Deschamps and Mattijs (2018), refers to concentrating directly on employee productivity by measuring the units of acceptable quality generated by an individual in a business setting for some time inside an organization.

There are four positions that can be analyzed in an educational organization, namely; 1. Principals, 2. Vice principals, 3. teachers, and 4. staff (Administration staff and cleaning service). The following is the result of the analysis and design of the work that has been done.

Headmaster's Job Design

Headmaster Job objectives/goals is Realizing the vision and mission of the school organization. The principal's activities include activities, educators, managers, administrators, and supervisors. The activities can be detailed again as follows; planning, organizing, directing, coordinating, supervising and evaluating all school activities, covering the areas of teaching and learning process, office administration, student administration, employee administration, equipment administration, financial administration, library administration, and public relations administration.

Headmaster Required educational and experience requirements such as: Have an academic qualification of bachelor or diploma, At the time he was appointed

headmaster at the age of 56, Have at least 5 years of teaching experience. For kindergarten has at least 3 years teaching experience, Having a rank as low as III / c for civil servants (PNS) and non-civil servants included with the rank issued by the foundation or authorized institutions.

Skills/competencies and basic skills that must be possessed by Principal, namely: Managerial Competencies, Entrepreneurial Competencies, Supervision Competency, and Social Competencies. Headmaster also required personality and job characteristics such as: Noble character, develop culture and tradition of noble morals, and be an example of noble morality for the community in schools, Have personality integrity as a leader, Have a strong desire in self-development as a principal, Be open in carrying out basic tasks and functions, Self-control in the face of problems in the job as a principal, Have talents and interests as an education leader.

Based on the description above, it can be said that the school is led by the principal who has a strategic role in improving teacher professionalism and the quality of education in the school. The principal as a leader must be able to: 1) encourage the establishment of a strong will with passion and confidence to the teachers, staff and students in carrying out their respective duties; 2) provide guidance and direct teachers, staff and students, as well as encourage, encourage and stand in front for progress and inspire in achieving goals (Pendidikan et al., 2017).

Vice Principal's Job Design

Vice Principal's have job objectives/goals in Assisting the Principal in the implementation of curricular and extra-curricular activities. Activities that carried out along with the implementation process by Vice Principal such as:Develop teaching programs, compile and describe the educational calendar, develop and share teacher duties and lesson schedules, develop a schedule of study evaluation and final exam implementation, represent the Principal in accordance with his authority or assignment from the Principal, and etc.

Vice Principal's required educational and experience requirements such as:Never imposed a moderate and severe disciplinary penalty in accordance with the prevailing laws and regulations, actively teaching or guiding for at least 5 years, good for loyalty and good value for other scoring elements and average increases in the last two (2) years, have a teacher performance score of at least - at least good in the last two (2) years, have knowledge of education management, ICT skills, and communication skills, have an educator certificate, rank / class as low as – low administrator (III C) or position as low as - low young

teacher, At least – at least ever been a homeroom teacher and/or school level achievement teacher.

There are skills/competencies and basic skills that must be possessed by Vice Principal, namely:able to develop and socialize the curriculum with the Principal, Staff and Teachers, have managerial skills and leadership skills, able to include the world of work in the implementation and development of curriculum, able to encourage staff to thrive. Vice Principal also required personality and job characteristics such as: Responsible, positive thinking, having concern in school development, innovative and creative, can work well with all teachers and school residents.

Based on the description above it can be said that the deputy headmaster / vice principal is someone who helps the duties of the principal and has responsibility for all his basic tasks in developing and socializing the curriculum with the principal, staff and teachers, managerial and leading groups, including the world of work in the implementation and development of the curriculum and able to encourage teachers and school residents to develop. A deputy principal can be said to be the closest person to the school who has the task to manage everything related to administrative circulation in the school, as middle management under the principal (Surya, 2008).

Teacher's Job Design

Teacher's have a job objectives/goals in Realizing the purpose of national education by educating the nation's children with knowledge and skills mastered. Activities carried out along with the implementation process of teachers is teaching and learning activities and learning administration activities.

Teachers required educational and experience requirements such as:a teacher must be obtained through higher education (minimum Bachelor or diploma 4, have an educator certificate, must be healthy physically and spiritually, have the ability to realize national educational goals, have pedagogic competencies, personality competencies, social competencies, and professional competencies obtained through professional education. Skills/competencies and basic skills that must be possessed by teachers are:ability to manage student learning, personality skills are steady, noble, wise, and authoritative and become an example of learners, knowledge ability of the subject matter broadly and deeply, able to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians of students, and the surrounding community.

Teachers also required personality and job characteristics such as:□believe and fear of God, the One God, high morality, have a high sense of nationality, honest in saying and acting, patient and wise in carrying out the profession, discipline and hard work, love

for the profession, have a positive view of the learners, innovative, creative and highly curious, love to read and always want to move forward, democratic, working professionally with students, peers and the community, open to suggestions and criticisms, peace-loving, and have international insight.

From the description above, it can be concluded that the teacher's work process is reflected in planning, organizing, implementing, and assessing the learning process of learners on an ongoing basis. It means that the teacher's job is not only to educate and teach alone, but starts from the planning process to the assessment process. The role of teachers is very important to create quality of life in schools, in school organization through self-development, active participation, cooperation, maintaining safety and security in the work environment in the school (Pendidikan et al., 2017).

Administrator's Staff Job Design

Administrator's Job have an objectives/goals in Implementing school administration. Activities carried out along with the implementation process by administrator are:preparation of school administration work program, management, preparation and implementation of school administration/ infrastructure, student affairs, curriculum, staffing and public relations, Preparation of Administrative Administration (implementing incoming/outgoing letters, typing letters, doubling letters, archiving, organizing letter numbering, tidying up mail files, sending and receiving letters, compiling and presenting school statistical data. take care of school documents).

Administrator required educational and experience requirements such as: Educated at least graduates of high school/vocational/D3/S1 or equivalent, relevant study programs, with work experience as a school administration worker at least 4 (four) years, Have a certificate of school administration personnel from institutions determined by the government, Mastering/having the ability to optimize Microsoft office applications well. Skills/competencies and basic skills that must be possessed are: Administering staffing, school finances/ madrasah, standards of facilities and infrastructure, carrying out administration of school relations with the community, mailing and archiving, management standards related to students, and mastering the use of Information and Communication Technology (ICT).

The Administrators required personality and job characteristics such as:Have integrity and noble morals, have work ethic, control yourself, have confidence, have flexibility, have thoroughness, have discipline, have creativity and innovation, have responsibility. They also need to be able to□working together in teams, providing excellent service, having

organizational awareness, Communicating effectively.

From the description above, the administration assists the school in providing services related to administration. In the point of view of education, administration or commonly called administrative personnel is said to be qualified if its human resources work effectively and efficiently. Administrative personnel require efficient assistance in order to optimize their output (Li, Li, & Erping, 2009; Niazi, 2011). Though administrative efficiency has long been an interest of many institutions of higher education, a small number of these colleges (particularly in the developing world) can offer administrative personnel with a welcoming and supportive atmosphere in which to achieve their working goals (Wilson, 2016; Zareen, Razzaq, & Mujtaba, 2013). Administration serves the implementation of an operative work by providing a variety of necessary information. This description makes it easier to achieve the desired objectives or allows the completion of operative work. Administration assists the leadership of a school in making decisions and taking appropriate actions. Recording of information, in addition to information purposes is also related to the function of accountability and control functions (Pembinaan et al., 2017).

Cleaning Service Staff Job Design

Cleaning service have a job objectives/goals in Performing the operational functions of the school. While the activities carried out along with the implementation process are: Monitoring the school environment as much as possible, Supervise and maintain security, Work with the relevant service if there is a security problem that cannot be done internally or there has been an unlawful act, Fill out an event notebook, Report an event, Keep an eye on the influx of people, goods, vehicles in the school environment. Service cleaners interact almost with all school resident and communities.

Cleaning service required educational and experience requirements such as:Minimum junior high school education or equivalent, Have expertise and ability in maintaining cleanliness, Able to take good care of school assets. Skills / competencies and basic skills that must be possessed are:communication and interact effectively and efficiently with students, fellow teachers, parents/guardians of students, and the surrounding community, Ability to maintain school assets and hygiene. Cleaning service also required personality and job characteristics, namely: Have integrity and noble morals, have a work ethic, control yourself, have confidence, have discipline, have creativity and innovation, have responsibility. They also

need to be able working together in teams, providing excellent service, communicating effectively.

Service cleaner in the school has the main task described into 5 statements, namely (1) monitoring the school environment (2) supervising the influx of people, goods, vehicles, in the school environment, (3) carrying out the task of securing the school, (4) reporting the state of the school environment to the principal and cooperating with the relevant agencies, (5) maintaining and maintaining school property. Each employee has their main duties and functions that are different all adapted to the school conditions. The school does not only do the main tasks, but also does additional tasks that are not its obligation (Dewi, 2018).

CONCLUSION

Job analysis has an important role in a school organization to place people in a certain position or position. Because without adequate analysis and knowledge of what workers in schools do for their work, school organizations will not be able to establish effective human resource procedures for selecting, promoting, training, assessing and compensating. Job design is an important factor in management, especially operations management because in addition to dealing with productivity, it also concerns the workforce who will carry out school operational activities. Job design is a breakdown of tasks and ways of carrying out tasks or activities which include who does the task, how the task is carried out, where the task is done and what results are expected. adding a job design is a function of determining the work activities of a person or group in an organizational manner.

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Development of Multimedia-Based Teaching Materials in Mastering Linguistic Aspects

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Abstract. The use of learning multimedia has numerous advantages, including accommodating variances in student learning styles, allowing students to choose the content to be studied, and allowing students to change their learning speed by selecting particular buttons given in multimedia learning. This study aims to investigate the development of multimedia-based teaching materials in the mastery of linguistic aspects of the understanding of listening to Mandarin. This research method in the form of literature review was conducted based on issues, methodologies, equations and further research proposals. The findings revealed that the understanding of listening to their language after the application of materials that indicate multimedia had an influence on the development of mandarin teaching material materials.So it can be concluded that, multimedia is one of the important tools in teaching understanding listening to mandarin. With the right elements and the right storyboard can help motivate students and improve listening skills.

Key words: linguistic aspects mastery, multimedia, teaching material development

INTRODUCTION

The creation of new tools, techniques, and strategies for teaching and acquiring language skills has been facilitated by technological opportunities (AP & Lai-May, 2012). Technology is increasingly widespread, affecting many aspects of our social and work lives, and many of our recreational activities. Many researchers state that technology can be used as an instructional tool in teaching and learning skills. According to (Gilakjani, 2017), when we talk about teaching, education or training issues, we must consider the important role of technology. With the advent of technology, coupled with the use of multimedia, students' receptive language skills (Alvarez-Marinelli et al., 2016) and productive language skills ((Hwang et al., 2014), (Hwang et al., 2016)) can be increased more effectively. In broad terms, multimedia is the use of several media to convey information (Ivers & Barron, 2002).From a psycholinguistic perspective, multimedia provides students with multisensory exposure (ie, audio and visual). It has been reported that language learners who use multimedia learning materials memorize more words than their counterparts who use paper-based learning materials (Ahmadian et al., 2015). Students can also acquire skills (e.g., learn autonomy and computer literacy) and practice information processing skills (Cerezo et al., 2014).

The use of computers in foreign language teaching is not limited to classroom activities. Various researchers offer options for the use of Internet technologies in the classroom and in students' extracurricular work. For example, the use of ICT in foreign language teaching is considered in the works of scientists (Abdykhalykova et al., 2020); (Elmurodov, 2020).

One type of learning media is multimedia. Multimedia learning is usually operated with a computer and provides feedback for students. In addition, it has been widely used in second and foreign language learning, especially listening, because the use of multimedia can help students improve their abilities.

In schools, multimedia, an innovative tool, has become one of the attractions of teaching today. Widely used in the teaching and learning process, multimedia has conquered the hearts and souls of students so that the interest and attention of students increases and deepens, making them more attentive and participatory. There is much belief that a changing scene requires thinking about the structure and culture of schools and classrooms, as well as what educators are instructed to do and how they show it. Likewise, educators find multimedia more relevant when they use it. The researchers also reveal the impact of using technology in teaching.

Although digital storytelling has been practiced for more than two decades, a limited amount of research has been done on this technology mainly because it has been used in educational settings. (Robin & McNeil, 2012). Therefore, further studies need to be carried out to test the feasibility of using digital storytelling on students to evaluate its efficacy on achieving their listening comprehension. Therefore,

listening skills are absolutely necessary in one's academic success because it has been considered as the most widely used language skill in the classroom (Jimmy, 2013).

On the other hand, there are many findings from previous studies regarding the importance of listening skills for students. Even (Cigerci & Gultekin, 2017) mentioned in their research that listening plays an important role in the individual's daily activities as well as learning activities. Thus, students' skills are acquired and developed naturally in their early years of life. Therefore, children can understand, synthesize, evaluate more efficiently what they are listening to if they are taught effectively with their own spoken language. In addition, listening is the first language skill that children develop and is the most dominant communication in the classroom and everyday life. One way listening skills can be developed is through storytelling (Oduowu & Oluwakemi, 2014). Therefore, language learning must be supported by many visuals or real objects in the classroom.

The use of multimedia in learning a second or foreign language offers various benefits. The use of learning multimedia provides several benefits, such as accommodating differences in student learning styles, giving students the freedom to choose the material to be studied, and giving students the freedom to adjust their learning speed by selecting certain buttons provided in multimedia learning. With the various benefits of learning multimedia, teachers and students can use it in listening learning, both inside and outside the classroom (Bewe, 2020). The advantage of utilizing multimedia in education is that it efficiently communicates knowledge to all students and maintains their interest in studying (Zimmer, 2003). The goal of developing a learning model that incorporates multimedia into the teaching and learning process is to enhance efficiency and motivation, to enable active and exploratory learning, to be consistent with student-centered learning, and to better direct learning (Suyanto, 2003). While according to Brett (1995) Multimedia has several advantages over other forms of media, including the following: 1) providing an interactive process and easy feedback, 2) allowing students to choose the subject of the learning process, and 3) facilitating easy and systematic control over the teaching and learning process.

One example of a good multimedia in learning to listen to a second or foreign language is 123LISTEN by Jan de Jong. This multimedia was created to help learners practice listening in English as a second or foreign language (Hulstijn, 2003). Besides (Brett, 1997) also create learning multimedia for listening with various features to assist language learners in listening to audio in English. Next, Brett conducted a comparative test to compare the effectiveness of listening using multimedia and using only recordings (audio or video). Based on the results of Brett's research, it was concluded that students' listening comprehension was higher when they used multimedia compared to using recordings (audio or video).

Currently, much attention is paid to the use of multimedia in foreign language teaching, especially for young learners, according to their age specifications and special abilities to understand educational materials. Pedagogical systems and educational technology, especially multimedia, also attract great attention from teachers to improve the education of young students (Ogay, 2020). However, increased efficiency in "teaching" does not always imply an increase in "learning" efficiency, particularly when instructors make extensive preparation to provide more than enough information (Liu, 2009) and the speed of knowledge input in class is much faster than students' acquisition speed.

Multimedia applications for textbooks are interactive electronic educational and information resources that illuminate subject content according to state educational standards and curricula with the help of information and communication technologies, including video, sound, animation, graphics, text and dictionaries that help learners to learn the material efficiently, and aims to consolidate and control the knowledge acquired and, in addition, include supplementary material, which enriches the main content of the subject. There have been several studies that attempt to forecast a user's degree of acceptance of a multimedia file, such as the one provided in (Mitaim, 2013) using pictures, but these studies do not take into account the user's relevance of the content in the context of his/her job.

One aspect of education that can be developed during the learning process and is expected to have a sizable impact on efforts to implement teaching objectives on fashion design in a digital format is the development of effective and efficient learning media, such that students develop certain competencies in accordance with the purpose to be accomplished (Van der Velde & Ernst, 2009).

The results of a survey of teachers conducted in the context of research (Thamarana, 2017) shows that most English teachers have a positive attitude towards the use of multimedia technology in teaching. Teachers agree that multimedia technology encourages the process of self-understanding. And most of the teachers surveyed believe that multimedia helps teachers develop students' language skills in a more effective way.

METHODS

Strategies in finding journals used in the literature review, questions used to conduct journal reviews that are tailored to the research theme, limitations on taking journals and other things. The journals used in the literature review were obtained through a database of international journal providers and Scientific Indonesia journals through Google Scholar. The author opens the website and www.google scholar.com. The researcher wrote down the keywords according to "development of multimedia-based teaching materials", "mastery of linguistic aspects", and "understanding of listening to mandarin". Based on the search results found 30 journals used for research.

RESULTS AND DISCUSSION

The demand for learning a foreign language is increasing day by day. Knowledge of foreign languages is required in every field, be it business or politics. (Elmurodov, 2020) explained that the role of modern pedagogical technology and information and communication tools in improving the quality and effectiveness of education, the organization of targeted games in the form of games that attract students' interest is very important. In fact, their scope of application is expanding day by day, and technical means are becoming an integral part of the learning process. Teaching and learning foreign languages using modern technology is one of the most effective methods. Also, interactive teaching instructs students in how they are actively involved with their learning process.

In 2000, President Abdurahman Wahid issued Presidential Decree (*Keppres*) No. 6 of 2000 to cancel Presidential Instruction No. 14 of 1967. Since then, Mandarin has been taught openly in various educational institutions (formally, informally). Chinese is no longer taught in families as a first language but as a foreign language.

The situation mentioned above causes some problems. One of them is the shortage of Chinese textbooks (Sutami, 2016). Chinese learners are accustomed to learning Chinese by using imported books. Only a few teachers dared to compile their books. Sutami stated that many Chinese Indonesian textbooks were unable to meet the standards of both Chinese and Indonesian, and that there were still many errors in the *Hanyu Pinyin* writing system and Chinese/Indonesian grammar (Sutami, 2016).

There are many schools, from Kindergarten to High School to universities and also language courses open classes to finance learning Mandarin (Prasetyaningtyas et al., 2020). Teachers come from various walks of life. Some of them are graduates of the University of Indonesia and DarmaPersada University,

some of them come from families with Chinese backgrounds. None of these teachers have the educational background to teach Mandarin.

To support teaching and learning activities, several teachers and institutions have started compiling their teaching materials (Prasetyaningtyas et al., 2020). The first textbook published was Basic Chinese Language Mandarin (初级汉语课本) which was published by DarmaPersada University in 1999. After that, many published books appeared in bookstores as teaching materials for Mandarin. Many of them try to provide the lost generation of Chinese knowledge with materials with which to teach how to communicate in Chinese.

According to the data collected from 1999 to 2018, Prasetyaningtyas (2018) shows that there are 33 publishing companies that publish 109 titles of Chinese teaching materials. This number is an achievement, because in previous years there was no teaching of Mandarin in Indonesia. Several generations, at least two generations do not have the knowledge or skills to communicate in Chinese.

Some publishing companies mainly publish Chinese learning books, some others publish not only Chinese learning books but also interesting for Chinese language teaching and learning. These companies are not only in Jakarta but also in other cities.
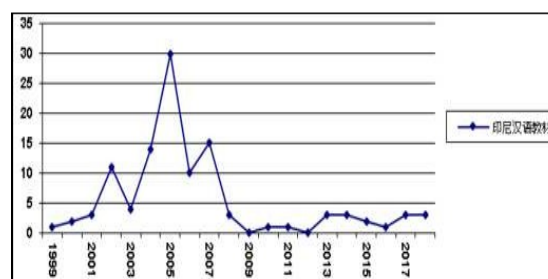
Source: (Prasetyaningtyas et al., 2020)
Figure 1. Chinese Language

The data shows us that Chinese teaching materials found in bookstores or online bookstores have very good book covers. Authors and publishers seem to realize that the performance of physics including color, image or layout has a lot of influence to attract and motivate learners to learn Chinese. Especially for children, the colors and illustrations or pictures are so eye-catching.

Based on student competence, it can be seen that teaching materials are also divided into several levels of competence. There are three levels to it. First, zero level, second, intermediate level and third, advanced level. Books found in bookstores and online bookstores try to meet this need. The data shows that of the 109 existing titles, 107 books provide teaching and learning materials for students at the zero level,

and only 2 books provide teaching and learning materials for the intermediate level. Unfortunately, no material was found that was able to meet the needs of the advanced level. This is understandable because most Chinese learners are just starting to learn Mandarin.

Based on the language skills revealed in the teaching materials, from the research result (Prasetyaningtyas et al., 2020) it can be seen that the speaking skill training material book is the most numerous. The second place is the practice of writing a skill book. The third place is to practice reading skills of books and reading materials. The fourth place is the integrated skill material book. Integrated skills material books are usually used in activity classes. But the number is still small. Listening skills material could not be found. According to the publisher, the recording process faced several obstacles. The obstacles are the lack of listening skill materials, people who can speak Mandarin in standard pronunciation, and also the production costs which can be high.
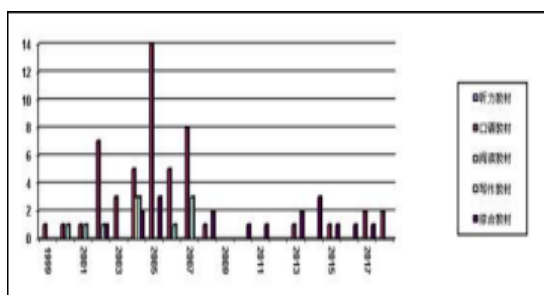
Source: (Prasetyaningtyas et al., 2020)
Figure 2. Teaching Materials Based on Chinese Language Skills

The data collected above show us that while there are positive gains regarding the numbers, there are disproportionate amounts of language skill or competency levels. There are a number of children's books, but very few for adult learners. There are a number of teaching materials for speaking skills, but no teaching materials for listening skills.

Listening is understanding, and speaking is expressing. Both are important communication skills. It is difficult to separate in training and use. Training can be carried out flexibly in different stages and by different methods. Learning Mandarin requires students to learn students' comprehensive English application skills, especially listening and speaking skills. According to the conditions of colleges and the level of Mandarin students, colleges and universities should explore and define modes of teaching multimedia-assisted listening and speaking. Listening and speaking training can be done via LAN or campus network.

Highlights the disconnection between the need for active listening skills and teaching them in business management programs. Since active listening is such a valuable skill, there is a paradox where so much time is spent honing speaking skills without considering listening skills. (Spataro & Bloch, 2018) based in theory, the multi-method approach encourages the development of interactive skills. The evidence from the article shows that students accepted the process with confidence and enthusiasm and an intention to continue the process.

Multimedia content is widely considered as a significant and effective technique in the field of second language learning (Lai & Lin, 2020). He studied the effectiveness of multimedia materials from several aspects including listening, speaking, reading and writing skills (Williams, 2013).

In fact, the efficiency of teaching listening to Mandarin is relatively low. The teacher plays the recorded material, the students do listening exercises, and the teacher checks the answers (Hung, 2015). (Lai & Lin, 2020) the use of multimedia technology can increase the effect of learning Chinese vocabulary.The inherent listening teaching model lacks interaction between students and teachers, which leads to students' listening skills. Teaching listening presents several characteristics. The first is the student's independent listening practice, the second is the full integration of listening and speaking skills, and the integration of listening strategy training into classroom training (Wang, 2019); (Yang, 2020). Finding of (Ene & Chikelu, 2019) shows that the level of proficiency of foreign language teachers in the use of multimedia aids to teach listening and speaking skills is very demanding. Therefore, improvements are still needed in program delivery to meet the demands for the quality of teaching the four language skills with multimedia assistance in secondary education.

There are several theories about language learning. Stephen Krashen promotes comprehensive input, which refers to input that slightly exceeds the current level of language learners. If "i" is the current level of foreign language proficiency of the language learner, then "i+1" is the next step in the development process. Therefore, if the goal is to help language learners complete their assignments, a comprehensive "i+1" should be given to them (Krashen, 1985).

Constructivism argues that students' knowledge is obtained through the construction of meaning and obtaining the necessary information in certain situations, with the help of others, such as cooperation and communication between students. The ideal learning environment should include four parts: situation, cooperation, communication, and meaning construction (Tobias & Duffy, 2009). Today, the development and application of multimedia and network technolo-

gies provide the necessary technical support for the application of constructivist theory. Multimedia-assisted instruction can be effectively integrated into constructivism in the listening and speaking teaching process to provide an ideal teaching environment for independent learning. Vivid language material, demonstrated through sound, images, words, animation and video, creates a real or near-real language learning environment (Sarkar, 2016); (Ningsih et al., 2018).

When using social media to demonstrate active listening; searching library databases in the use of digital storytelling; improve digital pronunciation dictionary software; use the internet to download teaching materials; use virtual classrooms to teach students listening skills in documentaries; use the mobile Application to meet the needs of students outside the classroom; use online oral tutorials while highlighting points; use computer software to engage students; use a smartphone to develop instructional materials using presentation software or creation tools (eg., Authorware, Toolbook) and; use online audio and video conferencing to teach listening skills (Ene & Chikelu, 2019); (Elfona & Zaim, 2019).

Multimedia and network technologies create favorable conditions for collaborative learning and communication beyond the boundaries of space and time. It helps students to build knowledge and skills of the mandarin language, and generates new ways of learning to meet the requirements of students' self-exploration, situation creation, multiple interactions, cooperative learning and resource sharing (Sarkar, 2016);(Ningsih et al., 2018); (Ogay, 2020). Based on the relevant basic theory, (Yang, 2020) put forward preventive measures such as correcting teacher and student misunderstandings, strengthening teacher and student information literacy, improving teaching design skills of teachers, attaching importance to resource construction and strengthening teaching management.

The application of metacognitive strategies in multimedia learning helps students to have self-knowledge, task knowledge, and listening strategy knowledge (Bewe, 2020). Multimedia design, type of material, presentation format, and individual differences became the focus of the most chosen research. Research breakthroughs are interpreted and a number of gaps in cognitive load research related to multimedia learning (Mutlu-Bayraktar et al., 2019) which one in this case Learners can also plan, monitor, and evaluate their listening processes and outcomes using learning multimedia (Bewe, 2020), yet speaking and listening interventions, as well as the use of smartphones, tablets, and other non-computer devices, are being massively ignored (Rafiqa et al., 2020). The method of using technology in foreign language

teaching, three classroom models are applied: (Abdykhalykova et al., 2020) namely, *in demo mode* (one computer on the teacher's Desk + projector); *in individual mode* (work in computer classes without access to the Internet); *in individual remote mode* (class in computer room with Internet access).

The use of technology, especially mobile-based learning in the teaching and learning process; improve teacher creativity in designing teaching materials and media, increase student motivation in learning, mobility, accessibility, and superior potential to equip students with learning materials anytime and anywhere (Elfiona & Zaim, 2019).

Web-Based Cooperative Learning is cooperative learning that is supported by multimedia network technology. It has attracted greater attention by many instructors and scholars. Using the Internet for college students is almost universal, and especially for Mandarin language majors. The information resource network for cooperative studies offers adequate facilities and resources. Students and teachers are no longer limited by time and geographical boundaries. They can communicate and learn at any time and have abundant resources (Xue & Lingling, 2018);(Wei, 2018);(Wang, 2019);(Ying Zhang, 2020). Students can understand different types of knowledge. With different learning environment conditions, such as video, audio and other information to relieve the boring cooperative learning. This is in line with the opinion (Liu, 2020) Single teaching environments, limited teaching conditions, and backward teaching equipment hinder the development of auditory teaching tools.

In study of Multimedia-assisted self-study materials, (Li & Tong, 2019) discovered that students who used flash-E cards outperformed those who used paper flashcards in the direct post-test to read and listen to Chinese words, as well as having more positive learning attitudes. on learning Mandarin. Meanwhile an in-depth examination of the VLS type (*vocabulary learning strategies*) (Rahimi & Allahyari, 2019) revealed that VLS multimedia instruction had a positive effect on increasing learners' vocabulary size. This suggests that multimedia-assisted VLS instruction equips learners with the competencies to extend what they learn during the course into other language tasks; in the case of the current study, a language test.

This finding is in fact in line with other studies that have emphasized the integration of affordability of technology and environment into vocabulary teaching and the positive effects of such learning situations on vocabulary learning (e.g., (Huang, 2018); (Gao, 2019); (Astuti & Nurhadi, 2019); (Lai & Lin, 2020); (He, 2021)). According to (Gao, 2019) To be able to develop pronunciation and listening skills,

teachers often use PowerPoint and pictures and animations in developing vocabulary, grammar.

According to Astar et al., (2021), typographical features of emoticons, letter omission, boiled writing, and phonetic spelling are used, as well as morphological features of initialism, abbreviations, reduplications, cuts, and casual styles of spoken diction — linguistic features create special registers called textese, which are recognized by non-standard forms or textisms. The language mechanism is characterized by a lack of adherence to the conventional use of periods, commas and capitals; even less than ten percent of the space that is considered to be used is not used conventionally. The dominant use of one-clause sentences displays the syntax of the language.

Various technical instruments and computer software applications are available for the purpose of teaching and learning language, in Lai & Lin (2020) uses LCD software and power point. While other research using existing computer software and tools includes research (Nomass, 2013) who have used online learning websites, computer-aided language learning programs, electronic dictionaries, email messaging programs, CD players, and video clips. There are also studies using high-tech tools and built-in computer software, (Kennedy et al., 2014) which uses Universal Design for Learning (UDL) to build a multimedia-based teaching tool called Podcast Content Acquisition (CAP) to deliver vocabulary instruction and training.

Based on analysis (Xue & Lingling, 2018), the network devices equipped at the university are universal, so students and teachers have access to computers for learning and teaching. University teachers acquire some computer skills, and students also have broader computer knowledge. Second, the teacher uses cooperative learning under a multimedia network to help students learn the language. Students are also better adapted to utilize multimedia resources for collaborative learning.

In a special listening lesson, students either listen to a recorded script from a reading text book or, after hearing some information, they respond to multiple choice questions about the substance of the listening material (Krivosheyeva et al., 2020). In such lessons, correct answers are emphasized, but the listening process necessary to decode information is neglected and the types of skills and strategies for effective listening are not practiced. The attitude of using multimedia has a statistically significant effect in explaining changes in students' listening skills (Soleimani & Mirsayafi, 2019). This is in line with the results (Wei, 2018); (Ying Zhang, 2020) to improve the way of speaking using the active listening and speaking foreign language modes under the multimedia device.

Listening skills are defined as multidimensional language skills that begin with awareness of sounds and images, and focus on sounds and images (Latifi et al., 2011); followed by recognizing and remembering audio-visual stimuli and ending with interpretation of meaning (Ergin & Birol, 2005). It is often emphasized that listening skills, which have been neglected for many years in foreign language teaching, have an important function in the development of all other language skills, especially speaking skills. Through the development of listening skills in foreign languages, it aims to help students distinguish sounds in the original context and real situations in the language concerned; to recognize semantic changes caused by emphasis, stress and intonation in a context and become skilled at understanding speech content completely and correctly (Kim, 2015); (Polat & Eristi, 2019).

According to Imhof and Janusik (2006) in (Polat & Eristi, 2019), who proposes individual and environmental variables that contribute to the development of foreign language listening abilities, individual factors contain mental and affective components. They described mental components with these sub-concepts: linguistic knowledge, discourse knowledge, pragmatic knowledge, metacognitive knowledge, prior knowledge, listening skills in mother tongue, ability to distinguish sounds and working memory capacity. On the other hand, the affective component is expressed as anxiety, attitude, interest, motivation, and self-efficacy. Finally, contextual factors include the purpose and type of speech, the nature of the environment in which the learning takes place, environmental variables, interaction status, and speaker quality (Polat & Eristi, 2019).

The conditions of significant learning require appropriate learning strategies, where students need to elaborate, or produce activities, such as asking themselves, semantic mapping, and writing summaries (Murtadho, 2021), monitor learning, and construct meaning from listening texts. This strategy can be considered effective in listening comprehension. Instructional multimedia, therefore, is an effective model for teaching listening, and such instruction influences the development of higher functions and skills beyond the learner's boundaries. Thus, no doubt, it can further develop students' cognitive and metacognitive skills (Soleimani & Mirsayafi, 2019). The use of metacognitive processes and critical thinking in instructional treatment allows students to improve their argumentative writing skills (Murtadho, 2021). (Soleimani & Mirsayafi, 2019) The results can encourage language teachers to take a more systematic approach to teaching listening and to plan their programs in the classroom. In practice, teachers can use new methodologies to teach teaching materials

related to listening, and try to improve students' listening skills through multimedia materials. It should be mentioned that the findings of this study can also enrich the literature in the field of development of second/foreign language.

By continuously upgrading the network teaching platform and improving the network teaching technology, teaching workers should strengthen their learning, improve their information literacy and network teaching ability, and combine the traditional college mandarin class with the multimedia network teaching platform to complement each other. Looking for a balanced teaching model that is more scientific and effective between the two (Wang, 2019).

For foreign language listening teaching mode based on computer multimedia platform, the first thing to do is to train teachers so that they can better understand the advantages of this teaching mode and quickly master the teaching method, so that they can become more proficient in teaching tasks. Only when teachers master how to use these teaching modes can they be more quickly integrated into learning and teaching, and integrate new teaching modes with traditional teaching methods to produce teaching methods that are more conducive to student acceptance. (see Figure 3)
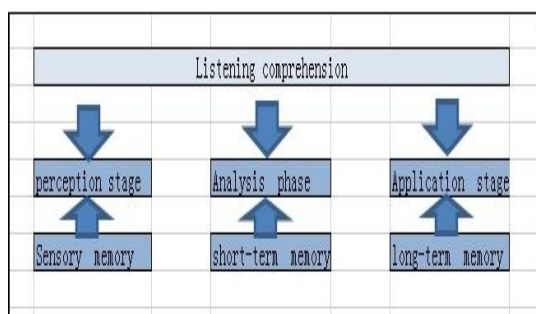
Source: (Liu, 2020)
Figure 3. Listening Comprehension

In a multimedia network environment of Chinese listening classrooms, teachers must change their roles, from lecturers of traditional classroom teaching knowledge to organizers and compilers of information, to student learning guides, assistants and promoters. The teacher will control the frequency and proportion of multimedia, distribute class time fairly and play the main role. In teaching, teachers should be skilled in using various multimedia facilities to assist teaching, so as to avoid the phenomenon of using high-quality equipment at a low level, such as the use of sophisticated equipment with dozens of functions as recorders (Guiling & Zheng, 2008).

With the systematic use of multimedia applications in foreign language classes, results can be achieved (Ogay, 2020) including increasing young students' interest in learning English; improving the

quality of learning and the overall educational process; increasing young students' cognitive activity; developing young students' creativity; diversifying young students' knowledge assessment systems; activating young students' critical thinking; developing communication skills, training team work. with young students. Students develop language skills that make them interactive and active learners ((Loniza et al., 2018);(Gao, 2019); (Liu, 2020)).

Students' listening abilities may be easily enhanced by viewing digital stories (Cigerci & Gultekin, 2017). Therefore, because listening activities accompanied by watching can be more influential, listening texts in language arts textbooks can be supported by multimedia. The results showed that digital storytelling is an effective way to prove instructions, especially in giving storytelling. It develops learning rather than using traditional means. Students who use digitalized storytelling show progress in language learning through listening comprehension. Language can be developed through the use of digital storytelling. Therefore, listening is one way to increase capacity in language learning (Loniza et al., 2018).

Loniza's results are in line with (Astar et al., 2021) which revealed that the integrative model of online listening strategy learning had no effect on students' listening skills, indicated by the absence of significant differences between the results of the listening skills test of the group using online listening strategy learning, the integrative model and the group using the Oxford online listening strategy learning strategy. Online listening strategy learning and vocabulary knowledge have no interaction with students' foreign language listening skills. This can be seen from online listening strategy learning, the integrative model in both the high vocabulary group and the low vocabulary knowledge group is less effective so that the increase in students' listening skills is not significant. online listening strategy learning, the integrative model is not strong enough to improve students' foreign language listening skills. The effectiveness of the method can be influenced by the length of time the treatment is given, the characteristics of the students, and the online learning design used.

Research (Gong et al., 2020) have made use of research on second/foreign language education (eg English) and have also shown how the findings have implications for language education researchers. The practice of memorization (in Chinese:) has been criticized by scholars in the field of second/foreign language education because it is always associated cognitively with 'short-term memory' and pedagogically with 'meaningless parts learned'. As Brown (2000) notes: 'In significant processes such as second language learning, mindless repetition, imitation, and other rote practices in language classes have no place'

(Gong et al., 2020). However, the 'read-imitate-create' teaching mode has been found to be an effective approach to promote listening, speaking, reading, writing and translating skills of non-Chinese learners (Y Zhang & Peng, 2014). According to research (Zhang&Yin, 2012), when the complexity of information relevance increases, learners' selective attention may shift correspondingly and significantly, consuming a considerable amount of attention resources and reducing working memory efficiency.Furthermore, Mayer (2005) demonstrates the cognitive process of multimedia learning by presenting his cognitive theory of multimedia learning.

A range of theoretical viewpoints and methodological techniques, such as those associated with sociocultural theory, are used by (Gong et al., 2020), (Group, 2016) to explain language learning and teaching. For example, while sociocultural approaches to learning have become more influential over the last decade, human learning is now seen as 'a dynamic social activity situated within a physical and social context' ((Johnson, 2006, p. 237);(Gong et al., 2020)).

For student effectiveness, teachers must use creative ways to attract students, who consider good digital design, always apply technological advances in facilitating the language teaching and learning process because it will arouse students' interest. In addition, teachers are advised to focus on language learning through listening comprehension in teaching students as it is a big factor for young learners to improve their language listening skills (Loniza et al., 2018).

Many different factors influence the development of listening skills in a foreign language, according to Lili (2015), Xu (2011), and Otair and Aziz (2017), who emphasize that many different factors play a role in the development of listening skills in a foreign language. They also emphasize that anxiety, which is an affective variable, is accepted as an issue that is becoming increasingly important when compared to other factors. In the related literature, apart from language learning anxiety, the existence of various types of anxiety related to language skills is also mentioned. One such type of anxiety is foreign language listening anxiety, which is important for this study. Research findings reveal that there is a strong negative relationship between listening anxiety and level of academic achievement with respect to listening skills (Dalman, 2016; Elkhafaifi, 2005; Kim, 2000; Sadighi, Sahragard& Jafari, 2009; Zhang, 2013; Zhou, 2003) is an effective reason to consider listening anxiety as an important variable in the development of foreign language listening skills (Horwitz, 2001). It has been proven by a large number of scientific studies that anxiety is an important affective

variable that has a good effect on the foreign language learning process and especially on the development of foreign language listening skills.

Applications in multimedia provide more opportunities for students to practice listening. Listening skills can be developed by practice, the more students practice their listening skills, the more their listening skills develop, teachers can create new listening applications designed according to students' needs and curriculum to help students achieve their foreign language course goals. (Elfiona & Zaim, 2019) states that positive for students as well as teachers. Lin et al., (2017) demonstrates that the Multimedia Technology for Teaching and Learning System Design is beneficial for students while they study the course.So that innovations such as mobile-based media are recommended to be developed and applied by teachers in teaching English, especially in teaching listening.

Teaching materials will be developed in the form of a textbook using a deductive approach, which contains: 1) the rules at the beginning, 2) followed by relevant examples, and 3) adequate training (Ningsih et al., 2018). Another name for the deductive approach is the traditional approach in which teaching is still teacher-centered. The selection of the form of teaching materials in the form of textbooks is in accordance with this concept. In relation to the use of materials developed for students, it must also contain interesting illustrations. For children, the most effective learning process is by imitating so that the presentation of concept-enriched teaching materials, examples before practice activities for students, and interesting illustrations will help students. Since Chinese is now widely taught in formal and informal educational institutions, one of the elements that needs to be considered is textbooks.

Quality textbooks have a good influence on teaching outcomes. Creating a textbook must meet several principles to produce a quality one. The principles that need to be considered are that textbooks must comply with systematic principles, scientific principles, practical principles, targeted principles and interesting principles (Liu, 2000: 314-318).

According to the findings of (Prasetyaningtyas et al., 2020), Chinese Indonesian textbooks place a strong emphasis on oral communication and writing abilities.. Writing skill here means writing Chinese characters. Some teachers say that reading Chinese characters is also an emphasized part, so, textbooks are a kind of balance of language skills, for most schools that implement the 2013 Curriculum, teachers need to have textbooks consisting of the basic competencies listed in the Curriculum. They cannot be taught at one time but must be distributed to all classes according to the gradation of difficulty, some errors are found in explanation, translation, or writ-

ing. For example, phonetic explanations, character strokes, grammatical use, and explanations. According to Chen and Liu (2008), who conducted research on the design of a Web-based synchronized multimedia lecture system for teaching/learning Chinese as a second language, the system enables students to self-learn Chinese comprehension via the Web and is easily customizable for different foreign language learning.

The outcome of the research (Hamidah et al., 2020), based on the data collected, it can be determined that throughout 2017, on the Australian Embassy's social media channels, 55 politeness indicators were discovered, consisting of 15 different types, as previously mentioned. From the fifteen forms of markers, nine of them are used in imperative texts or imperative constructions, either directly or indirectly expressed in non-imperative sentence forms. This shows that the Embassy is very careful when it comes to giving orders or orders to readers. The forms of commands that are stated indirectly, using the form of advice, invitations, and so on are evidence that in social media texts emphasize politeness.

Therefore, it is necessary to combine classroom teaching with self-study after school to overcome the difficulties of short teaching time in classes and fewer school hours. The campus network plays a strong role in students' independent listening learning. Students can use teaching course tools, instant news, listening materials, self-contained original films and other content uploaded by teachers on campus. In guiding students to learn to listen independently after class, teacher guidance, encouragement and the necessary inspection and evaluation systems are indispensable.

CONCLUSION

The designed high-level Mandarin listening learning system is useful for improving intelligence tests, strengthening listening training and feedback mechanisms, and helping to improve listening levels step by step. To get a good application, mobile learning resources must pay attention to providing a happy learning experience for learners, building the learner as the center, taking learning needs as guidance, and promoting it with technology.

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Reconnoitering Education Literacy and Equality: Bibliometrics Analysis of the term "Education Literacy and Equality"

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Abstract. The proposition of nonformal education were to characterize the education literacy and equality through bibliometric analysis. The research aimed to assess education literacy and equality research output through the period of 2020- 2021.The Scopus and google scholar database has used to retrieve records related to education literacy and equality. The VOSviewer application is used to analyze the retrieved bibliographic citation data. The literacy and equality research publication are analyzed and interpreted using the retrieved data. The performance of the most productive countries, authors, journals, languages, institutions, keywords, and citation references is examined. The rate of relative growth and the time required to double have been calculated. The performance of the most productive countries and the greatest number of articles are published in the form of 470 total articles. In the years 2020-2021, the maximum number of papers published is 470. The research novelty showed that there was the addition of new literature about the education literacy and equality through bibliometric analysis and there were variation in source between Scopus and Google Scholar database.

Key words: technology; non-formal education; learning

INTRODUCTION

The value of non-formal education cannot be affected in Sulawesi. This presentation claims to be extremely relevant and to contribute significantly to national progression and adaptability in its approaches, which are seen as a means of addressing some of the most having to press global issues currently facing Sulawesi's Island. As global issues which affect people ethnically, socially, financially, and politically, the role of non-formal education in addressing these issues becomes increasingly important. However, many educators include digital literacy instruction in undergraduate writing courses. One type of literacy, critical digital literacy, provides opportunities for student learning by utilizing Hutchinson and Novotny's critical digital literacy as a method. Non-formal approaches to adult learning, gender equality, health, environmental sustainability, and peace and conflict resolution are widely advocated by both government and the non organizations in the Ssouth Sulawesi.

Before schooling became established, non-formal education was conducted in Sulawesi. The transmission of information, skills, and attitudes to the next generation is critical to the long-term viability of many Pacific communities. As a result, in many traditional civilizations, the young learnt the knowledge and skills they needed for economic and social survival in a systematic manner. Children and teenagers learn about the gender roles and obligations that are

expected of them, as well as the roles and responsibilities that are required of their tribe. The teachers are community members who have a lot of expertise and are well-known.

Children and teenagers learn about the gender roles and obligations that are expected of them, as well as the roles and responsibilities that are required of their tribe. The teachers are community members who have a lot of expertise and are well-known. Non-formal education, in its broadest sense, is not a new notion; it is an educational process that has existed in pre-literate communities. There is mounting evidence to support the assertion that non-formal education is an ancient concept with a new name. Non-formal education is ingrained in the people's lives in Sulawesi Island. This article looks at non-formal education in its traditional setting before delving into the reasons for non-formal education in the Sulawesi Island, its conception, and its contribution to regional needs.

METHODS

This research used qualitative case study to approach the research in order to understand how they Exploring Non-Formal Education, especially in memos, case study is an object to be studied, not a methodological option, researcher can use some variety of research tools to research that object. In this study, the instrument used semi-structured interview to collect the data. A comprehensive review of the research substantiation for the efficacy of using digi-

tal technology to support Indigenous people's communication and language learning is conducted (Li et al, 2021). The subject of this research consisted five culinary art students with pseudonym from Sulawesi.

The researcher employed a qualitative research approach in this study. To collect data, a semi-structured interview is used as a tool. The participant is gathered in a WhatsApp group by the researcher, who gives them some instructions as a guideline. it is important that you understand the data to the expanse that you are familiar with the depth and breadth of the interview and keep re-checking the original audio recordings to keep the authenticity. The process of transcription would be time-consuming, frustrating, and progressive; therefore, this is the only good way to start acquainting yourself with the data. Following analyzed, the researcher clustered the data into themes to understand the pattern. This step decreases some of ineffectual data to highlight the data into theme. it is necessary to be on the lookout throughout the data transcription and analysis processes for clusters or categories of things that go together. At this stage, researcher must re-focus on the examination at the wider level of themes. Instead focus on codes, wider level of themes will deliver sorting the different codes into potential themes, and ordering all the important coded data extracts below the scope of identified themes.

The several early codes may form as main themes, while others may form sub-themes, and others still may be unused. The codes classify a characteristic of the data (semantic content or latent) that looks appeal for examine. Coding is how the most essential element of the raw data, or information that can be assessed in a meaningful way about the phenomenon. The analysis will be taking time to make the data more informative and insightful. "Regardless of the time that you spend on your analysis, it is important to develop the habit of building in opportunities to reflect on your analysis throughout the data coding and interpretation process". The last is to describe about the data. it is essential to consider how it fits into the wider overall story, in relation to your research question or questions, to ensure there is not too much overlap between themes. It is important to provides a concise, coherent, logical, nonrepetitive, and interesting account of the story the data tell – within and across themes. Qualitative research involves collecting primarily textual data and inspecting it using interpretive analysis.

The primary goal of the study is to determine the source–wise distribution of the study's E- learning research output. (1). To investigate the Authorship Pattern of Publication in the field of education literacy; (2). To investigate the degree of collaboration in research output and publication distribution; (3). To investigate the proportional growth rate and time required for doubling in the field of digital literacy; (4). Determine the document-by-document distribution of publications and research publications and (5). To investigate the keywords of education literacy.

Figure 1. Research Area Mapping
Source: Google Maps

The scope of the present study is limited to the journals accessible in the google scholar database. The Keyword used for the study is education literacy and equality: A Bibliometric analysis of Publication Output during 2020-2021. There are five stages to do in this study, namely the determination of the word key, data search, article selection, data validation, and data analysis. Determination keywords are done according to the purpose this research, namely education literacy and equality. To avoid daily update bias as the database continuously collects and updates data. The results of searching data in international publications are then selected and validated so that the data can be read and analyzed. Both selection and validation are carried out in the form of diagrams and data tables which are categorized into several types, namely the development of publications per year, types of publications, core journals, most productive researchers, number of publications based on affiliation and country as well as the distribution of themes that are the focus of the study on education literacy and equality. The categorization is then analyzed according to the importance of this article.

The bibliometric analysis offers a summary of research trends in education literacy and equality in publications and contexts. It can help stakeholders to see the opportunities presented in the collection of information in the domain of education literacy and equality. This study offers insight into scientific research education literacy and equality and provide evidence its use by stakeholders in the observer community and education literacy and equality. this study introduces the main themes of the research community by using the research taxonomy of education literacy and equality.

RESULTS AND DISCUSSION

This study used qualitative research to explore education literacy and equality specialized Non-Formal Education as system. Learning participation is an inseparable part of the learning circuit in non-formal education (Nugroho et al, 2018). Learning strategies play an important role in recognizing the role of variations in teaching in the learning process of third semester students in Non-Formal Education (Elihami et al, 2020). The education literacy and equality were created in response to the formal education system's inability to address the majority's learning demands. The education literacy and equality are frequently seen as a system that is compared and contrasted to the well-known system of "formal education."
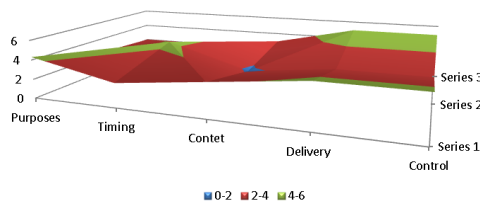

Figure 2. Non-Formal Education as System

The figure 2 showed that Under five themes, non-formal education was compared to formal education as a system. They are: Purpose, Timing, Contents, Delivery and control. When the formal system fails to give individuals with the skills required by the economic system, Non-Formal Education as System is considered as a less expensive option. In many developing island countries, concerns such as school dropouts and unemployment have prompted the establishment of Non-Formal Education as System training programs.

Literacy is not only in the narrow sense of the ability individual in reading and writing, but rather covers a continuum enabling learning. Individuals can achieve life goals them, develop knowledge and potential, and their participation full of social life. Traditionally, literacy is a person's ability to recognize, understand (understand) and use letters to communicate. Literacy has four characteristics of ability, namely breaking the code (decoding, translating the code so that it can be meaningful), participating in understanding and shaping (written text, or spoken text), using text according to its function, and critically analyzing and transforming text according to its function with his knowledge.

Literacy includes the ability and knowledge of reading (reading), producing texts (by writing), and acquiring the tools and intellectual capacity to participate in the culture and environment (Mulyono, 2015). In essence, literacy is formed by the social

environment with certain characteristics it (Fakhruddin et al, 2019). Therefore, it is very natural that literacy is highly dependent on the context, the set of regulations, and the conventions of the social environment. And then literacy through learning strategies play an important role in putting learning into action for success. Informal instructional strategies are used in elementary schools that use an informal education system to help Tahfidz-based learning and character development (Imam Shofwan et al, 2019).
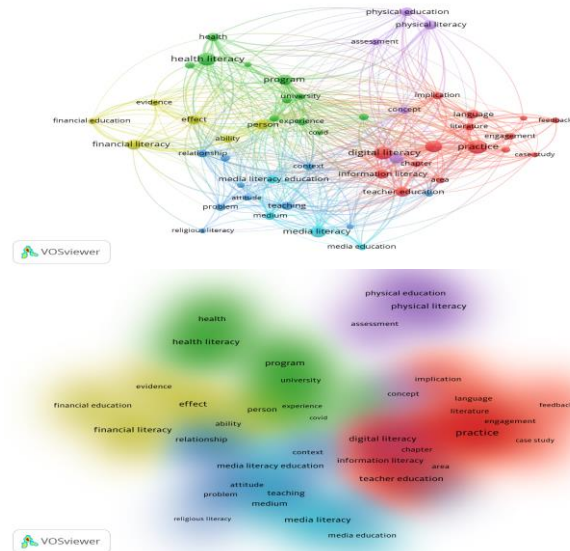
Figure 3. VOSviewer of Network Visualization & Density Visualization

The figure 3 showed that the publication years 2020-2021, citation years 1 (2020-2021), papers 470, cites/paper (4716.00), authors (2.70), h-index (27), g-index (55), hI, annual (22.00), hA-index (27), hI norm (27), papers with ACC > = 1,2,5,10,20,414, 341, 200,95,41.

The encouragement and changes in social and cultural paradigms, which in the current context are caused by advances and developments in information and communication technology (ICT) in the 21st century era have triggered the development of the term literacy. The United Nations agency in charge of education, UNESCO for example, notes several terms that are the development of literacy, such as: media literacy, information literacy, freedom of expression and information literacy, library literacy, news literacy, computer literacy, internet literacy, digital literacy, cinema literacy. , game literacy, television literacy, advertising literacy and so on.

In simple terms, information literacy can be understood as a way of learning through interaction with information (Qodriyati, T et. al, 2018). In the literature, information literacy is comprehensively defined as a person's ability to recognize when and when why he needs information (Sufyan et al, 2019), where he

can get that information and how to evaluate, use and communicate the information he has obtained in an appropriate way (Laksono et al, 2018). Therefore, a person's ability to perception plays a significant role in determining one's worldview and has a significant impact, including on functional literacy programs (Nurhayati, S, 2021). The purpose of this research is to uncover the illiterate's perception of functional literacy programs (Djibu, R et al, 2021). Information literacy cannot be seen separately (between individuals and information), but two elements that interact to form a single unit (Djibu, R et al, 2019). Information literacy is not merely a set of abilities, skills, or certain characteristics, but has a scope known as the six frames of information literacy as below.
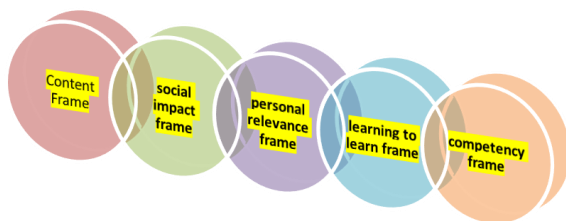
Figure 4. The five frames of information literacy

The figure 4 showed that the purpose of information literacy is essentially toconnect a person with personal, social, work and educational goals. In relation to social activities, the review of literature through information literacy can facilitate the attachment of individuals to their social environment. In other words, someone with Information literacy skills will demonstrate understanding and ability to convey, use, manage, synthesize and produce ethical information and data and will have the skills to do these abilities effectively and can become individuals who have role in society.

Technology has positive potentials that help them play a strategic role in development (Muhasidah et al, 2019). The purpose of this study is to examine how to implement information technology literacy model guidelines in empowering women through community-based education, as well as how to increase women's knowledge, skills, and awareness in managing the productive potential of information systems environments (Sujarwo, S et al, 2021).
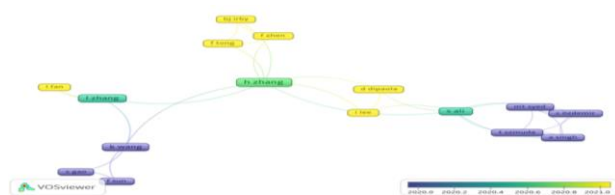

Figure 5. The VOSviewer about Authors by Non-formal Education

The figure 5 showed that the publication years 2020-2021 about authors data, citation years 1 (2020-2021), papers 470, cites/paper (4716.00), authors (2.70), h-index (27), g-index (55), hI, annual (22.00), hA-index (27), hI norm (27), papers with ACC > = 1,2,5,10,20,414, 341, 200,95,41.

Bibliometric analysis examines author, research title, number of citations, affiliations and country. The result is that there is no writer or researcher whose number of works is dominant. All of them are almost average, i.e. only have 1-5 research works.

VOSviewer software was used to analyze the metadata articles obtained from the https://www.scopus.com database and website Google Scholar. The analysis sought to identify the most frequently occurring keywords. The frequency of the keywords could be arranged based on the researchers' preferences, and less relevant words could be removed. We limited the minimum correlation of the terms to ten when creating the visualization with VOSviewer. It obtained two excellent clusters after performing the analysis with VOSviewer. The authors chose the second cluster, which was related to Non-Formal Education. On three different visualizations, the software indicated bibliometric mapping: network visualization and density.

Bibliometrics for writers is a branch of information theory that analyzes the characteristics and behavior of recorded knowledge quantitatively. We can only study the recorded information using this approach, not the knowledge itself. Bibliometrics for writers is a branch of information theory that analyzes the characteristics and behavior of recorded knowledge quantitatively. We can only study the recorded information using this approach, not the knowledge itself. The area of bibliometrics is concerned with research activities.

E - learning by using Zoom should be defined as the basic skill or ability to use a web browser confidently, safely, and effectively, which includes the ability to use office software including such word processors, email, and presentation software, as well as the potential to construct and edit images, sound recording, and video, as well as the ability to use an internet browser and Internet search engines (Musdalifah et al, 2021). Learning will not take place unless teachers and lecturers use online management in study skills to recognize the role of different variants in teaching in the learning process of students in Non-Formal Education (Agusriandi et al, 2021). Thinking skills such as conceptual thinking, creative thinking, innovation, concern, critical thinking, judgment, and metacognition are among the unexplored materials (Lyons et al, 2020). The results of the study are novel in that they provide a more complete explanation of the shortcomings of non-formal

education institutions providing life skills education (Prasetyo, et al., 2021). And then in functional literacy education, the participatory learning model attempts to fully engage learners in contributing to and actively participating in all stages of learning activity. The purpose of this study was to apply the participatory learning model and determine the impact of participatory learning application on functional literacy education in rural community learners (Arbarini, M et al, 2018).

Figure 6. Development of Publications in terms of Education Literacy and Equality by year 1932-2022
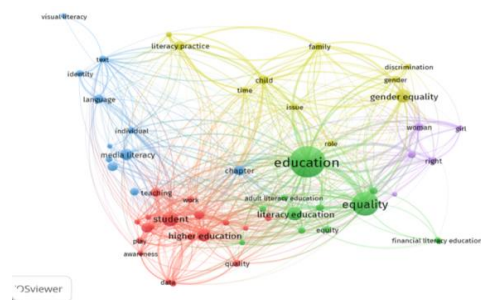
The figure 6 showed that the publication years 1932-2022 about authors data, citation years 89 (1932-2021), papers 1000, cites/paper (1643), authors (0.84), h-index (17), g-index (30), hI, annual (17.00), hA-index (0.19), hI norm (5), papers with ACC > = 1,2,5,10,20,71,30, 4,2,1.
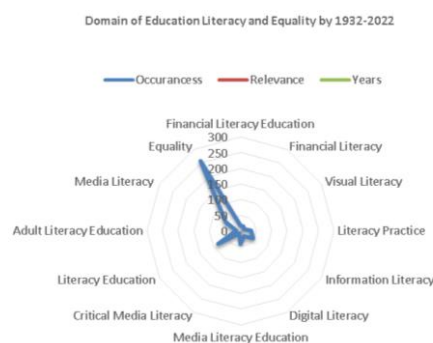
Figure 7. Keywords based on domain of Education Literacy and Equality
Source: Crossref

The figure 7 showed that the development of domain of Education Literacy and Equality has had a very rapid influence on the education and learning system, so it is no stranger to both academic and non-academic fields. One alternative that appears related to digital media is the shift of learning resources for students from physical learning resources (analog media) to digital. The principle of digital is to make it easier for students to access any kind of information, whenever and wherever needed, in this case digital media using devices connected to the internet network.

CONCLUSION

As a result of the educational inequalities within the sub-district, human capabilities to possess basic literacy and communication skills may be uneven. While metropolitan areas have benefited from several benefits such as diverse school access, adequate teachers, and diverse formal work options in the future for their young generation, it was also discovered that these comfortable situations have to some extent been exaggerated. Furthermore, some individualistic-minded and busy parents have exacerbated these conditions by encouraging their children to pursue conventional employment rather than start their own businesses.

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Relevance of Character with Transformation of Values and Learning Styles in General Education

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Abstract. Character is believed to be a force that can sustain a person in all situations. This research was conducted when the pandemic was still hitting and during a new adaptation period. The pandemic causes the need for changes and adjustments in attending lectures. In the faculty of arts and design, most of the learning process is carried out through the assistance of student work. Lecturers and students meet face to face on campus. The pandemic is changing values and learning styles that require effort, willingness, and adaptability. This research examines the relevance of student character with the ability to follow the transformation of values, learning styles, and learning methods. The method used in this research is through interviews with students of the faculty of art and design, interviews with lecturers, limited surveys, and distributing questionnaires as an effort to collect information. All information will be sorted according to the aims and objectives of the research through data reduction.

Key words: character, learning styles, pandemic, transformation, values

INTRODUCTION

The Covid-19 pandemic has not yet ended and still affected the education world and create stress that affects daily routines and has a significant negative impact on mental and physical health. Students are generally depressed because their routines are disrupted (Muhammad Babar Khawar, dkk, 2021:1). UU no. 20 of 2003 states that education is defined as a conscious effort so that humans can develop their potential through the learning process and or other ways that are known and recognized by the community. Along with the development of an increasingly advanced era, humans are required to master science and technology. Knowledge can only be obtained through education, both formal education and informal education (Kamal, 2013: 6). The successful implementation of education is also determined by the teaching method chosen. The method will guide the achievement of learning objectives (Maria Ulfa, 2018).

The educational process during the pandemic was shifted to online learning in all courses, including courses in the faculty of arts and design. Online learning uses the internet network with accessibility, connectivity, flexibility, and the ability to bring up various types of learning interactions. The advantages of online learning with information and communication are that it is not bound by space and time (Sadikin, Hamidah, 2020).

Before the Covid-19 pandemic occurred, online learning had become a demand in the world of education for the past few years due to technological advances and changes in social conditions. Online learning has become an important way of delivering courses in higher education (He, Xu, & Kruck, 2014). More than 69% of higher education institutions revealed that online learning is an important part of their long-term strategy (Allen, Seaman, 2013). Distance learning has great potential for valuable learning experiences in a virtual environment but needs to be supported by the university's growing technological infrastructure and quality of interaction with teachers (Leontyeva, 2018).

The teaching of arts and design still requires a process of assistance from the supporting lecturer for every work done by students. This online education needs to keep the work produced original and of good quality. Therefore, the character aspect is believed to be a strength that can support a person in this situation, both the character of the lecturer and the student concerned. Character education emphasizes the efforts and willingness of students to apply the values that have been known and implemented in their daily lives (Binti Maunah, 2015).

The faculty of arts and design has a specific way of carrying out the teaching and learning process. There is a grouping of basic expertise courses, namely groups of study materials and lessons aimed at providing a foundation for the formation of expertise, both for the benefit of the profession as well as materials for the development of science and technology. Design education is also needed to support preparation to become an industrialized country that will

meet economic needs. Industrialization is marked by the acceleration of technology fulfillment so that technicians and designers are needed. This reveals that the designer profession cannot be abandoned, especially now that the creativity factor related to the activities of ideas and designs is needed. Therefore, the world of higher education is expected to be able to produce professional designers. (Iswahyudi, 2003).

Professional designers when creating a design, need to pay attention to several processes that need to be done linearly. According to Yongki Safanayong, the design process consists of seven stages, namely: (1) Inspiration; (2) Identification; (3) Conceptualization; (4) Exploration/ Refinement; (5) Definition/ Dummy; (6) Communication; (7) Production (Hartanti, Nurviana, Lukman, 2020). The seven stages of the design process can still be done through online learning. Besides that, design is a rational art, its basic principles and working processes are very different from elitist art. An elitist artist's orientations are subjective, intuitive, emotional, single product, individual work, simple work, spontaneous, and anti-data. While a designer's orientations are consumer, objective, reasoning, mass product, teamwork, familiar with the production process, planned and systematic, and works based on research (Judge, 2019). In creating a design, a designer does not only work individually but needs to pay attention to other social factors, therefore the character aspects of a designer during the education process needs to be considered. This research examines the relevance between student character and the ability to follow the transformation of values, learning styles, and learning methods.

METHODS

The method used in this study is descriptive qualitative analysis, to obtain a complete picture in a natural setting because the objectives of this research are qualitative. Primary data was obtained from students through in-depth interviews conducted online. Subsequent interviews were conducted with lecturers who teach both theoretical and studio courses. The researchers also conducted interviews with outside lecturers, as a comparison to enrich the research results. Furthermore, the data collected will be analyzed using inductive techniques with the following steps; perform data reduction, data presentation, and data verification. The locus and focus of the problems investigated are the impacts of the online teaching and learning process during the pandemic, the online and offline (limited) learning process in the new normal and proper learning processes in the post-pandemic period. Data collection is done by reviewing opinions, attitudes, motives, as well as through the distribution of

questionnaires as a method of triangulation to obtain accurate answers. However, as qualitative research with a natural setting, various techniques will develop in the field so that the expected results, namely the quality and depth of this research can be precise and the results can be used as a reference in the teaching and learning process at the faculty of arts and design and will enrich the methods, techniques and teaching styles for lecturers and directing students to the right way of learning for each subject to be followed (Sugiyono, 2014:32).

RESULTS AND DISCUSSION

When the pandemic hit, even during the new normal, 100 percent of lectures were conducted online to break the chain of the spread of the Covid 19 virus. At first, this was fun for students because they didn't have to go to campus, they didn't have to get stuck in traffic, they didn't have to spend transportation costs and fees, avoid pollution during the trip. After two months passed, what was initially fun became boredom, uninteresting, and even difficulty in coping with the lecture material. Not to mention network problems, power failures, and when it rains heavily, network disturbances are getting worse. Difficulties in studio courses are more pronounced when compared to theoretical courses. The results of the processing of questionnaires and interviews conducted to design students from various levels showed this. First-semester students, most of which are still theoretical, stated that they have not found it difficult to understand the material. Because they simply listen wholeheartedly, read the instructions given by the lecturer, including books/sources that must be read, so that students do not experience difficulties. However, for upper-semester students whose learning materials are more focused on designing visual works, this condition is not conducive.

There is no other choice, like it or not all parties have to adapt during the pandemic and post-pandemic periods. Time is a wise friend, it provides an opportunity for everyone to change (Irwan Fecho, 2020:xii). Distance learning is learning that uses technology and information as an inseparable part, while still paying attention to learning methods and techniques (Tsai-yu Chang, dkk, 2021:1096). Lecturers have their challenges, especially in assembling material that has been prepared to be carried out face-to-face but must be done online. At Maranatha University, the CLS (Centered Learning Study) program has been conducted since three years ago. Lecturers and administrative staff have been involved in several pieces of training. Through this CLS all teaching materials ranging from the syllabus, PPT, PPT with sound, video, assignments, and

attendance can be accessed by all students. Every student and lecturer who already has a password can log in. Unfortunately, not all lecturers apply and using CLS. After the pandemic, awareness of the importance of the presence of CLS increased. Re-training is carried out through educational institutions. This training is conducted online. With the sincerity of all parties in a relatively short time, all lecturers have been able to store all their teaching materials in CLS including quiz questions as well as mid-semester and end-semester exams. CLS system continues to be improved, complaints from students and lecturers are accommodated and then followed up. The combination of face-to-face learning (on-site) and distance learning (online) is a future learning trend (Tsai-yu Chang, dkk, 2021:1099). This combination is important because virtual and independent learning is not believed to be able to replace face-to-face interaction. The attention of education providers to seek face-to-face learning directly needs to be studied and carried out (Aaronvir Singh Thind, dkk, 2021:6).

Using CLS helps a lot. Lecturers can continue to be creative through PPT shows, the development of teaching materials, and varied assignments so that the objectives of the lecture can be carried out. Through CLS students can learn a lot without having to incur additional costs. CLS is part of the education service provided by Maranatha Christian University. In addition to CLS, the lecturers and students were using MS team as a means of direct face-to-face contact. MS team becomes part of the lecture. Even though on a limited basis, lecturers and students can greet each other, ask how they are, what difficulties they feel (touch the heart, give attention), explain the material, and explain assignments. The implementation is because the material has been stored in CLS, it is expected that students will first study the material so that when face-to-face interactions are carried out it is more of a question and answer session. The lecturer explains the material that has not been understood. MS team is usually done at a maximum of sixty minutes. In addition to the MS team, some lecturers chose Google Meet or Google Classroom. Whatsapp groups were formed by lecturers as a means of communicating. For example, due to one reason or another lectures were canceled, a substitute lecture schedule (because of the red calendar), the lecturer was unable to attend due to illness, and other information.

The Importance of Character Quality

The Covid-19 pandemic has had a major impact on life, including the world of education, it needs to be addressed wisely. The teaching and learning process that is already comfortable for most educators, education staff, and students suddenly has to change. There is no other choice so that the learning process can be carried out. They must be willing to learn new things, such as using zoom, ms team, google meet, etc. Learning "independently" because direct interaction with lecturers and friends is very limited. Character toughness is needed. Character helps everyone to survive in all situations. Not easily give up. The steadfast qualities that are owned and developed in a person will determine the response without being influenced by situations and conditions (Rizal Badudu, 2019:11).

The pandemic has had an impact which for some students is seen as disastrous, but for others, it is seen as a challenge that needs to be addressed and faced. Willingness to change learning styles, learning methods, accept and learn new media that continues to change and develop is a must. It takes motivation that arises from students to these changes. Motivation refers to the entire process of movement, including situations that cause encouragement in the individual that manifests in actions and behavior (Abdul Rahmat. 2021:79).

Character is a keyword in actions and behaviors that encourage a person to develop independent, creative, national-minded abilities (Binti Maunah, 2015: 92) so that the development of national character must include the ideology of the Indonesian nation, namely Pancasila, religion, and belief systems that develop in society, values and morals that are upheld as well as the system of legal norms that apply in Indonesia ((Ida Bagus Ray, 2016:1). At first, a character does not grow by itself, it needs awareness and ability and needs support from the environment. Characters that have been formed will become capital in living all life, including facing all situations and conditions that are not ready to be expected. Students with resilient characters are relaxed and more ready to go through the lecture process without complaining or reacting to blame the situation. Strength of character is a positive factor that can protect a person from the negative effects of stress that affect mental, especially the impact of a pandemic (Qianwen Liu, Zhenhong Wang, 2021:2).

Value Transformation in Lectures

To study further about the lectures conducted during the pandemic, especially at the faculty of arts and design, we have conducted studies through literature studies, interviews with students, interviews with lecturers, and interviews with Prof. Rahmat whose concentration is in the field of education and distributing questionnaires to FSRD students. Value transformation will continue to change and develop because humans are dynamic and science continues to change and develop. FSRD refers to the values of

integrity, care, and excellence, so all of these values are inherent and even live in every process that occurs at Maranatha Christian University. During face-to-face lectures, the values carried are more likely to be observed. The value of integrity is manifested in words, attitudes, and actions.

The originality of the work is one of the concerns of the lecturers in its implementation. Therefore, the work made by students is assessed not only from the final result but also from the process carried out. All sketches made into parts will be submitted to the lecturer. When making this sketch, the role of the lecturer is very real in assisting students. Even when directing the lecturers, they can chat while asking about family, health, whether there are difficulties in following the material, and other things. Indeed, not all work can be done optimally online (Jason Schenker, 2020:11). Frequently the assistance process is also interspersed with jokes. This assistance process helps good relations between lecturers and students. Not only for the transfer of knowledge but also the transfer of the value of life. In the middle of a pandemic, teaching with high-tech equipment and new features is a must (Maria Patricia, 2020:1). Students who are categorized as adults still need figures who are willing to listen to complaints, answer questions sincerely, and direct various things that must be done by students. The attention shown by the lecturer with great patience is one aspect that students always miss. It is necessary to think about so that students remain active through discussion even though the learning is done online (Sharon Panepucci, dkk, 2021:8).

The transformation of values during onsite and online lectures is indeed different. Value transformation online is more limited in nature. Value transformation occurs when zones are grouped for universities such as red zones, orange and yellow zones which limit face-to-face activities in learning (Rodame Monitor Napitupulu, 2020). Lecturers can only observe through the screen, can only see without touching. Physical contact to direct and encourage is not possible. This was proven when we conducted interviews with students related to the transformation of values. The following are the answers given by the students: Keep the originality of assignments, even if lectures are conducted online; Sometimes attending lectures while doing other activities, because the camera is closed; For theoretical course assignments, sometimes ask and discuss with friends; Interaction with friends is getting less frequent (greeting, asking for news, or giving support/encouragement when a friend is sick). This is part of implementing the value of care. When they meet each other, they know that their friends are sick, even if they are close friends without telling them, when they see their facial ex-

pressions or body gestures, some students know that their friends are sick, or that there is a problem; Relationships are getting closer during breaks or in between doing assignments. Can have lunch while talking together. Stories told about everyday life. For boarding students make working groups together so that the value of the assignment becomes more leverage. It is felt when working together, ideas are sparked so that each member of the group can develop new ideas. On the other hand, students who don't have boarding houses sometimes tell stories that they get "nagged" by their parents because they wake up late. This story was responded by other students who also had the same experience. While others gave suggestions, not to wake up late, by setting an alarm on the cellphone, not sleeping too late, paying in installments, or taking advantage of the time while on campus or at the workshop. Jokes keep the students' togetherness while trying to do their best. This is part of the transformation of excellent value; Although there is interaction with friends, it is very limited, very different from when studying onsite; The transformation of values is still there. As long as students listen and pay attention to the lecturer, there are always messages and meanings that can be taken. For example, the task is done seriously (excellent value), believes in one's abilities (integrity value) and if there are friends who do not attend lectures due to illness or other obstacles, help so that today's lecture information can be conveyed (care values); Another value that students get is to be enthusiastic, to have a fighting spirit, not to give up; The next value is the value of discipline, not delay. Do what can be done.

From the answers given, it turns out that the transformation of values can still be carried out even if the lectures are carried out online. However, the transformation of values is not optimal as when studying in person/face to face. Another thing is that lecturers cannot observe body gestures, facial expressions of students who take classes because online lectures have limitations, such as not all students appear on the screen, the reason that the network has to close the camera, the duration is more limited, taking into account boredom and fatigue in the eyes when used continuously. The reluctance to transform changed after the pandemic (Manampiring, 2019). Conventional patterns that are felt to be comfortable become one of the obstacles in the implementation of distance learning (Rubiyantika Astutiningtyas, Setyo Y, 2020). Students' awareness that the pandemic is changing the order of life can be seen in the diagram below. The results in the diagram are also corroborated by the results of interviews, as stated above. The pandemic conditions are faced and lived, including the changes in it. The total number of respondents is one hundred and forty-six (146). As

many as 93% answered that the pandemic changed the order of life, including the world of education.
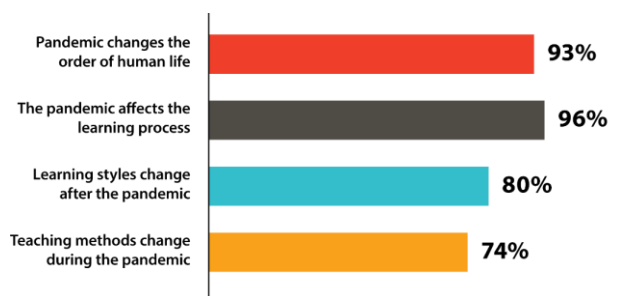

Figure 1. The Pandemic Changes [Graph]

This student awareness is a fact that cannot be denied. A reality that must be faced is accompanied by efforts so that the lecture process can still run and the quality is maintained.
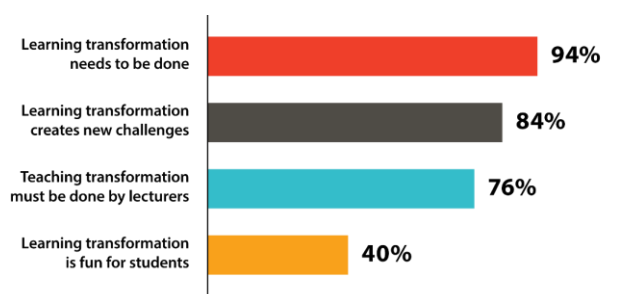

Figure 2. Learning Transformation [Graph]

Transformation or changes in the way of learning also require adjustment. One of the adjustments is time management skills, especially difficulty maintaining focus and concentration while sitting in front of a screen for a long time (Aaronvir Singh Thind, dkk, 2021:3). 94% of respondents strongly agree that it is necessary to make changes to the way of learning. From the results of the interview, the most widely used method of learning during online lectures is to prepare all the lectures that will be carried out. Make sure your laptop, computer, or gadget is ready for use. Anticipate if the power goes out. So always try so that the battery is fully charged. Make sure there is an internet quota or wifi, whereas previously this device was only as a support and not as the main device. In addition, focus/concentration is needed when using MS Team, Google Meet, or Google Classroom. Because if there is a material that is missed it will be difficult to ask. It is very different from onsite lectures, you can directly ask lecturers and students.

Learning transformation for most students is a new challenge. In terms of what is new for certain groups, it is considered a difficult challenge to do but for other groups challenges do exist but are not seen as difficult.

Seventy-six percent stated that teaching transformation was needed. Lecturers are also expected to carry out teaching transformations. From the results of the questionnaire, it can be seen that forty-two percent said they agreed and as many as thirty-four percent said they strongly agreed. Conventional teaching, which so far is mostly done by lecturers and students, meets face-to-face in the classroom. Lecturers teach and students listen. When studying online it is almost impossible to do. Without any change in the way lecturers teach, many things may be missed or not achieved. It takes creativity in compiling teaching materials stored in CLS. The teaching materials are interesting, easy to understand, supported by various data in the form of examples, pictures, videos or detailed explanations through voice PPT (PPT which has been prepared by the lecturer carefully and then read and recorded) carried out with clear voice recordings. The use of the internet network with accessibility, connectivity, flexibility and the ability to bring up types of interactions in learning (Ali Sadikin & Hamidah, 2020). Another creativity is to combine the method of delivering material to students while still paying attention to the duration. Ice-breaking still needs to be considered for preparation. The goal is to refresh the atmosphere, eliminate sleepiness, saturation or boredom.

The face-to-face is only an hour but the preparation will take longer. The lecturer prepares the material by first doing a simulation. One of the lecturers interviewed said that lecturers are a profession. It means an endless process. learning process. Keep abreast of all changes and developments, especially those concerning the world of education. Changing situations require creativity in using learning methods. The use of appropriate learning methods can improve learning outcomes (Mardiah Kalsum Nasution, 2017). Especially facing the millennial generation who are very familiar with the technology. Understanding and recognizing the characteristics of students as millennials can help lecturers in establishing and building relationships. The millennial generation has been living with technology since birth. All his needs can be met through technology. The following are the characteristics of the millennial generation (Hendarman, 2019, Gallup, 2016): Interest in reading conventionally decreases because smartphones are their choice in finding information; In general, they have a social account that is used as an information center and means of communication; Television has been abandoned and mobile phones are the main choice because mobile phones have many advantages compared to television. In a mobile phone, everything they need can be found; Family as people they see as

the center of consideration before making a decision; Work is not just looking for a salary but to realize what they aspire to; Job satisfaction is not the main thing but whether in the job they find new challenges that make them grow and develop; Want a cooperative boss. It's not just the one who rules and commands.

Not everyone likes a challenge. Some people prefer a safe and comfortable zone. Difficulty getting out or leaving the comfort zone answers to a questionnaire about whether transforming learning into something fun. The results of data processing show that the highest number, namely forty-four percent, expressed doubt. This means that students are confused about the transformation. Another language if you have to do it, but don't do it wholeheartedly. The word not wholeheartedly implies that it is not done with all its potential, just flows, which will happen later. His enthusiasm did not show. Twenty-eight percent agreed and twelve percent strongly agreed. The overall answer to this question is interesting to study. Millennials are fast-moving, instant-paced dynamic people. But unfortunately for the transformation in the lectures, not all agreed. As big undecided is the change pleasant or not. Students are part of the millennial generation. This generation has advantages such as technology literacy, dynamic, creativity, easy to change jobs in a short time (Yoris, 2016).

The next question we ask is the choice of online and onsite courses and their consequences. The answers we received varied greatly. Students who choose to study online provide the following reasons or conditions: Students who live outside the city (they return to their home areas at the beginning of the pandemic), because they are still worried about the covid-19 pandemic; Because they have not been vaccinated, the possibility of being exposed to covid is greater; Can help parents' businesses, because, after Covid, parents' businesses experienced a decrease in income; The task is to be original because the idea comes from one's mind, not influenced by friends; More exhibition activities that can be followed; The cost is cheaper because there is no need to go to campus, lectures can be followed from their respective places.

The answers above are not fully reflected in the results of the questionnaire. Our interviews were limited to fifteen students. The students consist of various generations. The purpose of selecting students is to obtain answers that provide a complete picture of the wishes, feelings, and expectations of students. Based on the diagram above, thirty-two percent (32%) expressed doubt and forty-five percent (45%) agreed and strongly agreed that online lectures were boring. We distributed this questionnaire in

April 2021, when Indonesia has entered the new normal period. Most students who take studio courses hope that it can be carried out on site even though it has not been done in full and still pays attention to health protocols.
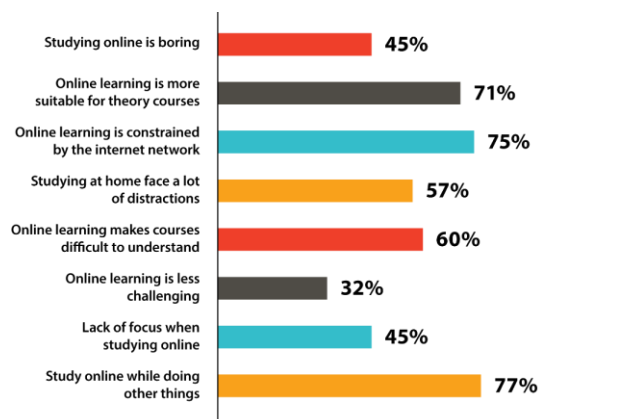
Figure 3. Online Learning [Graph]

The results of the questionnaire on questions related to online lectures are still ongoing and it is not yet possible to do onsite. Although there is a plan that in the next semester when the vaccine has been carried out and conditions are more favorable, limited onsite lectures will be conducted or tried. The diagram above provides an overview of answers for theoretical courses if indeed onsite lectures are still limited and can be done online. There are several notes that we have collected for the theory course so that the implementation does not give you a sense of boredom. The proposals include, the meeting is not only lectures, interspersed with ice breaking, there are interesting pictures/diagrams, not too tense (lecturers also relax in delivering the material). The lectures delivered were more varied and after fifteen minutes there was a pause in the form of questions and answers, games, or video playback related to the lecture material.

Even though online learning has several advantages, as revealed in the interview, there are also some obstacles. This obstacle is difficult to avoid for some students who live in certain areas where the network tends to be unstable. Seventy-five percent of respondents agree and strongly agree that networking is one of the problems faced when studying online. An unstable network makes it difficult to receive the full lesson. There is a part of the explanation that cannot be heard. So that when asking questions, they are also confused, want to ask, or where to start the question.

There are concerns that the things that need to be asked have been explained by the lecturer. When given a task, it becomes increasingly difficult. If any information is lost, it is very possible that an error occurred while doing the task. Most of the students

tried to ask their fellow students. Unfortunately the same thing happened too. Usually they try to discuss first so they can digest what the instructions for the task are to do. If they are still confused, then try to appoint one of the representatives to ask the lecturer. The results of the interviews showed that not all students were willing to directly ask the lecturers. They feel more comfortable if they ask their friends. From the interview, it was also revealed that not all lecturers have created Whatsapp groups or the like so that communication about assignments/ material can be explained immediately. If the lecturer takes the initiative in CLS there is a chat column that can also be used as a means of communication so that network problems can be minimized.

Campus is a place specially designed for learning and meeting of lecturers with students, equipped with various infrastructure facilities so that the lecture process can be carried out properly and conducive. Not so with the house. The house is a family residence designed to be multifunctional, carrying out various activities of human life. Starting from the bed, cooking area, family room, living room and so on. Therefore, when all the learning process or the lecture process is carried out from home, it is certainly not conducive. Campus is a world of reading, as well as a dialectic world of ideas and thoughts. On campus, various knowledges, concepts, propositions, paradigms, theories are taught, and therefore people will find the truth that emanates from the souls of wisdom and positive character (Cecep Darmawan, 2011: 528).

During the pandemic all family members are at home. For a family with three children and all of whom are conducting distance learning, it becomes increasingly uncomfortable. Students also said that there were many distractions at home. Apart from the network disturbances there is the temptation to take a short nap but eventually it persists. Tempted to do other activities, this is possible because during lectures the camera is closed. Education is one of the sectors that have the most broad impact (Agus Purwanto, 2020). Lack of enthusiasm for not meeting friends and lecturers is also boring. Before the pandemic, when going to campus there were always new challenges. At least in the morning before leaving, think about what clothes to wear, which way is safer, no traffic jams, after college eat with friends, chat and joke. Now all of that is gone.

This situation is real, it cannot be denied. To be able to survive in all conditions, it is necessary to change and strengthen mentality. Through various challenges during the pandemic and post-pandemic, the mentality should be stronger. Refers to human development which includes three dimensions, namely the dimensions of health, intelligence and

personality. Healthy is defined as a fit physical condition. Intelligent is defined to always think positively, directed to be able to analyze sharply and with quality. Personality can be interpreted as the will of noble character (Hendarman, 2019: 3). Health, intelligence and personality also affect a person's mental, emotional soul. To be smart requires continuous efforts, study seriously, utilize infrastructure optimally, build reading literacy, continue to practice, attend various seminars and workshops while continuing to self-evaluate.

The substance of mental building is in the family and education. In a family that upholds equality, love, care, and discipline in a balanced way, as well as instilling pluralistic values in every family member, it will produce children who are not only intelligent but caring and ready to accept differences as part of the nation's children. In lectures, the substance of mental change is in personality development courses such as Pancasila and civic education courses. Through these courses, the affective aspects of each student are touched.

Intelligence without a conscience does not benefit others. Cognitive intelligence without affective can lead to acts of corruption, prioritizing certain groups, behavioral deviations, and so on. Through education, every citizen is directed to have a good work ethic, which in turn will make him a good citizen. Citizens who can carry out their rights and obligations in a balanced way so that the realization of a prosperous Indonesia is more likely to be fulfilled.

Student Learning Style

Learning style is the way students choose to attend lectures. Everyone's learning style is not the same. Humans have specialties. There is no right or wrong learning style. Learning style is a consistent way for students to listen to teaching materials, provide stimulus, how to remember, think and solve problems. Learning style is the method chosen and considered the most comfortable to do, or the most preferred in the activities of thinking and processing information. After the pandemic, it is necessary to adapt to learning styles. If the learning style is not changed, it is very possible to be left behind in attending lectures. Learning styles that are chosen with full awareness can improve student achievement (Siti Solihah, Leni Sri Mulyani, 2020:92). The awareness that learning styles need to be adjusted is also believed by students (Figure 4).

Eighty-three percent of respondents agree that their learning styles should change. Visual learning styles find it more difficult with online learning, especially if the lecturer explains more than showing pictures, films, tables, or graphs. Visual learning style tends to order by paying close attention to everything.

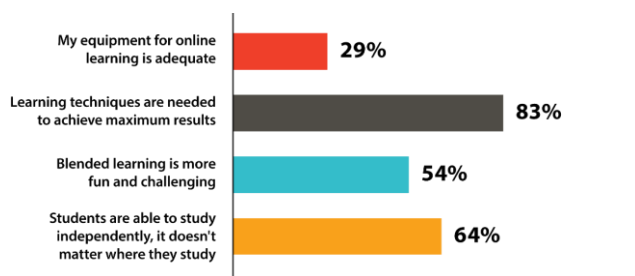Through pictures, they can remember the details of what they saw.

Figure 4. Learning Style [Graph]

Referring to Hiryanto's opinion that the principle of adult education does not have to be based on form, but what is more important is the readiness of the students. The learning method is one of the means chosen by lecturers to deliver teaching materials with the aim that students can follow, understand the material presented, can capture the meaning implied in it, and be able to develop and apply it in life. So that all the knowledge gained is not only for its own sake but also how that knowledge becomes meaningful for others. In the pandemic period, everyone has the same problems, attitudes, mindsets, readiness to make plans, actions, and responses that will distinguish one from another (Bayu Adi Laksono, 2021:857).

The learning style that is carried out during lectures is still done online. Here are the answers from the students: 1. Learning style with more concentration listening to every instruction given by the lecturer and then immediately working on it. Procrastination means there may be lost or missed/forgotten information; 2. Ask the lecturer more often; 3. Tasks in installments, do not delay. Procrastination means that you will pile up tasks that need to be done.

The obstacles faced when studying online according to the results of interviews with FSRD students include: Network constraints; Students who live in difficult areas when looking for lecture materials, sometimes have to order from other areas. In addition to expensive shipping costs, the quality of the materials is not up to the expected standards; Constraints with software; While helping parents, so that work or campus assignments are carried out at night or dawn; Less effective, because while at home there are other things to do; Less concentration; Lecturers and students must be more disciplined with a predetermined and mutually agreed on a schedule.

Expectations from students, if the pandemic conditions have not subsided: For studio courses, it is better to be able to do onsite classes with a limited number of students and still pay attention to health protocols; The tasks given are not too many; There is coordination among lecturers when they will give assignments to students so that assignments are not collected at the same time.

The existence of humans as social beings cannot be denied. The need to interact with each other is a necessity. In the interaction, there is communication, discussion, mutual understanding. The meeting becomes something fun. Learning is not only from teaching materials and directions but also through observation.
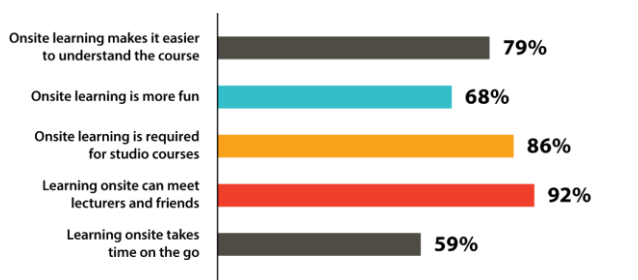
Figure 5. Onsite Learning [Graph]

The reason for students that onsite lectures are more fun is not only because they can meet face-to-face, but it is easier for them to digest information and directions from lecturers. The opportunity to ask questions is also very open. Usually, it will appear spontaneously during face-to-face lectures. Because in online lectures, sometimes it is difficult to understand some materials, and students are reluctant to ask questions because the material has been delivered. Through the questionnaires that were processed, about sixty-eight percent stated that onsite lectures were more fun.

For studio courses, it must be done personally and cannot be done communally. Lecturers need to meet in person to assist. Through this meeting, lecturers can directly give instructions and execution. Which parts need to be added, which parts need to be reduced are included in the determination and selection of design. In addition, through face-to-face lecturers can observe whether the instructions given are understood by students. This communication is very important. Lecturers do not teach but direct. In design class, originality is important. Lecturer instructions are not fixed. Students can propose reasons and views, there is a discussion. Through these discussions, students' creativity was honed. That's why every student's work will be different. Another point obtained during onsite lectures is that the lecturer can categorize each student's achievements in levels (basic, intermediate, or advanced).

The following are the results of interviews with students who wished that lectures be conducted onsite. Answers from interviews with students are as follows: 1. Onsite lectures are more fun because of the material delivered by lecturers are more varied; 2.

Adequate tools for a more complete task; 3. Information obtained from lecturers is more complete and accurate; 4. The material presented by the lecturer is easier to understand; 5. More enthusiasm, because you can meet lecturers and friends; 6. Can discuss and exchange ideas with friends directly; 7. Easier when going to do assistance; 8. More variation and not boring; 9. Studying at FSRD is more practical, so onsite is still better; 10. It is easier for a group to work together.

CONCLUSION

The conclusion from this research is that online learning is not effective for studio courses. However, this does not apply to all students. Students who have character qualities are better prepared to face and participate in the lecture process, develop creativity and fill the time to use all learning media that allow them to explore all their potential so that they can continue to attend online lectures properly. This is supported by the lecturers who carry out the teaching process personally even though the number of prepared students is less than the students who experience difficulty with lectures. The hope is that hybrid/blended learning can be carried out with (1) limited face-to-face meetings, (2) materials/tasks that are saved offline (anytime and anywhere can be read and studied by students without having an internet network and online lectures).

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The Impact of Remuneration toward Salary Satisfaction: A Case Study on Job Evaluation Method in SME Employees in Central Sulawesi, Indonesia

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Abstract. This study aims to evaluate the effectiveness of remuneration with job evaluation point method and to discover its impact toward salary satisfaction of employees in Small and Medium scale Enterprise (SME). This research is a case study involving SME level employees in the field of food and beverage preparation who received remuneration with job evaluation point method. The methods for data collection used in this research were observation, interview, and questionnaires. The measurement scale used was the Pay Satisfaction Questionnaire. This research was an experimental action research with the randomized pretest–posttest control group design. The Mann–Whitney and Friedman tests were applied for conducting data analysis. The study argues that the application of remuneration by using job evaluation point method can increase the satisfaction of SME employees, reduce the level of turnover, and increase work commitment of employees. The results of the data analysis showed that the hypothesis was accepted; there was an improvement in salary satisfaction of experimental group who received remuneration with a significance value of $p < 0.005$.

Key words: remuneration, job evaluation point method, salary satisfaction, Small and Medium Scale Enterprises (SMEs)

INTRODUCTION

Remuneration is one of the principal components of work satisfaction since it has a proficient effect toward work satisfaction. The growing needs of people with high living costs drive employees to search for higher pay that can guarantee their future and life satisfaction. Also, when people acknowledge they are not repaid well, then a condition of disillusionment will occured. These mistakes will subsequently make employees gloomy and feel unsatisfied to work in the organization (Idris et al., 2020; Yaseen, 2013). The term job satisfaction refers to the attitude and feeling employees have about their works. Positive and favorable attitudes towards the job indicate job satisfaction, and negative and unfavorable attitudes towards the job indicate job dissatisfaction. In other words, job satisfaction can be defined as the extent to which the individual's needs are satisfied and to the extent to which the individual perceives that satisfaction stems from his total work situation (Kiruja, Ek; Elegwa, 2013; Muchtar, 2017; Salisu et al., 2015). When someone has satisfaction in his/her job, it will eventually influence positive work outcome, such as increased performance (Kappagoda et al., 2014; Nur Agustiningsih, 2016; Pouliakas, 2010; Qasim, Samina, Farooq-E-Azam Cheema, 2012).

When an employee feels that the salaries received are less than the weight or level of work, then the employee will feel injustice and will usually react. For example, an employee who received an eaward in the form of a salary increase will have a positive reaction such as e feelings of satisfaction by interpreting a salary increase as a sign of a job well done (Sparrow et al., 2016). Interviews were carried out among employees and owners of small and medium scale enterprises (SMEs) with four aspects of salary satisfaction (Heneman & Schwab, 1985), namely salary rates, increased salaries, structure and administration of salaries, and benefits. The results showed an overview of all aspects that have not been achieved, such as that of the salary level of SME employees with a work time of eight hours with a salary of IDR 300–800 thousands/month while the Regional Minimum Wage of Central Sulawesi is two millions. There is no regular salary increase and there are no bonuses or benefits given to SME employees. This caused employees often shows negative work behaviors such as frequent late arrivals, skipping work, and frequent absence in workplaces.

SMEs development must be accompanied by the well-being of human resources in various aspects. Research shows that well-being is related to employee job satisfaction and employee performance (Sudibjo & Sutarji, 2020; Wood et al., 2012; Wright et al., 2007). identified two types of job satisfaction; firstly, the overall feeling about the job, and secondly, the feelings about the aspects of the job, such as benefits,

salary, position, growth opportunities, work environment, and the relationships among employees (Mueller & Kim, 2008). a person is satisfied with his/her salary when the salary level is received according to the standards in the area of work, the incremental salary is increased, there is effective structuring and administration of salaries, and also benefits or bonuses for works done by employees (Heneman & Schwab, 1985).

Job satisfaction is related to employee work behavior and attitude (Mabaso & Dlamini, 2017; Saputra & Suwandana, 2020). The research showed that job satisfaction is related to the frequency of employee turnover (Lee et al., 2017). Salaries assessed by employees as too low are considered as a factor that can be the cause of the employee's quitting (Chhabra, 2018; Misra et al., 2013; Rube & Kee, 2015). Therefore, organizations should be very prudent in planning of pay structure and should set confidentiality policy for individual employee's pay amount. Usually, organizations choose to underpay those employees who are willing to work hard for minimal pay while paying more to those who are not willing to work for minimal pay. The pay disparity will eventually lead to a great degree of job dissatisfaction when the hard workers realized they are not being paid fairly (Branham, 2012; Řehoř & Vrchota, 2018). Refer to the Society of Human Resource Management research report conducted in May 2014; salary has been identified as the most important driver for job satisfaction, where 60% of employees rated compensation/pay as very important and 36% rated it as important. Compensation/pay was also claimed as the leading factor of job satisfaction across four generations of employees (Millennial, Generation X, Baby Boomers, and Veterans) (Miller, 2014). (Bakan, 2013) regarded compensation as crucial for employees since it is one of the essential reasons people work. (Qasim, Samina, Farooq-E-Azam Cheema, 2012) that money-related rewards have significant impact in choosing work satisfaction.

It is important to remember that employees often evaluate the salaries they receive (Noe et al., 2017) The way an employee evaluates salaries is by analyzing the fairness between the works he does (output) from the salary he receives (input) and then comparing the same thing with others. Remuneration is a form of payment or consideration given by an organization or business with the aim of improving employee performance (Herwina & Mustakim, 2019; Jiang et al., 2009; Mohd Nasurdin et al., 2020; Rube & Kee, 2015). Employees who receive awards in accordance with performance and expectations tend to do productive things and support the organization by doing positive things. In relation to the effect of payroll on job satisfaction, (Luthans, 2012; Watson et al., 1996)

stated that employee satisfaction and dissatisfaction can affect performance and achievement in their work. Meanwhile, (Lindgren, 2008) (Naji, 2014; Vosloo et al., 2014) consistently claimed that remuneration has a significant effect on employee satisfaction. In other words, the higher the remuneration, the higher the job satisfaction. In order to advance and compete with larger companies, it is necessary for SMEs to focus on how to handle the human resources, especially regarding the matters which can affect employee dissatisfaction. It is beneficial to reduce employee turnover rates. Remuneration in SMEs is a new thing., Therefore, this research is intended to implement remuneration system for SMEs in order to increase employee satisfaction by evaluating jobs using the point method.

Remuneration System In SME

Remuneration is given by an employer to the employees which combines both fixed and variable pays. Remuneration, according to Indonesian Minister of Finance Regulation Number 176/ PMK.05/2017, is employee benefits that can be in the form of salary, honorarium, fixed allowances, incentives, bonuses or achievements, severance pay, and retirement. Another terminology of remuneration is compensation. (Tshilongamulenzhe, 2014) stated that compensation is money related and non-monetary rewards given by an employer for the time, skills, and endeavors made by the employees in fulfilling job necessities and achieving organizational targets. In line with this statement, (Werther, J., Davis, 1996) also stated that compensation is what workers receive as a reward/exchange of contributions that they make to the organization.

Job Evaluation Point Method

According to (Gomes, F, 2003), job evaluation is a comparison of jobs classified to determine appropriate compensation for these jobs. According to Yoder (1992), there are four main job evaluation methods, namely the ranking system, the Job Classification Method, the Factor Comparison Method, and the Point System. This study used the point system or the job evaluation point method. The job evaluation point method is often used because it is the most critical and detailed method. The position or job title is also given a rating scale, but the formulation is not to the position as a whole but in the form of a formulation of the position factors. Each of these job factors is given quantitative weights and values. The total value of these job factors is referred to as the relative value of the position.

There are several stages in applying Job Evaluation Point Method in SME X. After preparation, the remuneration scheme was implemented using the P3 method, namely P1 (pay for the position),

P2 (pay for performance) and P3 (pay for people). Then researchers conducted observations and interviews with employees to decide the determinants in formulating employees' salary. There are seven factors in Job Evaluation Point Method: Difficulty Level, Ability to Think, Working Conditions, Risk of Work, Working Patterns, Authority to Act, and Responsibility for Assets. These factors are then subdivided into 14 subfactors which are important for the work of SME employees. The following is the table of SME employee job evaluation factors:

Salary Satisfaction

Salary satisfaction refers to the attitude of employees for salaries they received which will affect the salaries of individual employees and work relation (Williams et al., 2007). Salary satisfaction is often thought to affect behavior, such as absence and turnover intention (Wagner, 2007). (Lum et al., 1998) defined salary satisfaction as a circumstance in which employees will be satisfied when the amount of their salary meets their expectation. On the other hand, (Heneman & Schwab, 1985) defined salary satisfaction as a level of perception and feeling of a person either positively or negatively to the salaries they get and it can influence the individual in working in an organization. According to (Heneman & Schwab, 1985) salary satisfaction is a multidimensional satisfaction construct consisting of four following subdimensions: pay level, pay structure and administration, pay raise, and benefits.

Table 1. Factors and subfactors used in job evaluation

Factors	Sub Factors	Value
Factor 1 Difficulty Level	A. Difficulty Level	9%
	B. Working Procedures	10%
Factor 2 Ability to Think	C. Levels of Consideration and Thought	5%
	D. Troubleshooting	5%
Factor 3 Working Conditions	E. Physical Environment	8%
	F. Physical Contributions	9%
Factor 4 Risk of Work	G. Five Senses Coordination	10%
	H. Mental Concentration/Tension	10%
Factor 5 Working Patterns	I. Work Schedule Pattern	8%
	J. Marketing Patterns	5%
Factor 6 Authority to Act	K. Risk Probability	8%
	L. Level of Control	6%
	M. Authority to Use Funds	4%
Factor 7 Responsibility for Assets	N. Management and Coaching Authority of Employees	3%

SMEs

SMEs in Indonesia are productive businesses owned by individuals and business entities that have met the criteria for micro-businesses. As regulated in the legislation/Perpu No. 20 of 2008, according to the SME definition, the SMEs are divided into three criteria: micro, small, and medium businesses.

Micro-business criteria are businesses that have a net worth of IDR 50 million and do not include buildings and busines s premises. The maximum annual sales of micro-businesses is IDR 300 million. On the contrary, the criteria of small-scale business is a business that has a net worth of IDR 50 million with a maximum of IDR 500 million. Medium businesses are often categorized as big businesses with criteria of net worth owned by business owners reaching more than IDR 500 Million to IDR 10 Billion and do not include buildings and land of business premises. Their annual sales revenue reaches IDR 2.5 billion to IDR 50 billion. In this study, SMEs which are included are micro-business SMEs with a wealth of IDR 50 million and annual income of IDR 30–40 million.

METHOD

This research was conducted in Buol Regency, Central Sulawesi Province. The research subjects in this study were 19 SME employees. These SME employees were selected by looking at the level of salary satisfaction of employees who are in the low and medium categories. Employees were divided into two following groups: ten experimental groups and nine control groups.

The method used in this research is experimental action research with a randomized pretest–posttest control group research design. The method of data collection in this study used observation, interviews, and questionnaires. The scale of measurement used in this study is Pay Satisfaction Questionnaire (PSQ) developed by (Heneman & Schwab, 1985). To test whether there is a difference in the level of satisfaction between the salary before and after the treatment, Mann–Whitney U test is applied as data analysis techniques. Moreover, to see the difference in the level of salary satisfaction of each aspect, Friedman Test with IBM SPSS Statistics 24 software were applied. The questionnaire amounts to 18 items.. The scale's reliability is 0.953 and the validity varies between 0.572 and 0.749.

The limitation in this study is the number of research subjects. This is related to the low number of employees in each SME, thus causing difficulties in selecting SMEs according to the research criteria. In addition, research sites that are far from the city cen-

ter are a challenge for researchers in the data collection process that requires several stages.

RESULT AND DISCUSSION

Module Development and Module Validity Process of Job Evaluation Point Method (Case of SME X)

The validity process of the remuneration module was carried out in the following stages. The first stage is the researcher jointly observed and interviewed the owner of the SME. After studying the SME, the researcher arranged the modules as needed. The next stage is content validity, which is assessed by a professional, an industrial and organization psychologist, and a professional in the food processing industry in the SMEs level in related areas. On the next stage, the module is given to the SME owner then a trial was carried out in understanding the content of the sentence by several employees of the SME. The final stage of the module validity was carried out before and after the implementation of remuneration in the SME.

Effect of Remuneration on Salary Satisfaction (Experiment Result)

The hypothesis proposed in this study is that remuneration with job evaluation point method can increase salary satisfaction. The following is the result of Mann–Whitney U test:

Table 2. Results of the Mann–Whitney U test on Measurement of Pre-test, Post-test and Follow-up Variables of Salary Satisfaction in Experimental Groups and Control Groups

Stage	Z value	Sig.	Explanation
Pre-test	−1.476	0.140	Not Significant
Post-test	−3.734	0.000	Significant
Follow-up	−3.689	0.000	Significant

Based on the results table 2 of the Mann–Whitney U test, it can be seen that the measurement of pre-test showed no significant difference between the two groups before treatment. The measurement of the post-test stage illustrates the significance of salary satisfaction between the control group and the experimental group after being given treatment. What happened at the follow-up stage was that there was a significant difference in salary satisfaction between the control and experimental groups after 14 days of intervention treatment.

Based on these results, it can be concluded that the hypothesis in this study is accepted, meaning that the implementation of the remuneration system with job evaluation point method has a significant influence on salary satisfaction in SME X employees. These results are reinforced by those of the Friedman test:

Table 3. Friedman Test of Salary Satisfaction in Control and Experimental groups

Variable	Group	N	Chi-Square	Df	P	Explanation
Salary Satisfaction	Control	9	14.114	2	0.001	Significant
	Experiment	10	16.632	2	0.000	Significant

Based on the result table 3, it shows the different tests in the experimental group with a significant value of 0.000 ($p < 0.005$). It means that there is a significant difference in salary satisfaction in the experimental group after the implementation of remuneration with job evaluation point method. The same thing happened in the control group with p-value equals to 0.001 ($p < 0.005$). In other words, there was a significant change in the score of the control group when they were given intervention in the experimental group.

To see further the results of score changes of the two groups at each stage, it can be seen in the following result of Friedman – Mean Rank Test.
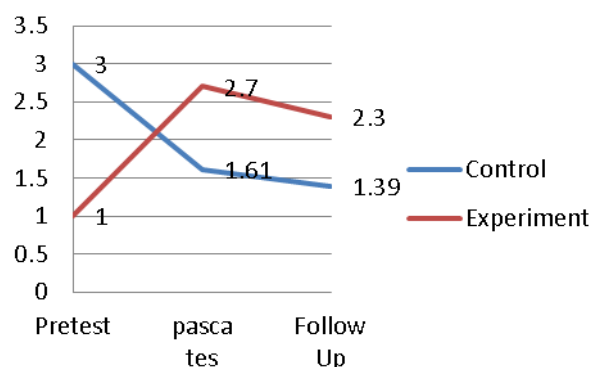

Figure 2. Friedman Test of Salary Satisfaction of Both Groups in Three Stages

Based on the chart above, it can be seen that there was a change in score of the experimental group from the pre-test and post-test, which means there was an increase of salary or salary satisfaction even though it experienced a slight decrease in the follow-up stage. In contrast to the control group, a significance value of 0.001 (p < 0.0005) indicates a change in score by managing the level of salary or salary satisfactionBased on the results of the mean rank chart above, the experimental group experienced a decrease in salary satisfaction scores from the pre-test, post-test and follow-up stages.

The next analysis is to see the significance of the increase in scores of salary satisfaction in the experimental group by paying attention to the four aspects of salary satisfaction. The following table is the results of the Friedman test per aspect:

Table 4. Friedman Test Results on Each Aspect of Salary Satisfaction in Experimental Group

Aspect	N	Chi-Square	df	P	Expl
Pay Level	10	15.250	2	0.000	Signif.
Pay Increase	10	16.703	2	0.000	Signif.
Adm and Pay Structure	10	13.500	2	0.001	Signif.
Benefit	10	18.667	2	0.000	Signif.

Based on the table 4, it showed that the four aspects experienced a change in scores significantly (p < 0.005) after being given treatment. The level of change in scores for each aspect can be seen in the chart below:
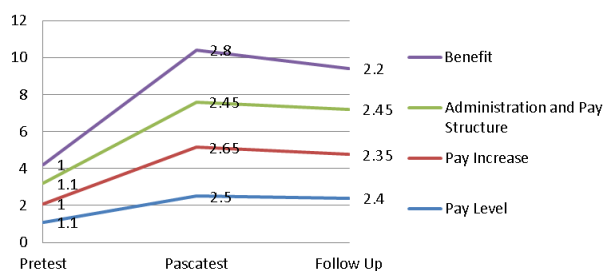
Figure 2. Mean Rank of Each Aspect of Salary Satisfaction in Experimental Group

Below is the result of the analysis of the Friedman test on each aspect of salary satisfaction in the control group. The change of scores is the result of Table 5. Based on the table 5, it showed that all four aspects experienced a change in scores significantly (p < 0.005) after being given treatment. However if it is seen further, the change in score has decreased after

being given treatment. The level of change in scores for each aspect can be seen in the chart Figure 3.

Table 5. Friedman Test Results on Salary Satisfaction of Each Aspect in Control Group

Aspect	N	Chi-Square	df	P	Explanation
Pay Level	9	8.323	2	0.016	Significant
Pay Increase	9	8.968	2	0.011	Significant
Administration and Pay Structure	9	15.935	2	0.000	Significant
Benefit	9	12.645	2	0.002	Significant
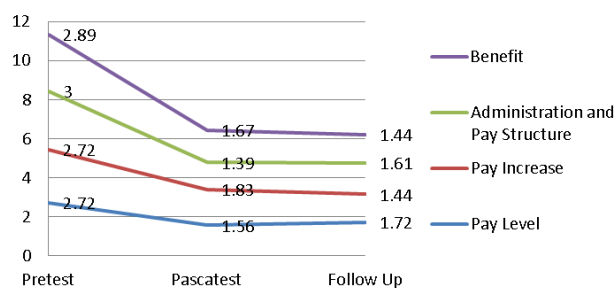
Figure 3. Mean Rank of Each Aspect of Salary Satisfaction in Control Group

The results of the study show that the implementation of remuneration by using job evaluation point method can increase salary satisfaction including four aspects namely satisfaction at salary level, salary increase, structure and administration of salary, and benefits. The results of this study reinforce the theory suggested by (Heneman & Schwab, 1985), which states that the four aspects of salary satisfaction are interrelated. If the increase of salary is in line with the equitable structure and administration of salary, it will affect employee satisfaction on salary levels and benefits so that employee satisfaction on salary will generally increase. Therefore, each aspect of the PSQ scale is interrelated. The same thing happened to SME X employees in which every aspect of salary satisfaction was increasing after remuneration.

Remuneration Reward System, Motivation, Satisfaction, and Performance. The provision of remuneration or compensation either directly or indirectly is found to stimulate employee performance. A reward system which is perceived to be fair and proportional by employees could improve their productivity at work (Gohari et al., 2013; San et al., 2012). Meanwhile, the remuneration given may also have indirect influence on their performance. This implementation of remuneration reward system could also be a powerful tool to improve employees' work motivation and job satisfaction. When someone feels that the system being applied by their organization is fair, it

can improve his job satisfaction and increase their motivation to work (Jehanzeb et al., 2012; Priya & Eshwar, 2014).

Based on the results of further measurements with the interview method, the research subject stated that with the preparation of remuneration, they felt more satisfied with the salary they received. They claimed not to rate the amount of the salaries but rather the system of justice given to salaries. The job evaluation performed on employees to determine the amount of salary received makes the employees feel more accepting and improving their performance. Given the similar qualifications and specifications, if an employee believes that the salary offered in other organizations is higher, he or she will be dissatisfied even his or her salary is considered high as compared with the salaries in the organization he or she works in (Al-Zoubi, 2012). As a result of the empirical studies, it is believed that pay is able to influence the job satisfaction level of employees.

In addition to the increase in salary satisfaction that occurs in SME X employees after the implementation of remuneration, the positive impact is also felt by the organization. Prominent changes in the quality of employees who have become more motivated to work are occured because employees experience increased salary satisfaction. The SME owner also admitted that his staff's performance had increased such as smiling more often and being more active in completing their work. The roots of the payment for performance idea stem from a reinforcement theory which suggests that payment can be linked to employee performance (Jalal & Zaheer, 2017; Pang & Lu, 2018). That managers set target goals and reward employees who meet them with a scheme of bonuses for achievement, consequently raising the overall performance (Afrifa & Adesina, 2018; III, Herbert G. Heneman, Timothy Judge, 2011). Althougth that there are two factor that mostly satisfy as an employee in organization which are remuneration and promotion (Arbarini et al., 2021; Miah, 2018; Mustapha, 2013; Weng & McElroy, 2012). The impact of increasing salary satisfaction on SME X organizations can be seen in the ability of SME owners to control production costs. Owners feel more equitable in dividing production costs and employee welfare. The impact of other organizations such as increasing the number of sales that occur after the implementation of remuneration is done. (McNeese-Smith, 1996). In addition, the relationship between the owner and the worker becomes better after the implementation of remuneration that high job fulfillment is dependably increment the profitability of an organization, thus the expanding organizational performance too. The supervisor relationship is an important factor by which employees achieve a high level of job satisfaction, so

an appreciation from supervisors and a good working relationship with them, the attention to the needs and feelings of employees, and professional supervisor's input, constructive criticism, and general understanding affect employee job satisfaction (Gębczyńska & Kwiotkowska, 2019).

However, remuneration is a kind of major element which plays a vital role in the level of job satisfaction. Walters (2010) has been perceived that low salary leads one of the major contributors that makes employees unhappy and dissatisfied with their job latter on which is converted to escaping duties, high level of absents, low commitment and employee turnover. (Asep Saepudin, 2019; Kim et al., 2005) stated that employee commitment can be upgraded, and their degree of satisfaction could be rising by exploring the influence of remuneration. With the proven implementation of remuneration by using job evaluation point method, it can increase salary satisfaction and have a positive impact on the organization.

CONCLUSION

In addition to increasing salary satisfaction of SME employees after applying remuneration,, a positive impact is also felt by the organization. The employees showed a significant change in which they became more motivated to work. In line with the increasing salary satisfaction, the SME owners also claimed that the performance of employees had improved as they smiled more often and were more active in completing their work. The impact of increasing salary satisfaction on SME organizations can be seen in the ability of SME owners to control production costs. The owner feels more equitable in dividing production costs and employee welfare. Another organizational impact wa also occurred, such as an increase in the number of sales after the implementation of remuneration.

For the next researcher, it is important to involve more research subjects and avoid the application of control and experimental groups in the same company. This is to avoid gaps and social jealousy because salary is a very sensitive matter for employees. It would be better if the companies are different but the level of salary satisfaction is at the same level so that it will be more effective in making measurements. The next researcher can select SMEs with different types of production so that they can develop assessment aspects in conducting job evaluations.

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Analysis of the Level of Multicultural Understanding of the Suku Anak Dalam in North Musi Rawas Regency

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Abstract. This study aims to analyze the level of multicultural understanding of the Suku Anak Dalam in the North Musi Rawas region. The population taken in this study were all ethnic children in the Musi Rawas Utara area. The sampling technique used was purposive sampling with a total sample of 72 people from 3 villages. The data collection technique used a non-test technique in the form of filling out a questionnaire. The instrument used in this study is a questionnaire using a modified Likert scale with 4 answer choices. The results of the validity and reliability test indicate that the instrument used is valid and reliable. For the results of the analysis, the percentage for each respondent was in the range of 76%-100% who entered the category of strongly agree based on the Likert scale interpretation table. This means that all respondents are categorized as strongly agree with the statements regarding the multicultural indicators proposed in the questionnaire. This shows that the Suku Anak Dalam North Musi Rawas have a high multicultural understanding.

Key words: multicultural, suku anak dalam, north musi rawas

INTRODUCTION

Indonesia is the largest multicultural country in the world (Naim & Qomar, 2021). It is unavoidable, and even diversity has become a national identity (Rahmawati et al., 2014). In Indonesia, various ethnic groups, races, religions, customs and cultures are scattered (Sahal et al., 2018). An archipelagic country that has 13,000 islands, 300 ethnic groups, and 200 languages. The community adheres to 6 religions (Islam, Hinduism, Christianity, Catholicism, Buddhism, and Confucianism) as well as various beliefs (Nugraha, 2020). Multiculturalism in Indonesian education was introduced after the independence of the country as the basic principle of nationality, Bhinneka Tunggal Ika (Nakaya, 2018). Indonesia is proclaimed as a country that has ethnic diversity but has the same goal, namely together towards a just, prosperous and prosperous society (Rosyada, 2014). According to archaeologists, diversity in Indonesia is manifested in three aspects of life, namely technology, social organization, and religion (Iqbal, 2014). The diversity of the Indonesian people can be a blessing as well as a disaster. It will be a blessing if Indonesia as a nation-state entity is able to take care of its diversity. On the other hand, it can be a disaster if this nation is not able to take care of diversity, such as the disharmony of the nation that is happening today (Nurcahyono, 2018). This can happen because diversity is often seen as a difference, differences are increasingly sharpened and are often used by some people to fulfill their personal or group ambitions and

interests (Dwintari, 2018). This eventually causes social tensions that often give rise to internal conflicts between communities, whether it be ethnic, customary, racial or religious conflicts (Kamal, 2013). This does not rule out the possibility of causing Cyber Crime events, namely intentional acts that violate criminal law (law and case law), are carried out without defense or reasoning, and are punished by the state as a crime or violation (Nurhayati et al., 2021). For this reason, the plurality and heterogeneity that is reflected in Indonesian society is tied to the principle of national unity and integrity which we know as the motto "Bhinneka Tunggal Ika", which implies that although Indonesia is diverse, it is integrated in unity (G. Lestari, 2015).

In simple terms, multicultural is defined as "cultural diversity" (Aziz, 2020). Multicultural values include respecting the culture of different ethnic and religious groups (Setyono & Widodo, 2019). There are two dimensions that can be used to describe patterns of multicultural identity: identity plurality and identity integration (Fitzsimmons, 2013). Multicultural is defined as the plurality of cultures and religions. Cultural plurality is the social and political interaction between people with different ways of living and thinking in a society (Najmina, 2018). Every human being is obliged to develop a multicultural attitude. Multicultural attitude is an attitude that is open to differences (Khairuddin, 2018). Several studies have found that field experiences with different ethnic and cultural characteristics contribute to an

increase in multicultural attitudes (Arsal, 2019). In addition, multicultural education can also help to deal fairly with all the cultural and racial differences found in society (Ashamwi et al., 2018). This is because the five dimensions that exist in multicultural education are content integration, knowledge construction, equality pedagogy, prejudice reduction, and empowerment of school culture and social structure (Cole & Zhou, 2014). Multicultural education is also advocated as a basis for transforming ideologies, values, and principles of separation between "us" and "them" in society (Chang et al., 2018). The view of multiculturalism is useful for knowing how social structures create and maintain different cultures in a society (Abidin, 2016). In the understanding of multiculturalism, differences are an unavoidable fact which are then appreciated and respected in the same degree so that they do not consider the cultural elements they have are more valuable than other people's cultural elements. Unfortunately, these understandings and attitudes cannot be born immediately, but need to be instilled and inherited and taught, one of which is through education (Lestariningsih & Purnomo, 2018). Multiculturalism is closely related to 'identity politics', 'politics of difference', and 'politics of recognition', all of which regard proper recognition of cultural diversity as a necessary step to reassess undervalued identities and change dominant patterns of representation and communication that marginalize groups (Colombo, 2015). In a multicultural society, the potential for conflict and friction between the people is very large (Wibowo & Wahono, 2017). In this concept, intercultural understanding is a way of understanding human dignity and how to empower positive relationships among multicultural communities (Abduh et al., 2020).

The multicultural indicators that will be raised in this study are about culture, religion, political aspirations, educational differences, and economic differences. In Indonesia, economic differences between communities are very visible. In Indonesia, there are even many poor people or can be said to be people who are unable to achieve a minimum standard of living (Jaiyeola & Bayat, 2020). So it requires sustainable economic growth and a rational distribution of income to support more poor people (Zaman et al., 2020). Poverty makes us think about the failure of education (Mihai et al., 2015). Many people assume that economic differences can also cause educational differences. For this reason, a policy is needed as a solution to the existing problems. one of them is by presenting multicultural education that involves students with different races and ethnicities, blacks and whites, as well as students from various regions with different cultures and economic levels to obtain a quality education (Alghamdi, 2017). In addition, the

goals of multicultural education are divided into four areas, namely academic, social, political, and cultural (Lawyer, 2018). This is what makes multicultural education work seriously to instill multicultural understanding for all students in particular.

Indonesia is an archipelagic country consisting of thousands of islands and has a population of approximately 240 million people and has a different natural character. The character of nature will shape the character and culture of a different society (Supriatin & Nasution, 2017). Indonesia is very rich in culture, there are many ethnic cultures in the form of certain groups, they live in remote corners of modern cities. They live among the thickets of large trees, so they are often called Suku Anak Dalam (SAD). SAD is a group of people who are still marginalized (Safitri, 2020). Suku Anak Dalam or Orang Rimba are one of the minority tribes living on the island of Sumatera (Arsa et al., 2019). Suku Anak Dalam community was initially feared by ordinary people, because they did not know the limits of life at all (Sari, 2019). The interesting thing about the Suku Anak Dalam that is most prominent is its body resistance to live in the wild and has the ability to use wild animals as a source of food and necessities of life by hunting.(Farida et al., 2014). The behavior of the Suku Anak Dalam is inseparable from the behavior that has been passed down from their ancestors (F. Lestari & Susanti, 2019). SAD has a very rich and unique ancestral culture (Tristo, 2018). Culture includes everything that makes one group or community in a society different from another: language, values, literature, worldview, food, religion, clothing, holidays, beliefs, and behaviors that make up the lifestyle of a particular group (Alsubaie, 2015). In responding to these differences, the principle of living as a nation and state must always be upheld (Ulya, 2016). Suku Anak Dalam are found in South Sumatra, scattered in the interior of Muara Enim, Lahat, Musi Banyu Asin and Musi Rawas (Sustianingsih, 2014). In Musi Rawas and North Musi Rawas districts, there are at least 4700 people of the Suku Anak Dalam. They live nomadic and scattered in several areas. One of the areas is the village of Sugai Jernih. It is known that the original inhabitants of Sungai Jernih village are the Suku Anak Dalam (SAD) community (Judge et al., 2020). Other areas also exist, such as Sungai Kijang Village, Rawas Ulu Subdistrict, Bumi Agung Village and Chairperson III Village, Kec. Muara Beliti, Sukorejo Village, Kec. STL. Ulu Terawas and still scattered in various other places (Kesuma Wardanni, 2020).

The differences that are most often felt in Indonesia, including in the North Musi Rawas region, include differences in culture, religion, political aspirations, economic differences, and differences in educa-

tion. With this diversity, it is hoped that all people will have an understanding in multicultural terms so that things do not happen that cause division. Therefore, in this study, researchers will analyze the level of multicultural understanding that is specifically carried out on the Suku Anak Dalam in the North Musi Rawas area.

METHODS

This study aims to analyzethe level of multicultural understanding of the Suku Anak Dalamin the North Musi Rawas region. The population taken in this study were all ethnic children in the North Musi Rawas area. The sampling technique used is purposive sampling with a total sample of 72 people from 3 villages, namely Muara Tiku Village, Karang Jaya District, Musi Rawas Utara Regency, Sungai Jernih Village, Rupit District, Musi Rawas Utara Regency, and Sungai Kijang Village, Rawas Ulu District, Musi Regency. north wary. All of them are located in the province of South Sumatra. This research was conducted in September 2021. The data collection technique used a non-test technique in the form of filling out a questionnaire. The instrument used in this study is a questionnaire sheet using a modified Likert scale with 4 answer options, namely Strongly Agree, Agree, Disagree, and Strongly Disagree. Valid : if rcount is greater than rtable value ($r_{count} > r_{table}$); Not Vakid : if rcount is less than rtable value ($r_{count} < r_{table}$); Reliable if Cronbach's alpha value > 0.60; Not reliable if Cronbach's alpha value < 0.60 (Khomsun, 2016).

Analysis of the results of the questionnaire was carried out quantitatively using the following formula.

$$p = \frac{n}{N} \times 100\%$$

(1)

where P is the percentage of the results of the questionnaire analysis, n is the total score of the assessment, and N is the maximum possible score. For the Likert scale, the score interpretation model can be seen in Table 1.

Table 1. Likert Scale Interpretation

Percentage (%)	Category
0% - 25%	Strongly Disagree
26% - 50%	Disagree
51% - 75%	Agree
76% - 100%	Strongly agree

(Hayati et al., 2015)

RESULTS AND DISCUSSION

Before being analyzed further, the questionnaire as an instrument in this study was tested for validity and reliability. These two tests were conducted to determine whether the questionnaire that had been made met the accuracy requirements or not. In practice, these two tests were carried out with the help of SPSS software. The validity test used in this study is the content validity test. Content validity test is used to prove the accuracy of the item with the content. In the content validity test, the Pearson coefficient value is used whose decision is taken from the comparison between the calculated person coefficient value (r-count) and the Pearson coefficient table (r-table). If the value of r-count > r-table, it can be stated that the question items on the questionnaire are valid. Reliability test is used to test the level of consistency of the questionnaire. The reliability test used in this study is the internal consistency technique with Cronbach's alpha technique. A questionnaire is said to be reliable if Cronbach's alpha value > 0.60 (Triana & Oktavianto, 2013).

In this study there were 72 respondents, so it was obtained Pearson table coefficient value (r-table) is 0.2319 at a significance level of 5%. The results of the validity test on each statement item can be seen in the Table 2.

Table 2. Validity Test Results on Each Statement Item

No Item	r_{Count}	r_{Table}	Category
1	0.734127	0.2319	Valid
2	0.433647	0.2319	Valid
3	0.498299	0.2319	Valid
4	0.278788	0.2319	Valid
5	0.486768	0.2319	Valid
6	0.623389	0.2319	Valid
7	0.633245	0.2319	Valid
8	0.646394	0.2319	Valid
9	0.419792	0.2319	Valid
10	0.544775	0.2319	Valid
11	0.292209	0.2319	Valid
12	0.437318	0.2319	Valid
13	0.260779	0.2319	Valid
14	0.527794	0.2319	Valid
15	0.354678	0.2319	Valid
16	0.612127	0.2319	Valid
17	0.206996	0.2319	Invalid
18	0.585308	0.2319	Valid
19	0.491743	0.2319	Valid

No Item	r_Count	r_Table	Category
20	0.573644	0.2319	Valid
21	0.576341	0.2319	Valid
22	0.01926	0.2319	Invalid
23	0.502704	0.2319	Valid
24	0.145516	0.2319	Invalid
25	0.504841	0.2319	Valid

From the Table 2, information is obtained that there are 3 items out of 25 invalid items, namely items numbered 17, 22, and 24. This is because the value of r-Count < r-Table. Therefore, the 3 invalid items were excluded when conducting a reliability test. For the results of the reliability test can be seen in the Table 3.

Table 3. Reliability Statistics

Cronbach's Alpha	N of Items
0.873	22

From the Table 3, it is known that the Cronbach Alpha value obtained is 0.873 with the number of items being tested as many as 22 items. In accordance with the rules used, namely if the Cronbach Alpha value is greater than 0.60 then the instrument is said to be reliable, then the results obtained are compared with the r-table value for df = N-2 = 72-2 = 70 with a significance level of 5%, namely of 0.2319. For comparison of Cronbach's Alpha value and r-table value, namely 0.873> 0.2319, the research instrument is categorized as reliable.

To determine the level of multicultural understanding of the Suku Anak Dalam Musi Rawas Utara, a calculation of the percentage of the results of filling out the questionnaires that have been distributed, the results can be seen in the following table

Table 4. Percentage of Tribal Children's Agreement Level in Musi Rawas Utara to Statements Regarding Multicultural Indicators Mentioned in the Questionnaire

Respondent	Total Score (n)	Maximum Score (N)	Percentage $P = \frac{n}{N}\% \times 100$	Category
72 Suku Anak Dalam in the North Musi Rawas	6.431	7,200	89.31%	Strongly agree

Table 4 provides information that the Suku Anak Dalam Musi Rawas Utara strongly agree with the

statements regarding the multicultural indicators included in the questionnaire. This shows that the Suku Anak Dalam Musi Rawas Utara have a high understanding of multiculturalism with the principle that differences are an unavoidable fact which are then valued and respected in the same degree so that they do not consider their cultural elements to be more valuable than other people's cultural elements. , as well as elements of religion, political aspirations, economic differences and educational differences.

For more details on the number of respondents in each category, see Figure 1.
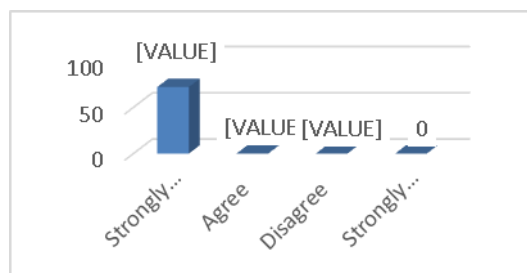
Figure 1. Graph of Number of Respondents in Each Category

The figure 1 shows that all respondents are in the category of strongly agreeing with the statements regarding multicultural understanding mentioned in the questionnaire.

Several relevant previous studies, namely research conducted by Mailinar & Nurdin (2013) which discusses the religious life of the Suku Anak Dalam in Senami III hamlet, according to this study, although the Suku Anak Dalam still adheres to traditional beliefs, they also understand that Islamic teachings are sacred teachings, containing rules, commands and prohibitions that are in line with their habits. This study also finds that it is still difficult for the Suku Anak Dalam to make Islam something that can be internalized in daily life. The Suku Anak Dalam's conception of Islam which is still mixed with their traditional beliefs is manifested in various religious rituals such as tahlilan and basale. The level of religious understanding that is still minimal among SAD is due to factors of low education and geographical conditions that do not support the entry and exit of ustadz and religious teachers. Other research that was conducted by Yenni et al. (2014) which discusses socio-cultural studies of tribal children in malaria, the results of the study show that knowledge, attitudes and behavior of the community about malaria and how to eradicate it in general are still lacking/don't know. The attitude of the community is quite good in accepting input from outside. Then there is also research conducted by Mustika & Dastina (2020), this study concludes that the entry of Islamic teachings has a considerable influence on changes in the life

order of the Suku Anak Dalam community. Several factors that influence the shift that occurs in the ethnic group of children in, among others, conversion of religion to Islam, social interaction with migrant communities, migration from one area to another, and education.

CONCLUSION

The results of the validity and reliability test indicate that the instrument used is valid and reliable. For the results of the analysis, the percentage for each respondent was in the range of 76%-100% who entered the category of strongly agree based on the Likert scale interpretation table. This means that all respondents are categorized as strongly agree with the statements regarding the multicultural indicators proposed in the questionnaire. This shows that the Suku Anak Dalam Musi Rawas Utara have a high multicultural understanding.

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Learning from Home Satisfaction for Graduate Biology Students in the COVID-19 Era

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Abstract. The study aims to assess the level of satisfaction for Biology master's students understudying in online learning mode henceforth learning from home at Yogyakarta State University. A structured questionnaire was employed to view student satisfaction around 7 dimensions namely; resource availability and well-operating tools, instructor support & interaction, lesson quality and quality of delivery, assessment mechanism, teaching method, learning environment, and satisfaction. Of 49 students was surveyed and asked to answer questions relating to learning from home experience and the level of their satisfaction. Out of which participants over 80% were females and around 19% males where the major part of them belonged to 21-30 years of age. Data were analyzed using SPSS software and item's reliability was found higher (over 0.75) that substantiated the reliability of the questionnaire used. Based on calculating the mean and SD, data reveal that students are highly satisfied by the learning from home system. Findings suggest that the implementation of the learning from home program was a very great idea during this dire disease era as the majority of the students supported the initiative. However, the study discovered also that the quality and distribution of internet connectivity, non-updated devices for some students was the main challenge that might be rending online learning more ineffective.

Key words: biology students, learning from home, satisfaction

INTRODUCTION

Since its inception in the early months of 2020, the coronavirus has imposed the life of many to change (Poerwanti et al., 2021) and has caused most higher institutions and other public convocations to precipitously shut down their doors in the wake of stimming the number of new contracted cases (Wong et al., 2020). With no time to dither, universities were then required to employ online teaching platforms, regardless of students' and teachers' level of literacy in digital devices management (competencies) and preparedness as well (Bonafini et al., 2017). Due to that, the learning and working from home approach for both teachers and students started gaining wider acceptance and has now become a viable alternative to conventional classroom teaching.

Assuming that the online learning concept is currently more acquainted with the education system so far, however, it is not a new pedagogical method anyway for others. Whelan Ariza, (2018) stated that the new paradigm in teaching as an online system has been used over years in different disciplines, albeit so far it has become a mandatory approach induced by the current pandemic (Hasanah et al., 2021). But proficiency in its implementation platforms from K-12 to college-level still has some lacks and gaps. Specifically, in the DIY (Daerah Istimewa Yogyakarta in Indonesia), teaching-learning from home is widely implemented across the universities and the country

(Nurhayati et al., 2021). Before and on the onset of the disease, none expected that would be possible to perform teaching from home, but a couple of weeks later the COVID-19 breaks, university instructors were given limited online options to abide by. Some of which were live lectures, recorded video or audio lectures, voice-over demonstrations, virtual presentations (teachers and students) to deliver the rest of the required instruction. With learning from home, there is a noticeable dominance in technology (together with electronic devices and internet flow) involvement and application in teaching-leaning in higher institutions. Some studies on information systems present evidence that one of the ultimate aspects while seeking and evaluating the success in the implementation of the new system is user satisfaction (Whyte et al., 1997), (Petter et al., 2008). Therefore, having a stake in student satisfaction level with learning from home settings and provides technical training and proper instructions were the lowdown dimensions and concerns to explore.

By definition, satisfaction is a person's attitude or feelings bonded with multifaceted factors that are affecting a particular situation an individual goes through or experiences (Acuña et al., 1995). In tandem, Acuña (1995), explained that student satisfaction is more likely to be conceptualized to represent student's perceptions acquired from the perceived values of education and experience obtained at the school setting at the point of time. It can also be in-

terpreted as a concept that reflects outcomes and reciprocity that transpire between learners and an instructor (Barnes, 2017). In the respect of what was audited early, student satisfaction is considered to be one of the important staples for assessing the success and effectiveness of a course or system application.

Despite its outstanding contribution especially in course effect, however, currently, not a plethora of research is found that can point out the criteria as a guideline for evaluation of student satisfaction. That said, much of these potentials are remain untapped. Some recent findings have suggested some evaluation criteria of students' satisfaction with virtual learning. Compatible devices (electronic), instructor, class management, instruction, to be considered the most criteria driving and render online learning effective and smooth (Sutarto et al., 2020), (Meiers, 2007). The learning environment was deemed to create a favorable milieu for student's teamwork, exchanging ideas with one another becomes a factor that encourages the learner's participation and state of feeling engaged in the course. Some other researchers have found in follow-up interviews that, three key areas that students identified as being essential for them like being in touch regularly with teachers, quick response from teachers, and also regular intervention to ease the learning (Misko et al., 2004), (Guthrie,. 2002).

The role plays by the instructors is also undeniable to predict as far as course satisfaction is concerned. That is why the performance of an instructor is found highly correlated with student satisfaction, particularly with his or her response time and availability (Gray & DiLoreto, 2016). An instructor is supposed to act not only as a facilitator of learning rather as a motivation booster for all students as considered one of the most important factors in satisfaction. Another factor deemed essential that may positively influence satisfaction and learning effect as well in online learning is the quality of the lesson (NASHAAT et al., 2021), (Piccoli et al., 2001). The feel of students' learning from home satisfaction and their performance in online collaborative learning in the light of the pandemic is the key factor in judging whether online learning model can be sustainably appreciated or not (Coman et al., 2020). Exploring the factors affecting student's satisfaction when partaking in learning from home, the results of Kuo and colleagues showed a close relationship between student's satisfaction with the factors such as learner-instructor collaboration and interaction, learner-content interaction, and the quality of both devices used and internet self-efficacy. Regardless of some main factors aforementioned that account for student satisfaction in learning from home approach, recent studies also have identified numerous staple challenges thought to contribute

enormously to learning within an online environment. Such challenges include instructors' assessments mode, overseeing students' performance through practices, lack of internet access, low quality of online instructional delivery, cost control, lack of teachers 'intervention, counseling in students learning progress, etc. (OECD, 2020), (García & Weiss, 2020). Apart from that, other additional challenges on teacher's sides were reported especially that related to the instructors' adaptability skills to customize lectures for online learning, monitoring students the real performance in synchronous and asynchronous interaction, as well as designing authentic online assessment tools (Sholihah, 2021).

Within this online learning setting, learners are administrated to involve willingly and collaboratively through selected and appropriate online platforms with the focus of social context as the learning collaboration. Therefore, this study aims to assess student's satisfaction levels on the used online systems and approaches during the unprecedented pandemic to collect evidence of tools being used, and measures to the effectiveness of teaching and learning quality in the light of the pandemic.

METHODS

The content items/questions used in this online survey was conducted to find out the level of student satisfaction with the quality of the program and teaching system with respect to resources availability and well-operating tools, instructor support & interaction, lesson quality and quality of delivery, assessment mechanism, teaching method, learning environment, satisfaction. Similarly, questions related to socio-demographic distribution (age and sex) were also collected and used.

Design and procedure: By using a convenient online survey through the platform of Google form, the questionnaire was shared with Biology graduate students via WhatsApp groups. From the researcher's own experience as being a student in the Biology program, we decided to use Biology students in the master's program with the main reason as to view why many students constantly complaining about reaching or participating in online learning indeed. Hence as first-timers, they were likely to encounter some challenges while coping with online learning when physical interaction is still not allowed so far. According to (Demuyakor, 2020a) and (Demuyakor, 2020b), an online survey is one of the best means of cutting down costs when carrying out a study but at the same time serves as an effective way of getting authentic data from the online population. The main objective was to ascertain how satisfied are graduate Biology students at Yogyakarta State University and

also how students are responding to the online learning adopted by the same institution as a result of the COVID-19 pandemic.

Participant: The population for the present study was the biology students who are participating in online learning. The sample group is made up of 49 students completing the online survey through a Google form designed by the researcher under lecturers' supervision. Before subjecting the participants to the e-survey, a request was made to the group administrators and members on the intent of the survey, and hereafter the link was shared via the WhatsApp group platforms. For over a month, data were collected from students in semester one (1) and semester three (3).

For the scope of the data collection, we decided to apply the survey items, designed and constructed under the expert's supervision. The respondents concerned by the study were all graduate students in the Biology department and were invited through the WhatsApp platform to complete the sampling. As estimated, the completion of all questions took the participants about 10 minutes in average time. A deliberate bid-weekly reminder strategy was utilized to notify the participants who had not completed the survey items to do so. The questionnaire used was adapted and adopted according to the online learning requirements and was around 7 dimensions as cited in the previous paragraphs. The survey administrated to participants was divided into three parts. The first part consists of student demographic data, multiple-choice questions, and Likert scale itemization recorded on a 5-points from strongly disagrees to strongly agree. Data were collected from October 2020 up to December 2020. The questionnaire comprised 44 items encompassing these 7 dimensions/factors. The mean score has been used to measure students' satisfaction for each dimension. No question was reported or remained unfinished or mistakenly filled out, however, 17 students did not want to complete the questionnaire due to the lack or less of interest to participate. Of 49 students as a sample size in this study, this number was translated to a response rate of 74.25%. According to (Challice et al., 2021), any study with a respondent rate of over or equal to 50 % (percent) is considered appropriate for analysis. Thus, our response rate of 74.25%, said that it was excellent to proceed with the analysis. The mean score has been used to measure students' satisfaction for each dimension.

Data analysis: All data collected were in ordinal scale namely Likert scale converted to 5-points scales. Cronbach's alpha was used while testing the validity and reliability of items. It is a measure of internal consistency of items, that is how closely related a set of items are as a group (Tavakol & Dennick, 2011). It is considered to be also a measure of scale reliability where its value or popularly known as reliability coefficient of 0.70 or higher is considered acceptance (Trizano-Hermosilla & Alvarado, 2016)

RESULTS AND DISCUSSION

Consequently, this study was done to survey or investigate the answer to the research questions cited in the section of sub-objectives. Then, the main objective is to measuring student's satisfaction with the learning from home system plagued by the COVID-19 through courses they have taken in the biology master's program through the following sub-objectives: (1) how much satisfied are the students with the assessment mechanism in the course's studies in online learning in the COVID-19 era? (2) how much satisfied are the students with the instructor's support and interaction? (3) how much satisfied are the students with the learning environment (in the residences) and teaching methods experienced during online learning? (4) how much satisfied are the students with the learning quality, resources available and, tools during online learning?

Based on the aforementioned objectives along with the importance of the related works in articles writing, it is worthy to review some concepts, previous findings, to complete properly the gist of the information needed. In the wake of institutions and public convocations closures and mandatory curfew seem in different countries all plagued by the contemporary disease, these preventive acts are impacting not only the mode of life of students, teachers and, household, but have shown far-reaching economic and societal consequences in many families across the world. After UNESCO recommended the closure of schools and starts off the use of distance learning programs, there have been so many useful mobile or computers applications developed mostly open educational applications and platforms that schools and teachers can use to reach learners from their home just in purpose to limit the disruption of education (Alderete & Formichella, 2017).. According to UNESCO reports and monitoring as of 7th July 2020, roughly 1,067,590,512 learners have been overwhelmed by the grief due to school closures and preventive protocols to abide by in response to the pandemic. With no time to differ, other countries have established and implemented localized closures impacting millions of additional learners. Solely in Indonesia herein in Yogyakarta city mostly known as the city of education, about all students ranging from kindergarten to higher institutions are affected due to the COVID-19 strength. While it is still blurred and far away to predict how the pandemic will unfurl, the likelihood of extending restrictions on social distancing and curfews would persist.

In Indonesia like in many other developing countries, a substantial portion of the population doesn't have ample access to the internet and electronic devices (Summaries, 2019) and (PISA, 2018). And even people who are supposed to have access to the internet undergo an infrastructural divide (The World Bank, 2020). The infrastructural gulf can be viewed through several circumstances, including the discrepancy of internet stability and speeds in different regions of the country. In tandem, despite internet issues and electronic devices, the availability of public electricity or accessibility of electricity in residences is also critical. People in the downtowns are more likely to enjoy significantly faster internet compare to those living in remote areas (Vichit-vadakan, 2020). With the learning or working from home system, most people feeling so far, buying data packages either on mobile networks or computers, their quality to perform well depends mostly on the personal financial capability and budget. That said that is relatively varying within learners and families they live in. For some, the faster internet bundles are deemed far more expensive for students to afford regularly even though some universities had started to giving hands in such acts but complaints and constraints are often heard.

So far Indonesia is counted among Asian countries with many private and state/public universities with a sizeable number of programs and students from around the world (Welch, 2007). Because of the presence of coronavirus, these programs and students are being delivered or offered online. The proliferation of online educational leadership programs has created new for schools and students and thus has enhanced competition among schools and programs. However, attention to student satisfaction especially during this new online learning environment is more crucial than ever, (Chernyayeva et al., 2009). (Strong, 2012) stated that with online learning, some key elements related to student satisfaction appear to be course structure and design. In this respect, a survey handed over to teachers in 28 institutions in America, (Choy et al., 2002) revealed that of 201 response, the services which were expected by students from schools and teachers were outlined as follows: 1) concise and detailed information about what is mandatory for the student to complete at the end of a structured module/course; 2) detailed course information; 3) personal details on the tertiary university database security; 4) clear instructional statements of what is required to acquire; 5) prompt and helpful interaction as teachers' feedback; 6) assessment requirements applied for all students; 7) virtual and smooth communication between teachers and learners with different communicative means; 8) timely response/reaction from teachers; 9) complete directives on whom to approach and ask for help; and 10) information on how to register. After these latter findings, the research conducted follow-up interviews in the wake of trying to find others influential elements or factors to drive student's satisfaction. In their opinions, three key areas were perceived by students as being essential, namely regular contact with teachers, quick response from instructors, without forgetting regular support for learning. Apart from that, improving teacher's satisfaction and technical system were also reported by students. Despite results audited in this preceding section, in 1999, (Hara & Kling, 1999) a qualitative study carried out of an online graduate course enrolling six students in master's programs, their findings were in the line with (Samarawickrema, 2005) who found that the lack of prompt feedback, technical hindrances, along with ambiguous course instructions bred student frustration and dissatisfaction.

Further, a study comparing two parts of a graduate student course, one with a conventional approach and the other one with online, (de la Varre et al., 2014) noted that more students taking the online course found the courses to be better than expected. However, few of them found the online course taken to be less than they expected. Among major difficulties and concerns raised by students, technological issues, inadequate group participation by their classmates were repeatedly reported. As course design and structure found by (Gopal et al., 2021) to impact students' satisfaction with online courses, a comparative study executed by (Arias et al., 2018) between online and face-to-face courses, suggested that students completion rates are partial/total influenced by subject matter. In the follow-up research, (Bailie, 2015) and (Rosenfelt's study 2005) investigated and compared student achievement and completion rates and online learning by the same instructors, and student achievement was determined by final course grades, and data was tested by employing an independent two-sample t-test. In the meantime, the mediating effect of the subject matter such as student age, race, gender, academic background namely previous college or university was scrutinized. By using a sample of 796 students in their studies, completion rates were calculated using a two-sample z-test whereas ANOVA was recalled in verifying the impact of subject matter, age, race, gender, and previous institutions on student achievement. After addressing all data gathered, the authors found that there was no statistical difference in student achievement with either delivery form (online or face-to-face teaching approach). However, their findings showed that completion rates and conventional courses teaching, a significant difference was reported compared to those in remote learning courses. In fact, for them, subject matter area was found to be a variable with the great-

est mediating effect on school achievement and completion rates between the two delivery methods.

But then, according to (Mohamad et al., 2020), in higher institutions, the sense of student satisfaction is determined by a better interaction between professors and students. In tandem, the same authors noted that this bond between them may be even more complicated when a group or team project is served online. By using narrative pedagogy, it is a great occasion where teachers shared and explained their working experiences of supporting and participating to students' knowing and linking with each other in online courses. In online teaching, teachers employed practices that set limits and rules and reassured treatment fair of group members. (Stutsky, 2009) stated that in online learning, some faculty made a special extra effort to become a supportive presence in learner-to-learner knowing and connecting by stressing students' accountability to their groups. According to them, such act was accomplished by posting/sharing course contents in form of notes, sending e-mail, and most importantly partaking in discussion boards.

Mcgrath & Kraus, (1998) conducted research regarding school administrator and faculty reactions/responses to online learning through a case study involving the development of an online learning initiative for the State University of the New York system shortened as SUNY. As participants in such study, decision-makers, proposal authors, and faculty were invited to participate in unstructured interviews proposed and designed by the author in collaboration with experts. The author's concern was to search for whether there are similarities or dissimilarities in the responses collected between institutions, faculty, and administrators by emerging patterns. After doing that, Kraus reported that this growing form of postsecondary instruction may be affecting a cultural change in higher education. These changes predicted to change during university education will mainly consist of how teachers instruct and how students acquire knowledge, as well as how they interact with each other (teacher-student or student-student). As a conclusion drawn, the researcher said that universities cannot decline this new, swapping, and extending marketplace although online education will not be totally a replacement for face-to-face knowledge delivery.

Last not least, peer interaction, faculty-student interaction, and a sense of intellectual stimulation of both the student and the learner's peers were found by (Turley & Graham, 2019) related to student satisfaction at the graduate level. Diekelmann & Mendias, (2005); Rosenfeld, (2005) have also found these characteristics of students' satisfaction in studies of online courses at both the undergrad and graduate level. Some researchers with online course experi-

ences also recapped some issues that, if addressed, could have a major impact and foster student satisfaction. Some of which included time management, helpful communication with the educators, clear instructions regarding course expectations, student assignments, and requirements, support to enrolment as well as data security (Khan et al., 2017, Hara & Kling, 1999). Despite means and ways noted for some researchers that ensure student satisfaction with distance learning, to our better knowledge, data are still needed to reveal student's satisfaction with online learning especially during the coronavirus pandemic at the graduate level.

In the context of Yogyakarta schools, the practice of learning from home is still new to many colleges (high school teachers, lecturers, and students) and also there is not enough proof yet that guarantees good access to electricity and internet service, and other reliable academic materials for all. So, this survey was carried out to access partially some major problems faced by students during online learning and determine their level of satisfaction with the learning from home system.

Among 49 students who willingly partook in this study as respondents, the majority of them were of age group 21-30 years where the prevalent number of them was female 40 individuals of 49 in total or 81.6% and male 9 people or 18.36 from the total. This quantitative study employed a questionnaire, which the items used to measure resources availability and well-operating tools (6 items), instructor support & interaction (6 items adapted from (Navarro-Rivera & Kosmin, 2013); Cole et al., 2014), lesson quality, and quality of delivery (7 items), assessment mechanism, (4 items of (Nguyen & Walker, 2016)&(Sahidin, 2018), teaching methods (5 items); learning environment (3 items Gunawardena & Zittle, 1998), satisfaction (4 items of (Nguyen, 2016) adapted from previous studies and pieces of literature.

Information about Respondents

Table 1. The attitude of respondents towards teachers, activities/problems regarding learning from home

Statement	Yes n (%)	No n (%)
I enjoy taking a class from home than from school	21 (42.85%)	28 (57.14%)
I am glad to be updated with the digital technology used for taking a class from home.	47 (95.91%)	2 (4.08%)
Online class saves my travel cost, as I do no travel from home to school.	49 (100%)	0 (0%)
I control the principle of using automated media (social media indeed).	36 (73.46%)	13 (26.53%)
I can access and use the internet easily (download files research, books, article, learning materials…).	26 (53.06%)	23 (46.93%)
I can easily access the university's digital platform, (Google classroom, zoom conference, Be smart, digital library, etc.).	32 (65.30%)	17 (34.69%)
I have a fixed internet subscription during the corona pandemic for learning from home and for other related academic activities.	11 (22.44%)	38 (77.55%)
Multiple Choice Statements		
How did/do you get online lessons during the learning from home period?	Through the university's digital platform.	45 (91.83%)
	By means of social media	0 (0%)
	By a colleague (classmate)	4 (8.16%)
I did not sometimes use the digital platform to follow my lessons because;	I do not own a private updated computer	11 (22.44%)
	I do not own a suitable smartphone	3 (6.12%)
	Internet flow is weak/unstable	43 (87.75%)
	I do not have the Internet at home	18 (36.73%)

This table above illustrates the level of students' feelings while taking the learning from home. It also depicts the problems/ activities of respondents towards online learning where only 22.44 % of the respondents admitted to having a good quality of internet access for their online class at their home. However, more than half of the respondents (77.55%) got disturbed by their online class because of internet problems. So, the major issues students reported are chiefly related to the quality of the internet as a mandatory element during learning even though some others reported that their devices are not compatibles with some mandatory software and documents students should install and have.

Table 2. Age Group and Sex of Respondents

| | Frequency | Percentage | Gender | |
			Male	Female
<=20	0	0%	0 (0%)	0 (%)
21-30	45	91%	8 (16,3%)	37 (75.5%)
31-40	4	8.1%	1 (2.04%)	3 (6.12%)
>40	0	0%	0 (0%)	0 (0%)

Items Verifications/testing
Table 3. The Reliability

Variables	Items	Reliability
Resources Availability and well-operating Tools	6	0.855
Instructor support & interaction	6	0.913
Lesson Quality and quality of delivery	7	0.903
Assessment Mechanism	4	0.892
Teaching Method	5	0.921
Learning Environment	3	0.947
Satisfaction	4	0.970
Completed instruments used	**35**	**0.981**

Table 4. Mean Scores of Subscales Variables

| Variables | Sample | |
	Mean	CV
Resources Availability and well-operating Tools	3.70	.23
Instructor support & interaction	3.65	.24
Lesson Quality and quality of delivery	3.72	.23
Assessment Mechanism	3.50	.28
Teaching Method	3.72	.24
Learning Environment	3.74	.23
Satisfaction	3.76	.22

The questionnaire used consisted of seven subscales and used 05-point Likert scale as schematized as follows:

Table 5. The score of each Point of the Likert Scare employed

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The substantial results of the research were discussed in detail based on the questions /statements that were provided. The study aimed to investigate student's satisfaction with the learning from home system induced by the COVID-19 and courses they have taken in the biology master's program at Yogyakarta State University. Data from the questionnaire were coded, then analyzed by the use of SPSS software 26th version. This software was employed to excellent reliability among multiple measures of variables of the research. During the data collection, 41 items questions of 5-point Likert scare were administrated to the respondents, where 35 statements were valid.

Age and Gender Distribution of Participants
Table 2 recaps the number of males and females along with their ages. It is encouraging that over 80% of the participants were females and younger between 21-30 years of age. Not only in this study, but the number of females in all walks of life in Indonesia is also increasing and higher than males.

Reliability of the Entire Instruments Used
Table 3. portrays to what extent is the reliability of the entire instruments employed. There were 05 Likert subscales for 7 dimensions. The questionnaire consisted of 41 items in all but only 35 items were used during calculating/testing the item's reliability. Cronbach's Alpha reliability was recorded for each subscale ranging from 0.855 to 0.970, and overall reliability of 0.981 shows that the instrument yielded consistent since reliability is accepted when the Cronbach's Alpha is greater than 0.70 even some works of literature suggesting the value of alfa below 0.70. Cronbach's alpha is a statistic scales commonly quoted by different authors to determine the state of tests and is known as 'one of the most important and pervasive statistics in research. According to (Taber, 2018) and (Sharma, 2016), Cronbach's alpha involving chiefly tests construction and use to the extent that its employment in any research with multiple-item measurements.

Resources Availability and well-Operating Tools
Learning resources dimension and operating tools refer to availability, utility, and relevance, text, software, videos together with some other form of materials recommended by the university or lecturers in the online courses to help students meet the required expectations of learning. A mean of 3.70 shows that students are satisfied with the learning resources available during this contemporary period of their learning from the home system.

Instructor Support & Interaction
The instructor is any educator who is devoted to providing guidance and mentoring to the students via different means of communication like moderated discussion boards (MDBs), emails even with other means of assistance learners might need. Based on the data yielded, seems like students were highly satisfied by the available instructor support and interaction anytime they ask for help. The highest mean score of 3.65 of all dimensions shows that lecturers and other academic staff are doing well to provide ample and satisfying support during this dire moment of learning from home.

Lesson Quality and Quality of Delivery

A substantial part of students perceived that learning from home was a very good option and a useful method to use when physical interaction is not allowed. A mean score of 3.72 and a cumulative variance of .23 have been recorded from their responses. Overall, with that mean score, it shows students' high satisfaction with this dimension.

Assessment Mechanism

It's a multi-faceted process consisting of different types of academic assessments like formative and summative assessments which include daily assignments, learning projects (power tests), quizzes, graded discussions or presentations as well as mid and final exams. Reasonably, moderate mean scores of 3.50 show that they are quite satisfied by the evaluation of their lecturer even though a few of them complaining that the assignments given are beyond their capability.

Teaching Method

Given on teaching method for online instructors, four different roles are identified such as pedagogical, social, managerial, and technical responsibilities (Berge, 1995), (Yuksel, 2009). Pedagogical roles simply stand for the teaching methods, whereas social roles to the ways that instructors establish social relationships with the students. As far as managerial roles are concerned, it refers to administrative and organizational tasks, while technical responsibilities talking about technical support that lecturers provide for students to easing and nurture knowledge. To examine online teaching methods, this study focused on the pedagogical roles of instructors in the online asynchronous discussion boards, which are the most popular platforms and used to maintain pedagogical roles in online settings (Kebritchi, 2014). A mean score of 3.72 shows students' high satisfaction with teaching methods mostly used by their teachers during learning from their homes.

Learning Environment

It is broadly understood as teaching and mentoring methodology, perceptions regarding online learning environment, availability of different teaching and learning media for both sides (teachers and students). After addressing data related to this dimension, a high score of 3.74 was gained on this dimension which implicates that students do appreciate the availability, flexibility, and utility of online resources as teaching media during their virtual learning from their home.

Satisfaction

Through 4 items administrated to respondents asking the level of satisfaction of online learning. This has yielded the highest mean of 3.76, that said, students are quite satisfied with the system and they consider it effective so far.

CONCLUSION

So far determining the level of students' satisfaction in online learning could be evaluated by different means. However, in our study it was appraised based on some selected criteria namely resources availability and well-operating tools; instructor support & interaction; lesson quality and quality of delivery; assessment mechanism; teaching method; learning environment and satisfaction itself. By employing 49 students as the sample size, 81% of them were female against 19% of males in which the majority of them belonged to 21-30 years of age. Given the items validity used through subscales attributed, all felt in the high category, which substantiated the reliability of instruments. The survey data have shown that the students were contented and determined with the new learning system by showing a sense of satisfaction in all aspects deemed to show off the level of their satisfaction. Hence, our findings imply that, there is a plethora of evidence that indicating a speedy advancement of the level of technology and its positive influences as well as contribution in online learning. Successful and effective virtual learning is mainly dependent on how learning resources are available along with the well-operating tools/devices for both sides. The interaction between the student and professor, lesson quality, teaching methods, assessment means constitute outstanding factors to explore the level of satisfaction within learners. Despite being facilitators in discussions either individually or within groups especially during assignment or classroom presentations teachers are also required to willingly respond to the questions asked by students, design assignments, and assessing them.

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Adaptive Curriculum for Tutors Training Program to Enhance Pedagogical Competency in Indonesia

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Abstract. This paper documents the design and evaluation of an adaptive training curriculum document for tutors in tuition center. The aim of this study is (1) to develop adaptive curriculum model for tutors in tuition center to enhance pedagogical competency, (2) to organize adaptive curriculum model for tutors in tuition center to enhance pedagogical competency, (3) to evaluate curriculum model for tutors in tuition center to enhance pedagogical competency. This research used research and development method by Sugiyono and curriculum development model by Hilda Taba. Data collection method of this research were questionnaire, structured interview and direct observation. Validation technics used in this research are validation by experts. According to the result; (1) based on need analysis, curriculum model needed for tutors consist of seven main subjects, (2) the organization used is adaptive separated curriculum, (3) according to the validation, adaptive curriculum model for tutors in tuition center to enhance pedagogical competency is proper to apply. This research and development result showed that there are seven sub competencies should be in tutors training program curriculum to enhance pedagogical competency. This research provides contribution of curriculum in form of synthesis study of adaptive curriculum document in Indonesian subjects of tutors training program.

Key words: curriculum development; tutors; pedagogical; adaptive curriculum

INTRODUCTION

Tutors training program has been conducted by tuition center in Indonesia individually. Teacher training for tutors' need is recognized by owners of tuition center, whom take this challenge positively and create their own tutors training program. Teacher training held by tuition center are intended for tutors and prospective tutors who work in the tuition center. However, the existed curriculum tutors training program is unintegrated which caused by the unavailability of structured curriculum for tutors training program. Otherwise, the program has proven succeeded to enhance tutors' pedagogic competencies (Ramadhani, Sumaryanto, & Utanto, 2020). Especially for tutors who are not from educational program, they usually do not have experience about pedagogical competencies. They only understand the material without knowing how to explain to students. Therefore, tutors training program has a great need to focus on enhancing pedagogical competencies to conduct meaningful learning in tuition center.

The existed tutors training program can become a solid foundation to create curriculum for tutors training program in tuition center. This study followed research of A Portrait of Teacher Training Program for Tutors in Tuition Center in Indonesia (Ramadhani, Sumaryanto, & Utanto, 2020), in the study, existed program of tutors training program in a tuition center is described into three simple steps. In this

study conducted in the same tuition center explained that the existed program is successfully enhance the understanding of teaching in tuition center.

In the first step, introduction to standard operational procedure, trainees are given information about basic information about tuition centre, introduced to people and the working system in the tuition centre. The second step is observation, trainees were asked to join classes conducted by senior tutors to do observation of live teaching process. The third is teaching practice, trainees were given a chance to conduct their own teaching class or group to apply what they have learned from training program and during the process, a senior tutor will supervise and give comments about the learning process conducted by trainees. These three steps in the training program are designed to enhance pedagogical competency in the tuition centre which later on will be used by tutors to conduct meaningful learning (Jaquette, 2018).

Pedagogical knowledge is necessary for teachers and also tutors to conduct meaningful learning. Pedagogic is an art and a knowledge about principles, learning rules, managing learning environment, learning style and facilities (Sulaiman, 2004). Generally pedagogical competency is how a teacher manage learning process including how to understand students, design learning plan and execute, evaluate and help students to develop (Khofiatun, 2016; Simamora, 2015; Prasetyo, 2015; Babuta, 2019). Pedagogical competency is one of the key competencies in a

teacher to be able to lead a meaningful learning process. Pedagogical competency usually required in formal teacher to conduct meaningful learning in class. The importance of pedagogical competencies also needed for tutor in tuition center to enhance students' achievement. The previous study in correlation between pedagogical competency and student's achievement showed that a teacher with high knowledge of pedagogical competency proven able to enhance class achievement (Sulfemi, 2017).

Pedagogic competencies of formal teacher are different from tutor in tuition center. Due to the different learning purpose between formal and tutors in tuition center (nonformal teacher). In Indonesia as mentioned in law number 20, year 2003, the purpose of national education is; (1) to develop student's potency to become religious and devoted to God, (2) has noble character, healthy, given knowledge, clever, creative, independence, democratic citizen and, (3) liable person. In the other side, the purpose of tuition center is to help students to develop their potency and help them to solve difficulties from formal education (Fauziah, Aini, & Jalius, 2018). In Indonesia, according to the Government Policy 74 number 19, year 2005 about teacher's competency there are eight pedagogic competencies that a teacher required to have. Those are; 1) understanding of education knowledge and foundation, 2) student's understanding, 3) curriculum and syllabus development, 4) learning design, 5) the ability to create ideologic and successful learning, 6) educational technology uses, 7) learning evaluation, and 8) the ability to develop students in order to enhance student's potency. Those eights competencies are designed according to formal teachers' need and purpose in teaching.

Curriculum development, as a process, continually renew or develop to find more effective way to achieve learning purpose, either by creating a new or by improving existed curriculum. The concept of curriculum has been conducted by experts to help them to find a good system in conducting learning process, including curriculum competency-based (McBride, 2017). One of curriculum development model is curriculum development from Hilda Taba which divided steps in developing curriculum into four steps which are; identification curriculum purpose, identification experiences needed, organization of the curriculum and curriculum evaluation (Lismina, 2017). The most important step in developing curriculum is the need analysis, it is very necessary to see what needs to be in the curriculum from all the stake holders, mostly the students so that the curriculum can be designed suitable for the learning and able to achieve the learning purpose (Asrizal, 2017; Ummah, 2018; Irawati, 2018). In curriculum development, many experts suggested that a curriculum design should see the need of students from the need in the past, current situation and future needs (Garraway, 2016). This study will focus on document curriculum needed for tutors in tuition center to enhance pedagogical competencies based on past, current and future situation.

Past situation used in this study is applied training program in the tuition center from previous study, A Portrait of Teacher Training Program for Tutors in Tuition Center in Indonesia (Ramadhani, Sumaryanto, & Utanto, 2020). Three basic steps as explained in the study will be used as the main material and organization of the curriculum document. Current situation will be seen from the Government Policy 74 number 19, year 2005 as main eight pedagogical competencies which will be used as the foundation to conduct need analysis towards the students in tuition center to see the need of tuition center tutors so that specified pedagogical competencies can be designed suitable for tutors in tuition center. Future's need in this curriculum document will be seen from literature source and journal articles that suitable for document curriculum for tutors in tuition center.

Nowadays training curriculum should be designed to help trainee to gain information easily. Therefore, the use of technology in a curriculum will able to help to design curriculum which deliver material easily. One of the learning designs which combine virtual learning and direct learning is blended learning. Blended learning provides more freedom for trainees to access material depends on trainee's need (Chaplowe & Cousins, 2016). The use of blended learning can be decided by considering the need analysis of the program. Therefore, in this study also will be identified which organization of curriculum will be suitable for tutors, whether it needs to be designed as blended learning or not. The need of blended learning in education program can be diagnosed by three situations, (1) original pedagogical problems, (2) learning literatures and pedagogical foundation, (3) repetitions design compares to summative evaluation (Cutri & Whiting, 2018). Therefore, this study blended learning will be used to deliver material for tutors training curriculum program in tuition center.

Furthermore, the future need of this curriculum design also expected to be able to fulfil the need of skills in tutors which has different ability and experience (Ramadhani, Sumaryanto, & Utanto, 2020). Therefore, to design blended learning that able to be adjusted depends on the need of different education background and skills, adaptive curriculum is a suitable to apply where there are different needs of students. Adaptive curriculum is a curriculum which able to be adjusted depends on students need (Railean, 2019). Adaptive curriculum sees students as different individuals with each needs and abilities,

therefore the need of materials also different in each student. The use of adaptive curriculum is considered based on the dynamic change of learning in certain education program. The use of adaptive curriculum will help students to achieve highest achievement through balancing summative and formative assessment (Carney, Mejicano, Bumsted, & Quirk, 2018).

The developing of tutors training program also suggested to design based on andragogy theories. This because tutors are grown up people, which has different learning need from children. Training held for adults should add experience inside the process, conducting understanding concept and make sure readiness of the participants (Yuse, 2018). More specific, the process of learning based on andragogy theory should pay attention to, (1) adults already have self-concept, (2) adults have experience, (3) adults have readiness to learn, (4) adults want to apply what they learn directly, and (5) adults will learn better if involve physical and mental activities (Sudjana, 2007).

METHOD

This research used mixed method of five stages research and development method adapted from Sugiyono level three to analyze the existed program and improve it to create better product. Curriculum development model used in this study is Hilda Taba. This study conducted into three stage. First is need analysis which conducted used questionnaires given to students in tuition center. Second is curriculum development based on Hilda Taba, the implementation of curriculum development model is divided into four stages, identification of curriculum purpose, identification required experiences, identification of curriculum organization and curriculum evaluation. In development stage, a curriculum development is compiled based on the need analysis and previous study which focus on developing three simple stages of tutors training program into a complete curriculum document. Third stage is curriculum document evaluation done by experts. The subject of this study was students, tutors and owner of a tuition center, Bimbel Variasi in Semarang, Indonesia. The number of research subjects are 18 students, 12 tutors and the owner in the tuition center. Data in this research is gathered used questionnaire, interview and direct observations. The validation of this research is expert validation.

Need Analysis

The impetus for developing the integrated curriculum document of tutor training program was to advance the tutors training program in tuition center of fundamental pedagogical technique and concepts to increase the service for partner tuition center. In developing this curriculum document, it was also important to conduct need analysis to determine the extent to which it would meeting its goals. Need analysis in this research is conducted based on eight competencies In Indonesia, according to the Government Policy 74 number 19, year 2005 about teacher's competency which are; 1) the understanding of education knowledge and foundation, 2) student's understanding, 3) curriculum and syllabus development, 4) learning design, 5) the ability to create ideologic and successful learning, 6) educational technology uses, 7) learning evaluation, and 8) the ability to develop students in order to enhance student's potency. The eight competencies further more become the foundation of the questionnaires to see which the competencies suitable for tutors in tuition center. This research used student's opinion to decide which competencies they think will help students to gain better lesson in tuition center.

Tuition Center

This study has focused on one tuition center to design curriculum document to enhance tutor's pedagogical knowledge. The tuition center is picked based on previous study in the same tuition center. In this particular tuition center, tutors used small group method and semi personal approach in their learning process. Small group method means that the class or group only consist 2 - 4 students, however big challenged must be faced by tutors due to in one group consist 2 - 4 students with different levels. Semi personal approach is used in the learning process due to learning group consists different levels, therefore, a tutor has to ask, teach and follow up each student individually. In learning process tutors only need to explain the materials which students faced difficulties and school homework. Tutors is not obligate to prepare learning material before in order to conduct learning process, unless in certain rare occasion, tutors has to make learning material and learning plan.

RESULTS AND DISCUSSION

Developing the Curriculum Document of Tutors Training Program in Tuition Center

Table 1. The Result of Need Analysis

Item	N	Min	Max	Mean	Item	N	Min	Max	Mean
1	18	2	2	2	13	18	1	2	1.8
2	18	2	2	2	14	18	2	2	2
3	18	2	2	2	15	18	2	2	2
4	18	1	2	1.5	16	18	1	2	1.8
5	18	1	2	1.9	17	18	1	2	1.8
6	18	1	2	1.8	18	18	1	2	1.9
7	18	1	2	1.7	19	18	1	2	1.9
8	18	1	2	1.7	20	18	1	2	1.7
9	18	1	2	1.3	21	18	1	2	1.6
10	18	1	2	1.9	22	18	1	2	1.5
11	18	1	2	1.9	23	18	1	2	1.9
12	18	2	2	2	24	18	1	2	1.8

In this step, need analysis is conducted to identify curriculum purpose and required experiences which suitable for the curriculum document. In the questionnaire the respondents are students in tuition center to identify suitable pedagogic competencies for tutors to teach students in tuition center. Based on Table 1, this study carried out eight pedagogic based on Government Policy 74 number 19, year 2005 about teacher's competency into 24 questions. The data is processed by descriptive analysis to identify mean number of each questions. Table 1 shows there are only three statement where students did not think it was necessary in tutor to help them solving problems from school.

This curriculum development followed Hilda Taba curriculum development model. Step by step has been carried out according to development needs. All stages of this curriculum development were very important and one of the stages was the need analysis stage, which was the identifying of learning experiences and competencies needed in the curriculum. According to many experts, pedagogical competency is how a teacher manage learning process including how to understand students, design learning plan and execute, evaluate and help students to develop (Khofiatun, 2016; Simamora, 2015; Prasetyo, 2015; Babuta, 2019). In this curriculum development, the competencies are adapted from the Government Policy 74 number 19, year 2005 about teacher's competency there are eight pedagogic competencies that a formal teacher requires to have. The result of the need analysis step shows that out of eight competencies required in formal teachers, tutors in tuition center only need seven of them as which are introduction to education knowledge, students understanding, developing syllabus, learning design and conducting lesson, education technology utilization, education evaluation, students developing, and teaching practice. The unnecessary competency is eighth competency,

the ability to develop students in order to enhance student's potency. Based on the findings, students in tuition center find it will not help them to resolve their problems from formal school.

Curriculum Development

Curriculum development in this study is conducted based on Hilda Taba, which are identification of curriculum purpose, identification required experiences, identification of curriculum organization and curriculum evaluation. As mentioned in the introduction section, the purpose of this curriculum is to create curriculum document to conduct tutors training program to enhance pedagogical knowledge and the required experience is identified using need analysis. In this step, required experiences are organized to create suitable organization for adaptive curriculum.

Table 2. Organization Based on Time Allocation

Subject	Time Allocation
Introduction to Education Knowledge	4 Hours
Students Understanding	6 Hours
Developing syllabus, Learning Design and Conducting Lesson	6 Hours
Education Technology Utilization	6 Hours
Education Evaluation	6 Hours
Students Developing	4 Hours
Teaching Practice	12 Hours

Table 2 shows the organization of seven material of pedagogical competencies based on time allocation which calculated according the importance of each materials. The longest of time allocation is given to the teaching practice material and the shortest time allocation is given to two subjects which are introduction to education knowledge and students developing. The amount of time allocation presented is the total time allocation. However, the application the time

allocation does not have to be conducted in the same day but also can be applied into several days depends on the necessary needs.

Second stage in curriculum development by Hilda Taba is curriculum organization. Adaptive curriculum is a curriculum which able to be adjusted depend on students need (Railean, 2019). Therefore, suitable curriculum organization for adaptive curriculum is separated curriculum which able to adjust student's need material. Organization of adaptive curriculum used separated curriculum which organize materials separated and not having any association between the materials (Majir, 2017). In this study, curriculum development is organized in separated curriculum based on time allocation by Gintings (2011). Table 2 shows the time allocation calculated based on the importance of the material that divided into three categories which are *Must Know, Should Know and Nice to Know* (Gintings, 2011).

The curriculum model of tutors training program will be focused on the document of the curriculum which divided into several parts, namely background of curriculum, relevant legal basis, vision, mission and purpose, curriculum structure, assessment, and attachment. After the process of making the curriculum document is complete, the curriculum document will then be reviewed by experts who will assess the suitability of the content and the validity of the media. Experts who assess learning media are curriculum experts and tuition center training experts.

Curriculum Evaluation by Curriculum Expert

Table 3. Curriculum Expert Validity Form

Category	Average Score	Criteria
Background of Curriculum	4,3	Excellent
Relevant Legal Basis	3,7	Good
Vision, Mission and Purpose	4,0	Excellent
Curriculum Structure	3,5	Good
Assessment	3,7	Good
Attachment	4,5	Excellent
Average	3,95	Good

Based on curriculum expert's evaluation result presented in Table 3 Get an average score of 3.95 with Good criteria. Furthermore, in the comments and suggestions section, the tuition center training expert wrote down the revision as their suggestions, then the tuition center training expert stated that the document curriculum was appropriate to be tested out with revision.

Material Evaluation by Tuition Centre Training Expert

Material evaluation by tuition center training expert was done after the curriculum document process has been completed and revised. The result data of material evaluation by curriculum expert are presented in the following Table 4:

Table 4. Tuition Center Training Expert Validity Form

Indicator	Criteria
a. The curriculum document is suitable to the needs and problems faced in the situation	Excellent
b. The purpose of the program is suitable to the needed competencies for trainees	Good
c. Training schedule stated and organized correctly in the document	Excellent
d. Background of the trainees are suitable to the program and competencies	Good
e. Method used is relevant to the trained competencies	Excellent
f. Media used is suitable to the needs	Good
g. The curriculum is able to facilitate the trainees to gain the competencies	Excellent
h. The curriculum able to give a good impression to the trainee	Good

Based on tuition center training expert presented in Table 3. Get an average score of 3.95 with Good criteria. Furthermore, in the comments and suggestions section, the tuition center training expert wrote down the revision as their suggestions, then the tuition center training expert stated that the document curriculum was appropriate to be tested out with revision.

Curriculum evaluation conducted not necessary to judge whether this curriculum is the good one or not. Kelly (2004) stated that curriculum evaluation should be more than to measure failure or success, it should provide deeper information for further curriculum development. Therefore, evaluation in this research pursue further evaluation focus on summative and formative decision. Summative evaluation conducted through evaluation scale used Likert scale judged by curriculum expert and tutors training expert. Based on the evaluation, development of document curriculum of tutors training program is considered as descent to be implied in real program. Formative evaluation in this curriculum evaluation is gained from open question to curriculum expert and tutors training expert which contain revision and advice which will be used as foundation to develop the curriculum.

Curriculum evaluation of this study is the first stage of curriculum evaluation. Therefore, the evaluation is conducted only for the final product before it

will be implemented in real life situation. Curriculum evaluation before implementation is really necessary before being implemented in real education learning process (Arifin, Ulfa, & Praherdiono, 2018). This stage of curriculum evaluation will produce the score to decide properness of curriculum.

The result must be interpreted in light of following limitations. This study only included very small number of participants in one tuition center, which may limit the generalization of the data. Tuition center where this study took place used semi private study group which only consisted 3-4 students, it may cannot be apply in tuition center with different type of learning form such as big classes or online class. This study also specified in learning process where only discuses basic school subject such as science, math and language, therefore there is a huge possibility that this study cannot be apply in different topic of learning discussion. There may be changes that occur over time, particularly in the need pedagogical competency, as students in tuition center require different learning over time.

CONCLUSION

This paper has documented the process of creating curriculum document for tutors training program in tuition center. Data was gathered from resources on students, teachers and owners to carry out a thorough needs analysis. This curriculum development studies has successfully carry out several important basics in developing curriculum document as foundation to create adaptive tutors training program for tutors in tuition center. Based on the need analysis, tutors in tuition center required seven pedagogic competencies to be able to conduct meaningful learning in tuition center. After developing the objectives, content and sequence, then the contents organized to suit tutors need of learning. This type of curriculum has been identified as adaptive curriculum by Heydon and Wang (2006), which organize curriculum separately on each material. This research resulted a curriculum document which support greater definition of curriculum, which believe that a curriculum is not only one path way instead multiple choices of learning process (Quirk & Chumley, 2018). In this curriculum development resulted separated materials which can be chosen based on students need and also can be accessed in many forms used blended learning provided. Furthermore, this study of curriculum development used time allocation by Gintings (2011) to organize separated curriculum based on time allocation needed. This separated curriculum based on time allocation is considered as suitable to be used in adaptive curriculum using blended learning.

Through training program, tutors in tuition center surely will advance their both technic and knowledge about pedagogical competency to conduct meaningful learning (Waltz, 2019). Evaluation on curriculum documents was conducted by experts to judge whether the documents are decent enough to be implemented in further study. The evaluation is come from curriculum expert and tutors training expert so that effective evaluation can be done. The result of the evaluation is expected to be more like suggestion, advice and critics so that the documents can be revised based on the judgement, formative evaluation. However, summative evaluation is also conducted to help to judge whether this document curriculum is able to be implemented after the revision. Based on the judgement, this document curriculum is decent and ready to be implemented so that further evaluation and development of curriculum for tutors in tuition center can be conducted. This curriculum development study believed that future training program conducted based on the resulted curriculum document can create successful program which able to enhance pedagogical competencies for tutors in tuition center. Therefore, this study is conducted in believe that if the curriculum is excellent and implemented in right and suitable process, the result of the program will be suits as the purpose of the curriculum.

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Management of Cakruk Pintar Community Library in Sleman District Yogyakarta

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Abstract. Management of Cakruk Pintar community library by using the management of the School Education program management. The purpose of this study was to determine: (1) program planning (2) program organization (3) program implementation (4) program supervision and (5) assessment of the Cakruk Pintar Community library program in Sleman Yogyakarta. This type of research is a qualitative descriptive study. The results showed 5 findings. First, the smart cakruk community library identifies the needs of the community in initiating program planning. Second, organizing the smart cakruk community library program is managed by professionals. Third, the implementation of the smart cakruk community library program went well. Fourth, the supervision of the community library program is in accordance with predetermined standards. Fifth, the assessment of the community library program is quite good with increasing enthusiasm of the community in participating in it.

Key words: management program, community library

INTRODUCTION

Non formal education programs are defined as activities that are planned in a planned manner and have goals, objectives, content and types of activities, implementation of activities, activity processes, time, facilities, tools, costs and other supporting resources (Sutarto, 2017; Melinda, 2019). Non formal Education education programs are defined as activities that are planned in a planned manner and have goals, objectives, content and types of activities, implementation of activities, activity processes, time, facilities, tools, costs and other supporting resources (Dawn, 2013). The management of an non formal education program is a way to achieve the goals of an non formal education program that have been set effectively and efficiently (Basri et al., 2018). Program management is carried out according to the target and can provide benefits for learning citizens. Program management is carried out according to the target and can provide benefits for learning citizens. (Sudjana, 2014) explained that educational management outside of school is an activity with or through other people, whether other people shortly to explain the management of school education is the joint activities or through others, whether the other person is an individual, or a group to achieve the purpose of your organization or institution outside of school education programs. Thus it is necessary to have a series of activities that must be carried out as an effort to manage the extramural education program, so that the objectives of the non formal education program can be achieved. (Hayati, 2020) Management of school education consists of functions that are sequential and the cycle of planning, organizing, scaling, coaching (monitoring, supervision and monitoring), assessment and development (Hayati & Suryono, 2015).

Nonformal education programs is the community library (community library) program. community library has been established in almost every region in Indonesia (Setyaningsih, 2021). This proves that the Indonesian people want to help the government to create a smart society, both academically and smartly in behavior. According to (Mostert & Vermeulen, 2014), the purpose of establishing community library (1) is to provide opportunities for people to read reading material so that it helps improve people's lives, (2) Provides a source of information that is fast, accurate and inexpensive for the community, (3) Helping the community to develop its potential so that it is useful for the surrounding community (this potential can be developed through reading material), and (4) Acting as a cultural agent , meaning that the public library is the main center of cultural life for the community. TBM has a role in provide service to public. Of course, this is necessary supported by all walks of life is around TBM. In addition, TBM is expected to improve the quality education in a better direction through providing learning facilities independent. "Public agencies will also promote nutritious food for thought (despite its relative unpopularity) for citizens and thereby nurture the public good (Staff of The Worthington Library, 2010) .TBM must have a col-

lection library and distribute on community as needed its people (Bakhtiyar & Fahriyah, 2020) .

According to (Arifin, F., & Marlini, 2017) Taman Bacaan Masyarakat is an institution or ser1vice unit of various reading material needs that are needed and useful for each person or group of people in the village or the TBM region to inc1rease reading interest and create a reading culture. Society tends to use information technology not to improve reading skills, interest in reading but for recreational things, enter-tain1ment that is less healthy or even for interests that disturb the stability of society (Oxenham, 2017). According to UNESCO in 2012, Indonesia's reading interest index had only reached 0.001. That is, in every 1,000 Indonesi1ans, there is only one person who has an interest in reading (Courtay, 2012). Community library is a a place that was deliberately created and managed by communities, individuals, institutions and governments to foster interest in read-ing community in the park the reading and the read-ing garden society is included in the category public Library (Martini, 2018).

The Community library a non-government devel-opment organization, was estab1lished with the mis-sion of delivering development in1formation to activ-ities and organizations committed to the promotion of sustainable development, gender equity, social jus-tice, human rights and community education (Islam, 2009). The community library gradually developed into a service organization addressing a wide range of development issues through its Central Library, Docu1mentation and Information Centre (CELDIC) in Dhaka, and 26 Rural Information Resource Centres (RIRCs) (including one Divisional Centre in Bogra and one in Khulna), research and publication, intern-ships and some other programmes (Rahman, S.T. and Baroi, 1999).

Community library that carry out the aforemen-tioned objectives are community library Cakruk Pin-tar. community library Cakruk Pintar is located in Nologaten Gg. Selada 106 A, rt 04 rw 01 Caturtung-gal Depok, Sleman Yogyakarta. community library was founded by Mr. Mukhsin Kalida with his wife Rumi Astuti. This smart cakruk community library has had many achievements, starting from the local scale to the national scale. In 2008, this community library was awarded the Creative community library version of the Library Science Department (UIN) Sunan Kalijaga Yogyakarta. In the same year, won the trust to send a team of choirs to the 100 PNF Jamboree in Semarang. In 2009 he received a visit from 33 provinces participating in the 1000 PTK-PNF jamboree. In 2010 received an award for the category of creative and recreational community li-brary from the Minister of National Education. In 2012 he won 2nd place in the DIY PTK_PNF Jambo-

ree. In 2016, the 1st winner in the Sleman Regency community library competition, and received an award from the Regent of Sleman.

Based on the results of an interview with Mr. Mukhsin Khalida who said that in order to improve the reading culture in Indonesia, the Government of the Ministry of Education and Culture (Kemendik-bud) is trying to encourage the emergence of commu-nity library in Indonesia. These efforts have succeed-ed in creating approximately 6000 community li-brarys that have been established in Indonesia, both locally and nationally. Meanwhile, the Special Re-gion of Yogyakarta alone amounts to 254 community library. But ironically, of the many community li-brarys, many community library are no longer operat-ing. There are many obstacles experienced by com-munity library managers, especially in terms of fund-ing. If the managers only depend on funding from the government, when the funds are no longer there, the community library they manage will also go out of business.

Based on the above problems, the researchers are interested in researching the Management of the Cakruk community library . The author's motivation for conducting this research was to determine the management of Cakruk Pintar community librarys that have succeeded in becoming outstanding com-munity librarys. This is important to do, as a refer-ence for other community librarys. The formulation of the problems in this study are: (1) How is the plan-ning of the Cakruk Pintar community library pro-gram? (2) How is the Cakruk Pintar community li-brary program organized? (3) How is the Cakruk Pintar community library program implemented? (4) How is the supervision of the Cakruk Pintar commu-nity library program and (5) How is the assessment of the Cakruk Pintar community library program in Sleman Yogyakarta Regency.

METHODS

This study uses a qualitative approach with de-scriptive methods because this research is intended to explain the events that occur in the present. This study aims to obtain an empirical picture of the man-agement of Cakruk Pintar community library in Sleman, Yogyakarta. According to (Saepudin, 2017) descriptive research is research that seeks to describe the specific details of situations, settings or social relations that take place within the scope of the re-search subject. In a qualitative descriptive approach, the information or data collected is formed from words, pictures, not numbers. If there are numbers, they are only as a support. This research was con-ducted at community library Cakruk Pintar, which in this study did not determine how long the study took.

The subjects selected in this study were about community library, community library managers, and visitors to community library Cakruk Pintar. There are several methods used in data collection. Date. First, observation through direct observation related to community library program management. Second, interviews were conducted with the chairman, managers, and visitors of the Cakruk Pintar community library. The steps taken in this study were the researchers began to look for the required data through observation using observation guidelines as a research tool. Furthermore, the researcher conducted interviews with the chairman, manager, and visitors, then the data was processed into a transcript of the interview. The interview transcript was included in the form of a quote in the sentence to confirm the authenticity of the research. The next stage, the data that the researcher obtained from the results of the observations were checked on the research subject and linked to the literature used.

RESULTS AND DISCUSSION

Planning Program

(Downes, 2000) which states that planning is absolute must exist in an organization including long term planning and intermediate as well short term planning. Long and mediumterm plans are designed to meet broader organizational goals. The short term plan outlines more detailed how long term plans will be achieved (Isna Firdha Rahamawati, Cicilia Dyah Sulistyaningrum, 2019) .

Programs held at community library Cakruk Pintar are literacy activities (writing, storytelling), skills activities, fish farming activities, creative games (traditional games), and outbound activities. In addition, community library Cakruk Pintar is also a visiting center for literacy activists in Indonesia. The questions posed to the chairman and manager are the same, as many as 28 questions. While the questions asked to participants or visitors to community library were 22 questions. The Constitutional Court further explained the program of activities in community library Cakruk Pintar, he revealed.

There are three main activities of community library Cakruk Pintar, namely community economic empowerment by constructing 9 fish ponds, making snack market snacks, empowering human resources, empowering the environment. Turning TPA into water tourism and fishing grounds. These three main activities are called tridaya. We also have tourism activities, including fishing together with the community and doing outbound activities. 2 months ago we just did an outbound ". In creating an activity program, the joint chairperson of the management pays attention to the needs of the community around

the community library. This was expressed by RH as one of the managers in community library Cakruk Pintar, he said, "We carry out these activities after we read their needs. In fact, we involve the community to buy books, even though it is only a representative, we still invite them (Soedijarto, 2006) . Knowing the needs of the community is the main requirement in non-formal education. The real concept of non-formal education itself is "From the community, by the community, and for the community" (Sulfemi, 2019) (Islam, 2009) (Rashid, 2000). According to research results (Islam, 2009) community reading library have had a positive impact on people through workshops, seminars and study circles. The collection and dissemination of development resource materials on other countries encourages users in understanding and participating in development activities. Apart from this, information services like the news clippings, compilations and current awareness services also infl uence policy development. In particular, develop1ment workers are improving their quality of work by using the information services. Community people are being informed through TBM borne diseases and disability issues and now they are determined to stand against all unjust situations programmes about many social and environmental problems like climate change, women's education, early marriage. The facts in the field relating to non-formal education programs need to be explored further through research to determine which programs are currently running or implemented well and are on target.

Accordingly, it is necessary to complete an analysis of needs to be studied more deeply to obtain data and information. Furthermore, it is also to determine whether non-formal education programs are right on target and identify their usefulness or role to the community. Non-formal education activities focus more on training to develop the community's skills (Fakhruddin & Shofwan, 2019). Community participation in participating in activities at community library Cakruk Pintar can be said to be quite high, this can be seen from the presence of visitors everyday.

From the results of the interview, it can be concluded that Cakruk Pintar community library activities are carried out based on community needs. By first identifying the needs of the community. After knowing the needs of the community, the joint chairman of the management will find it easier to formulate activities to be carried out. By carrying out program activities based on community needs, community participation in participating in these activities is quite high. The objective of the activity program is to be the main yardstick in determining the success of a program. The co-chair of the manager first formulates the program objectives to be achieved. The for-

mulation of goals in community library Cakruk Pintar is also carried out in conjunction with the grouping of needs that have been done.

Organizing The Program

According to (Rahayu & Fakhruddin, 2019) in the International Journal of Advances in Social Science, Education and Humanities Research (ASSEHR), that: With the exixtence of the leadership that is able to influence and mobilize all of education resources (human and non- human resources) is predicated can spur and simultaneously trigger the attainment of quality of education learning equality. In other other words, the availability of educational resources may not be able to be utilized optimally without any leader who is able motivate, here it is the importance of educational leadership in achieving the quality of education (Rahayu & Fakhruddin, 2019).

The organization of the Cakruk Pintar community library program has a diverse structure with different educational backgrounds. The establishment of an organizational structure in community library Cakruk Pintar with the aim that each section focuses on their respective fields. Each section is assigned to carry out what has become part of it. However, technically, the implementation of activities is carried out jointly by the managers and assisted by the community. There is a description of the duties of each structure in community library Cakruk Pintar, from this data it shows that the organization of the community library Program has been carried out well. This condition shows the managerial ability of the head of community library. The management of Cakruk Pintar community library is more dominated by the kinship system / family ties.

Implementation Program

Within the framework of implementing management in a program education in improving the quality of education and the quality of human resources, the education system must always orientate itself to respond to the needs and challenges that arise in society as a logical consequence of change (Sumadi & Ma'ruf, 2020). Development that has been going so fast in the last few decades has led Indonesia to the ranks of the countries called NICS (New Industries Countries) or new industrial countries. Although Indonesia has made such progress, development is certainly far from complete. On the contrary, Indonesia must increasingly increase its development momentum (Sumadi & Ma'ruf, 2020) Community development, in essence, is building a community through sustainable physical and non-physical fields. Sustainability, arguably, is one of the strongest principles of modern life. From an environmental point of view, society is increasing-

ly adding value to sustainable technology, processes and products (Vivoda & Kemp, 2019). This relates to the physical field regarding the construction of facilities and infrastructure, such as highways, and so on. Whereas, it is related to the non-physical fields in the form of education, health, and economy for a better life. In carrying out community development, it is necessary to prioritise efforts, namely in the fields of education and the economy in improving people's welfare (Fakhruddin & Shofwan, 2019). The description of the implementation of the Cakruk Pintar community library program in this study includes participant characteristics, manager characteristics, funding, infrastructure, learning atmosphere, schedule, participant activities, and manager activities (Isti Indriyani, Tri Joko Raharjo, 2017). The last education level of regular visitors to community library Cakruk Pintar is generally low. The socio-economic level of the community in general is middle to lower socio-economy. Regular visitors of Cakruk Pintar community library are dominated by children and adolescents. Meanwhile, the gender of visitors who come is dominated by women. Most of the managers of Cakruk Pintar community library are high school graduates, and a small proportion are undergraduate and master degrees. The managers of community library Cakruk Pintar are recruited based on the manager's own wishes. However, in this case, the manager is only present when program activities are taking place. Community library Cakruk Pintar does not have a daily picket schedule, so this manager is only incidental to a sense of volunteerism.

The source of funds for the community library Cakruk Pintar program comes from two sources, namely funds from the government and independent funds from community library Cakruk Pintar itself. However, the funds obtained from the government are not continuous. Most of the funds used by community library Cakruk Pintar are independent funds originating from the sale of books published by Cakruk Publishing. This was expressed by the Constitutional Court as the manager of community library Cakruk Pintar, "Funds for activities we take are based on the sales of books made by the smart cakruk writing team ". community library Cakruk Pintar has adequate infrastructure in the process of activities. There are approximately 4000 books available at community library Cakruk Pintar. This is fluctuating, because usually old books that have been read will be " rolled " at the community library pioneering Cakruk Pintar. The books available at community library Cakruk Pintar always change every year. This is in accordance with what was said by RH as the manager of community library Cakruk Pintar, he said . Approximately 4000 books. But it fluctuates, but we

usually roll the book to our community library. I don't want too many books here, so we will roll the old books that have been read to other community library.

Community library Cakruk Pintar designs learning places as attractive as possible. the manager together with the manager builds Cakruk as the center of activities. All activities are centered on the cakruk which is built on the banks of the Gajah Wong river. Previously, reading books in community library were centered in Cakruk because for various reasons they were moved to the terrace of the house of the community library manager and founder, which is located opposite Cakruk. However, other learning activities such as skills and other empowerment are still centered on Cakruk. The learning atmosphere in the community library Cakruk Pintar environment is felt comfortable by visitors, this was expressed by PNY, "The place is comfortable, mba, because the cakruk is also spacious. Want to make any activity enjoyable (page 323) " . The confession of a visitor and participant of community library Cakruk Pintar can illustrate a conducive learning atmosphere in the learning process. The schedule of activities carried out in the Cakruk Pintar community library program is discussed first to the participants who take part in the activity.

Activities of participants who took part in community library activities at community library Cakruk Pintar went well. The participants who participated looked excited and enthusiastic. Participants also follow the process of implementing activities in accordance with what was instructed by the speaker or manager. So that the community can easily understand the material presented by the instructor. Management activities at community library Cakruk Pintar can be said to be good. This is due to good cooperation between fellow managers. So that the activities carried out can run well. Managers have a role to assist and facilitate the needs of participants who take part in the activity. The role played by the manager is to prepare all the needs that will be used when the learning takes place, arrive before the activity schedule starts, provide n attendance list, and assist participants in following activities . Similar activities were also carried out by other community library, community library Mata Aksara. According to (Hayati, 2020) Activities of motorbike literacy eye community library, reading material literacy, book practice, and other reading materials. The purpose of this activity is the same as that of the smart cakruk, namely to increase the interest in reading people in the special area of Yogyakarta.

Program Monitoring

Community supervision is defined as an amalgamation of locally sourced treatment programs (e.g., psychoeducation, sober living communities, counseling) for persons charged with crimes that are meant to discourage recidivism through active institutional surveillance and are seen as an alternative to incarceration (Stone et al., 2018). By doing an evaluation it will be known what needs are needed in a program (Stufflebeam, 2000). In addition, evaluation can be used as a basis for making decisions for the sustainability of a program (Bledsoe, Katrina L & Graham, 2005; Chavis, 2004; Owston, 2007).

The supervision of the community library program is carried out by the Head of the Yogyakarta City Library and Archives Office and BP PAUD and Dikmas. Supervision is carried out on community library activities, completeness of community library facilities and infrastructure, and activity managers at community library Cakruk Pintar. This aims to improve the service quality of the community library program itself.

Evaluation Program

Evaluation of participants in an activity is used to determine the level of achievement of competencies that have been determined as the objectives of long-term and short-term program implementation (Jannana & Suryono, 2017) . Program evaluation is the "application of systematic methods to address questions about program operations and results (Newcomer, K. E., Hatry, H. P., & Wholey, 2020) (Franklin & Blankenberger, 2016). The program evaluations undertaken by the centers seemed to be based on a solid foundation with many of the best practices of program evaluation found in the literature, including alignment with mission/goals, stakeholder engagement, appropriate data use, and adequate resources (Newcomer, K. E., Hatry, H. P., & Wholey, 2020). The evaluation of the learning program is carried out by the program manager to determine the abilities that have been obtained by the learning community, and the implementation of the services that have been provided, the evaluation / assessment of the program is carried out on the entire implementation of the program that has been planned (Hanizar, Dewi Siti, Masluyah, 2014). Evaluation is a process carried out by someone to see the extent of the success of a program, the success of the program itself can be seen from the impact or results achieved by the program. Therefore, in success there are two concepts contained therein, namely effectiveness and efficiency. There are various evaluation models that have been used by evaluators to understand evaluation. An evaluation model has been developed by several experts to carry out program appraisal (Alexsandra, Ganefri,

2019). Program evaluation is carried out by the head of the community library as a form of managerial ability (Kurniawan, 2013). In addition, researchers also conducted program evaluations using the CIPPO model (Mahmudi, 2011), which showed that the Cakruk Pintar community library program was running well. This is evidenced by the fact that various elements of program management have been implemented in accordance with the community library program assessment standards contained in the Technical Guidelines (technical guidelines). The following is an evaluation of the Cakruk Pintar community library program that researchers did:

Table 1. Evaluation of the Cakruk Pintar Community Library Program

Component	Conditions in the Field	Standar	Assesment
Contexs			
Has a program conformity with community needs	Carry out program activities according to visitor needs	Right on target according to visitor needs	Corresponding
Formulate community library program objectives	Not yet, formulating goals with fellow community library managers	Formulate program objectives by involving the community	Not yet
Input			
Characteristics of the participants	School age children and the general public	Involving the whole community	Corresponding
Manager characteristics	High school graduate and has a protective spirit	All managers have a nurturing and friendly spirit	Corresponding
Funding	Independent funds and government	Able to manage funding well	Corresponding
Infrastructure	Has a variety of reading material, has administrative completeness. Few skill tools	Various reading materials, available supporting tools for activities, adequate skills tools, administrative tools are available	Good
Learning atmosphere	Comfortable	Creating a comfortable atmosphere	Corresponding
Proses			
Schedule	Schedule visitors read every day, there is no daily picket officer for managers to discuss with participants before carrying out activities	Adjust the schedule with the participants	Good
Participant activities	Some of the participants actively participated in the activities and made use of the infrastructure	Participants actively participate in activities, are able to participate in activities, and make good use of the facilities and infrastructure	Good
Manager activity	Facilitating visitor needs	Provide materials and equipment for activities, describe activities, present material clearly, provide opportunities to ask questions to visitors / participants, fill in administrative documents	Corresponding
Product			
Achievement of program objectives	A small proportion of people like to read books	Fostering people's interest in reading and empowering the community independently	Enough
	There are 0-10 people on weekdays, when there are activities there can be up to 50 people	There are 20 community library visitors every day	Good

Needs met	Already has a diverse collection of reading materials	Has a variety of reading material	Corresponding
Ability that is owned	Less able to practice skills that come from reading material	Able to practice skills that come from reading material and be able to participate in reading interest activities	Enough
The achievements achieved by community library	Already have local and national achievements	Have local and national achievements	Good
Outcome rogram impact,	A small proportion of participants / visitors have their own reading material	community library participants / visitors have their own reading material	Enough
	Has been able to invite other people to read and participate in activities	Able to motivate other people to read	Good
	Some people are able to market the products of their skills	Able to market their skill products to the general public	Enough
Program benefits	Some people are able to increase their interest in reading and become economically independent	Participants are able to increase reading interest and economically independent the community	Good

CONCLUSION

Program planning community library Smart Cakruk is divided into three groups of normal at call with Tridaya, that there are (1) economic empowerment, (2) human resource development, (3) empowering environment. In terms of developing reading interest, community library Cakruk Pintar has activities, namely (1) literacy activities consisting of reading and writing, (2) becoming a visiting center for various community librarys in Indonesia, (3) Outbound activities with community library participants organizing community library Cakruk Smart runs well, the organizational structure is carried out by kinship / family ties. In the organizational structure, each has a role and duty, but technically in the field it is carried out jointly . The implementation of activities at community library Cakruk Pintar which is seen from the characteristics of the peseta, the characteristics of the manager, funding, infrastructure, learning atmosphere, participant activities, manager activities can be said to be good. Supervision of the Cakruk Pintar community library Program is carried out by the Head of the Yogyakarta City Archives and Library Office, and BP PAUDNI . Based on the results of the research, the supervision carried out by the two government institutions was in accordance with the predetermined standard criteria. The evaluation of the Cakruk Pintar community library program is quite good, this can be seen from the enthusiasm of visitors coming to community library every day.

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The Impact of Community Health Education Media in the Industrialization Era on the Diet of High Risk Pregnant Women

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Abstract. Nutritional problems are still a global problem throughout the world. Media is one of the things that needs to be considered in conducting health promotion as an impact of the industrial era. This study aims to determine the effect of health education media in the industrial era on changes in behavior of pregnant women at high risk in dietary care. This research was carried out in the Work Area of the Makassar City Kassi-kassi Health Center. This research is a quasi-experimental quantitative type with a non-equivalent control group design using a purposive sampling method. The population in this study were pregnant women which consisted of 214 pregnant women. The sample size in this study was 40 pregnant women in the experimental group and 40 pregnant women in the control group. Data collection uses the observation method, interviews using a pre and post test questionnaire in the group The intervention was given a community health education media in the form of audio visual aids, namely video and in the control group a visual education aid was provided in the form of visual aids, namely a poster. Data analysis using Wilcoxon test and Mann Whitney test. The results of the study using the Wilcoxon test found that the media of health education in the form of effective videos of changes in the care of eating patterns of high risk pregnant women (p value <0.005). While health education media such as posters did not affect the change in care of diet for high-risk pregnant women (p value> 0.005). Research novelty found that in the industrialization era audio visual (video) media is more effective than visual media (posters) in community health education. Extension needs to be done by using videos so that the eating patterns of pregnant women are at high risk of becoming better.

Key words: community health education, high risk, media, pregnant woman

INTRODUCTION

The problem of nutrition is still a global problem throughout the world. The prevalence of macro and micronutrient deficiencies throughout the world has increased dramatically, putting nutritional problems as one of the issues that needs serious attention, especially in nutrition-prone groups, one of which is pregnant women and children under two years (baduta). It really requires comprehensive treatment and starts from nutrition care in pregnancy. Deficiency must be considered a disease or a risk factor for nutritional status and other diseases.

Indonesia is also included in 47 countries out of 122 countries that have anemia in women of childbearing age (WUS) and coverage of Early Breastfeeding Initiation (IMD), exclusive breastfeeding, Tablet Increased Blood (TTD) of pregnant women is still relatively low (Achadi, 2014). If this is not resolved immediately, in the long run it will result in the loss of the potential of smart and quality young generation (lost generation) so that children become unproductive and unable to compete in the future.

Through the SUN movement, 50 countries including Indonesia are committed to improving the political environment, advancing policies and laws and accelerating effective nutrition scaling up (Minister of Health, 2017). The commitment of the Government of Indonesia has been stated through Government Regulation No. 42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement, and on October 30, 2013 the President of the Republic of Indonesia launched the "National Movement for the Acceleration of Nutrition Improvement in the Framework of the First Thousand Days of Life" (1000 HPK Movement) (UNICEF, 2018).

The fulfillment of optimal nutrition during the first thousand days of life, in addition to providing opportunities for children to live longer, healthier, more productive, and lower risk of degenerative diseases in adulthood, also plays a positive role in breaking the poverty chain. This is made possible by the intervention efforts to improve nutrition of pregnant women, infants, and toddlers, thus giving birth to healthy children (Andarwulan, 2016; Patimah, 2017; Wirjatmadi & Adriani, 2012).

Based on data from the South Sulawesi Provincial Health Office, RISTI pregnant women who received health workers increased, in 2016 amounted to 28,235 pregnant women and 29,386 pregnant women in 2017. While RISTI pregnant women in Makassar

also experienced an increase in 2016 by 5,043 pregnant women and in 2017 amounted to 5,364.

Data from the Kassi-Kassi Community Health Center in 2016 recorded 285 RISTI pregnant women and increased in 2017 with 367 RISTI pregnant women, where the most pregnant women with KEK had 136 pregnant women. The nutritional and health status of pregnant women and young people as a determinant of the quality of human resources, is increasingly evident with evidence that nutritional status during pregnancy and when breastfeeding until a two-year-old child is a very critical period. The thousand-day period, which is 270 days during pregnancy and 730 days in the baby's first life, is a sensitive period because the effects on the baby at this time will be permanent and cannot be corrected. The impact is not only on physical growth, but also mental development and intelligence, which in adulthood can be seen from the physical size that is not optimal and the quality of work that is not competitive resulting in low work productivity (Fairus, 2012; Husnah, 2017).

Although impaired physical growth of children can still be corrected later on with an increase in good nutritional intake, but not with the development of intelligence. Scientific facts indicate that malnutrition experienced by pregnant women who then continues until the child is 2 years old will result in a decrease in children's intelligence. Unfortunately this period is often not the focus of family attention, both due to lack of knowledge and missed priority scale that must be met.

Enough nutritional knowledge is expected to be able to change the behavior that is not right so that they can choose nutritious food and compile a balanced menu in accordance with the needs and tastes, and know the consequences of malnutrition. Giving good nutritional knowledge, is expected to change the eating habits that were originally less for the better.

Strategies to improve high risk pregnant women knowledge, attitudes, and practices regarding nutrition and reproductive health have consistently contributed to reducing child stunting in Indonesia. (Hall et al., 2018; Simanjuntak et al., 2019). Most of the mothers in this country are the primary caregivers for their babies and decide on feeding patterns, immunisation, and health services (Titaley et al., 2019; Torlesse et al., 2016). Therefore, educational methods as an intervention to improve mothers' knowledge, attitudes, and practices have been implemented based on the theory of changes behavior (Mahmudiono et al., 2018; Schrader & Lawless, 2004) . Research on knowledge, attitude, and behaviour has assessed the success of an educational method by applying a pre-test and post-test research design, such as a quasi-

experimental or randomized trial) (Schrader & Lawless, 2004). The interactions between knowledge, attitude, and behaviour initiate a potentially reciprocal and dynamic relationship: knowledge regarding nutrition and reproductive health can inform attitude about that topic, which can influence behavior (Schrader & Lawless, 2004). Improving knowledge, attitude, and behaviour during pregnancy is important as it determines post-partum quality of life for the mother and her babies. For example, success of early breastfeeding initiation and exclusive breastfeeding can be determined by mothers' intention during pregnancy to breastfeed (Permatasari et al., 2016, 2018; Permatasari & Syafruddin, 2016).

The purpose of this study was to assess the effect of health education media in the industrial era on changes in behavior of pregnant women at high risk in dietary care. This study used interactive education methods that cover four topics: parenting, balanced diet, high risk pregnant woman, and reproductive health. Each topic was addressed using different techniques: audio visual aid (video), and visual aids by interesting poster. This educational method could be adopted or modified by the government and other health care providers in an effort to reduce the high risk pregnant woman.

METHODS

This research was conducted using experimental research methods. Experimental research is a research method used to look for the effect of certain treatments on others under controlled conditions (Sugiyono, 2009). The experimental research method used is quasi-experimental with a non-equivalent control group design. This research was conducted in the working area of the Kassi-kassi Puskesmas Makassar City. The pre-test was conducted at the Kassi-kassi Public Health Center in Makassar City, the post-test was a visit to the house of the respondent's pregnant women.

The population in this study were pregnant women registered at the Kassi-kassi Health Center in Makassar City in July 2018, as many as 214 pregnant women. The sample size in this study were 80 RISTI pregnant women, divided into 40 RISTI pregnant women in the experimental group and 40 RISTI pregnant women in the control group. According to Roscoe in the book Research Methods for Business (1982), for simple experimental research, which uses experimental and control groups, the number of sample members is between 10 and 20, respectively (Sugiyono, 2009).

The sampling method in this study uses Non Probability Sampling with purposive sampling technique that is the determination of the sample

based on criteria established by the researcher, the criteria set include inclusion criteria including pregnant women who are willing to become respondents of the study, having at least one high risk pregnancy, trimester II and trimester III gestational age. While the exclusion criteria are pregnant mothers who are sick, and pregnant women who live outside the working area of the Kassi-Kassi Health Center in Makassar City.

This education intervention was designed according to the characteristics and information required by pregnant women based on the result of the FGD that involved stakeholders, community leaders, community health workers, and pregnant women, who provided suggestions so that the educational methods used would be easy to understand and implemented during the pregnancy period to prevent maternal death. The majority of pregnant women had low education and socio-economic level in the study area. Their literacy level might have been a barrier to access information regarding nutrition and reproductive health. They are generally housewives who have sufficient time to receive nutrition and reproductive health education for 2 h. These data are reinforced by data obtained from health profile reports and socio-demographics. Advice from nutrition and reproductive health experts also confirms this method. Interactive education can increase participants' interest and concentration in receiving education. So this method can improve the knowledge, attitudes, and practices regarding nutrition and reproductive health, to prevent maternal mortality rate since the pregnancy period.

Nutrition and reproductive health education to high risk woman pregnancy was given to the intervention group and control group. They were placed in small groups (four or five mothers per group) and received 2 h of nutrition and reproductive health education from a facilitator every 2 weeks for 3 consecutive months using audio visual aids to intervention group and visual aids to control group. The education consisted of three sessions that included theoretical (lectures) and practical sessions. The first covered parenting (psycho-emotional and nutritional parenting) and was complemented by role-playing. The second covered nutrition during pregnancy, high risk pregnant, and immunity. This session was reinforced by simulation to assess nutritional status and nutritional requirements for the first 1000 days of life. In this session, the facilitator used two packets of nutrition discs, one consisting of eight discs that determine the nutritional status of children based on age groups, and another consisting of eight discs focussed on the needs of balanced nutrition from the gestational period through adolescence (19 years). The third session covered

reproductive health education, equipped with the games of myths and facts. The control group received information from visual aids like as poster about the usual nutrition and reproductive health education that is provided in the health program regularly every month. In this routine health program, pregnant women are informed about maternal and child health including nutrition and reproductive health, children's weight and height are measured, and children are given primary immunizations.

Four women nutritionists acting as data collectors and two public health practitioners as supervisors were given 2 days of training. The questionnaire was pre-tested on 5% of the representative sample assessed in other areas with characteristics similar to those of the study area. Data collectors administered the questionnaire through face-to-face interviews at the pregnant women's homes and were overseen by supervisors periodically. All questionnaires were verified for completeness and accuracy by data collectors.

All data in the questionnaire were checked for missing values, including maternal characteristics and practices. Furthermore, data were coded and input using SPSS version 20.0. Variables with continuous data, including practices scores, were analysed for normality using the Kolmogorov–Smirnov test. Based on the Kolmogorov test, all variables including practices showed not normal distribution. Descriptive statistics consisting of the mean, standard deviation, and percentage were analysed by univariate analysis, while variables with categorical data were analysed using the wilcoxon test. A 95% confidence level and a value of $P < 0.05$ were used to assess the statistical significance. Mann Whitney u-test was used to see significant differences in pre-test and post-test scores between the intervention group and control group, and wilcoxon test was used for continuous variables within groups at pre-test and post-test.

RESULTS AND DISCUSSION

The results of this study were obtained through filling out the questionnaire by means of direct interviews and direct measurements to respondents. Respondents in this study were 40 high risk pregnant women. Based on the data processing, the following results are obtained:

Univariate Analysis

From the results of questionnaire data distributed to 40 respondents it is known that the age of the respondent group ranged from 16 years to 44 years, both for the experimental group and the control group. Maternal characteristics included socio-demographic characteristics, obstetric history,

information on nutrition and reproductive health, and socio economic as represented in Table 1 and 2.

Table 1. Characteristics of Pregnant Women

No	Characteristic Responden	Group of Sampel				Total	
		Experimen		Control			
		n	%	n	%	n	%
	Age (Tahun)						
1.	< 20	4	20	3	15	7	17,5
2.	20 - 34	9	45	6	30	15	37,5
3.	≥ 35	7	35	11	55	18	45
	Age of Pregnancy						
1.	Trimester II	16	80	14	70	30	75
2.	Trimester III	4	20	6	30	10	25
	Education						
1.	SD	8	40	5	25	13	32,5
2.	SMP	4	20	3	15	7	17,5
3.	SMA	7	35	11	55	18	45
4.	S1	1	5	1	5	2	5
	Job						
1.	Government employees	0	0	1	5	1	2,5
2.	Private employees	0	0	0	0	0	0
3.	Entrepreneur	0	0	3	15	3	7,5
4.	Housewife	20	100	16	80	36	90
Total		20	100	20	100	40	100

Source : Primary Data

Based on table 1 the distribution of respondents according to age group of 20 experimental groups of 20 people and the control group. The number of respondents aged <20 years was 7 people (17.5%), respondents aged 20-34 years were 15 people (37.5%), and the most were respondents aged ≥ 35 years as many as 18 people (45%). Distribution of respondents according to gestational age to 20 people in the experimental group and 20 people in the control group. The number of respondents who entered the second trimester of pregnancy was 30 people (75%), and respondents of the gestational age entering the third trimester were 10 people (25%).

Distribution of respondents according to education of 20 experimental groups of 20 people and the control group. The number of respondents with primary education level was 13 people (32.5%), respondents with junior high school education were 7 people (17.5%), respondents with the highest education level were 18 people (45%), and respondents with levels the least education is S1 as many as 2 people (5%). Distribution of respondents according to work of 20 people in the experimental group 20 people and the control group. The number of respondents with civil servant jobs was 1 person (2.5%), respondents with self-employed employment were 3 people (7.5%), respondents with the most jobs were housewives with 36 people (90%).

Table 2. Characteristics of Respondents by Type of Pregnancy Risk

Types of Pregnancy Risk	Group of Sampel				Total	
	Experimen		Experimen			
	n	%	n	%	n	%
KEK	9	21	5	14,7	14	18,2
Age ≤ 20 years	5	11,6	3	8,8	8	10,4
Age ≥ 35 years	7	16,3	11	32,4	18	23,3
Parity ≥ 4 x	5	11,6	4	11,8	9	11,7
BB <45 Kg	8	18,6	1	2,9	9	11,7
TB <145 cm	4	9,3	2	5,9	6	7,8
Parity Distance <2 years	4	9,3	5	14,7	9	11,7
Parity Distance ≥ 10 years	1	2,3	3	8,8	4	5,2

Source : Primary Data

Based on table 2 the distribution of respondents according to the type of pregnancy risk for 20 people in the experimental group and 20 people in the control group, it is known that most respondents have ≥ 1 risk factors for pregnancy. The number of respondents with the highest risk of pregnancy, i.e. those aged ≥ 35 years were 18 people (23.3%).

Bivariate Analysis

Bivariate analysis is used in testing the hypotheses described previously. Hypothesis testing aims to test differences in eating patterns of pregnant women before (pre-test) and after (post-test) education.

Based on table 3 shows that in the experimental group obtained pretest as many as 11 people (55%)

have enough diet and 9 people (45%) have less diet. After being educated, posttest results were obtained as many as 11 people (55%) had adequate diet and 9 people (45%) had poor diet. Whereas in the control group pretest was obtained as many as 12 people (60%) had enough knowledge and 8 people (40%) had less knowledge. Then obtained posttest results as many as 12 people (60%) have enough knowledge and 8 people (40%) have less knowledge.

There was a significant difference between pre-test and post-test in IG ($P < 0.001$) for each question in this aspect. The participants' practices of nutrition during pregnancy, high risk pregnancy, and immunity improved after education.

Table 3. Distribution of Respondents' Diets Before and After Education

Dietary habit	Experimen Group				Control Group			
	Pre Test		Post Test		Pre Test		Post Test	
	n	%	n	%	n	%	n	%
Enough	11	55	11	55	12	60	12	60
Less	9	45	9	45	8	40	8	40
Total	20	100	20	100	20	100	20	100

Source : Primary Data

Table 4. Analysis of Changes in Diet

Dietary habit	Sampel Group			
	Experiment		Control	
	N	P Value	n	P Value
Decrease	0		0	
Increase	13	0,001	0	1,000
Stay	7		20	

Source : Primary Data

Based on table 4 an analysis of changes in pre-test and post-test eating patterns shows that in the experimental group as many as 13 respondents experienced an increase in eating patterns and as many as 7 respondents whose diet was fixed. Then seen from the p value of 0.001 which means that there are significant changes between the eating patterns of pregnant women before and after education.

In the control group as many as 20 respondents fixed diet. Based on the results of the statistical test the value is constant, the pre-test and post-test diet score is equal to the p value of 1,000 which means that there is no change between the eating patterns of pregnant women who are not given education

Daily diet is a person's diet related to daily eating habits. Good knowledge of a person's nutrition will make that person more and more take into account the amount and type of food they choose to consume. Pregnant women who have insufficient nutritional

knowledge will behave in choosing foods that attract the five senses and do not make choices based on the nutritional value of these foods. Conversely those who have good knowledge tend to use more rationally and knowledge about the nutritional value of these foods.

The results of the study of eating habits in the experimental group showed that the respondents' daily eating habits at the first measurement (pretest) of 55% of pregnant women were in the sufficient category. Whereas in the second measurement (posttest) that is 3 weeks after the education was carried out, the respondents' eating habits remained at 55% of respondents in the sufficient category. The results of this study are in line with research conducted qualitatively which states that although respondents already know the type of nutritious food which of course can also choose food ingredients that have high nutritional value, but in practice, respondents are still lacking in eating patterns or good

eating habits and portions foods that tend to be incomplete and few in number (Febriantika, 2017; Pratama et al., 2017; Wahyuni, 2015; Widy, 2014).

This is in line with the opinion that the knowledge possessed by a mother will influence in decision making and also affect her behavior. Mothers with good nutritional knowledge are likely to provide adequate nutrition for their babies. This is even more so if a mother enters a period of cravings, where the stomach does not feel like filling, nausea and abysmally. Although in such conditions if someone has good knowledge then he will try to meet the nutritional needs and also the baby (Riftana, 2013; Sunarsih et al., 2017).

Knowledge, attitude, and practices regarding nutrition and reproductive health are the main factors that can influence pregnancy outcomes (Garg et al., 2010; Hitachi et al., 2019). The finding of this study indicates that participants have a lack of practices regarding nutrition and reproductive at baseline. In this study, the practices mean scores were significantly ($P = 0.001$) improved after education in the IG. In the CG, there was no significant difference ($P > 0.05$) in mean practices scores regarding nutrition and reproductive health between pre-test and post-test. This study also shows that education intervention effectively provides a significant ($P < 0.05$) difference in the mean practices scores between the IG and CG at the end line, respectively of the IG and CG between pre-test and post-test. Similarly, a cluster randomized control trial study among pregnant women in Northeast Ethiopia showed that nutrition education significantly improved ($P < 0.001$) mean nutritional knowledge scores in the intervention group, from 6.9 at baseline to 13.4 after nutrition education. There was a significant difference ($P < 0.001$) in mean nutritional knowledge scores between the intervention group and control group at baseline. The study also shows that proportion of healthy dietary practices was significantly different ($P < 0.001$) between pregnant women who were given nutrition education in the intervention group compared to the control group at the end line (Diddana et al., 2018). A study among pregnant women in Addis Ababa showed that nutrition knowledge scores improved after the nutrition education program from 53.9 to 97.0%, whereas dietary practice scores during pregnancy increased from 46.8 to 83.7% (Mugyia et al., 2016). These studies reinforce the evidence that nutrition education has a positive effect on improving the knowledge, attitudes, and practices scores among pregnant women.

The results of research on eating patterns in the control group showed that the respondents' eating patterns in the first (pretest) and second (posttest) measurements had the same percentage of 60% of RISTI pregnant women in the sufficient category. This means that there was no change in the practice of RISTI pregnant women 's eating patterns in both measurements. This is also reinforced by Fadjria's research, that the behavior of eating habits is formed due to several factors namely the practice of food, reasons for eating, types of food eaten, and nutritional knowledge. Improved eating patterns are in line with SOR's theory that with the support of facilities and environmental stimulus provided can continue then shape a person's behavior. Changing practices especially individual behavior is not easy to depend on commitment and support from the surrounding environment. The research shows that even though respondents already have positive knowledge and attitudes towards the 1000 HPK Movement, it does not necessarily make the 1000 HPK Movement a healthy behavior in their daily lives.

As in the study entitled "Descriptive study of knowledge and attitudes of pregnant women about nutrition in the first 1000 days of life in the Sokaraja health center in Banyumas district" results of the fisher exact correlation test (0.589) which means there is no relationship between knowledge and attitudes of pregnant women towards nutrition in the first 1000 days of life . So not always pregnant women with insufficient knowledge will be not supportive of nutrition for the first 1000 days of life and vice versa. This is because there are several factors that influence the attitude of pregnant women, namely: physiological factors (age and health), direct experience factors on attitude objects, reference frame factors and social communication factors (Sudargo & Aristasari, 2018; Wahyuningsih et al., 2020; Y. Yusriani & Acob, 2020).

The failure of fetal growth during pregnancy is significantly related to stunted child growth (Vir, 2016). Pregnant women have central roles in achieve optimal growth during this critical period (Titaley et al., 2019; Vir, 2016). The 194 pregnant women who participated in this study have a high risk of having stunted children, generally. They live in rural areas with low socio-economic levels that are related to a lack of food availability in the household (Jonah et al., 2018; Nshimyiryo et al., 2019). Another study among pregnant women in rural Punjab showed that education and parity were significantly associated with knowledge, attitude, and dietary practices (Mal-kanthi et al., 2010; Purnomo et al., 2020; Singh & Deepti, 2019). The WHO reported that mothers with low income and a low level of education experience more difficulty affording adequate food to provide a nutritious and diverse diet (WHO, 2018). The findings of this study also indicate that about one-third of pregnant women (33.0 and 28.9% in IG and

CG, respectively) also have a short stature (> 150 cm), which may increase risk of having stunted children (Addo et al., 2013; Javid & Pu, 2020; Sinha et al., 2018). A 19-year-old woman with a height at least two standard deviations below the average (> 150 cm) has short stature, according to the WHO provision (Group & de Onis, 2006). Javid and Pu showed in the Pakistan Demographic and Health Survey of 2012–13 that short-stature mothers (height > 150 cm) were about 2.0 times more likely to have a stunted child compared to tall-stature mothers (Javid & Pu, 2020). Participants in this study also have not utilised health services optimally. More than one-third of those who have given birth delivered their babies at home and were helped by traditional birth attendants. They did not receive adequate health care in the early life of the baby, which is a crucial stage associated with pregnancy outcomes. This condition indicates a low quality of maternal health care, which may significantly affect child stunting (Beake et al., 2017; Wong et al., 2017).

The absence of a relationship between a person's knowledge is also usually due to the attitude that in addition to being influenced by internal factors (psychological and physiological) is also influenced by external factors (communication or interaction between individuals, as well as between individuals and groups) (Baroroh et al., 2020; Hasyati et al., 2019; Yusriani & Alwi, 2018; M. K. Yusriani & Nugroho, 2018).

Similarly, a quasi-experimental study in Brebes District, Central Java in Indonesia, showed that reproductive health education improved knowledge among brides and grooms (Wemakor & Mensah, 2016). Additional evidence in Somalia shows that they have a lack of knowledge about reproductive health that confirmed the need for proper nutrition education (Nugraheni et al., 2018). Reproductive health during pregnancy is fundamental to ensuring all women have access to respectful and high-quality maternity care to increase maternal health and pregnancy outcomes (Gure et al., 2015).

This study contributes to increasing intensive nutrition and reproductive health education efforts implemented in the wider community. Such studies provide scientific evidence as consideration for policymakers, researchers, program practitioners and implementers, non-governmental organisations, health workers, community health workers, and the entire community to improve knowledge, attitudes, and practices regarding nutrition and reproductive health, in order to reduce maternal mortality rate.

CONCLUSION

The media of health education in the form of effective videos of changes in the care of eating patterns of high risk pregnant women (p value <0.005). While health education media such as posters did not affect the change in care of diet for high-risk pregnant women (p value> 0.005). Audio visual (video) media is more effective than visual media (posters). Extension needs to be done by using videos so that the eating patterns of pregnant women are at high risk of becoming better.

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a. Title
Title of articles in English should describe the main content of manuscripts, be informative, concise, and not too wordy (12-15 words only), and does not contain formulas.

b. The author's name
Full name without academic degrees and titles, written in capital letters. Manuscript written by groups needs to supplement by complete contact details.

c. Name of affiliation for each author
The author name should be accompanied by complete affiliation address, postal code number, telephone number and email address.

d. Abstract
Written briefly in English in one paragraph of 150-200 words, containing background, research objectives, methodology, results, conclusion of the study and your research contributions to science.

e. Keywords
Written in English 3-5 words or groups of words, written alphabetically.

f. Introduction
Explaining the background, problems, importance of research, brief literature review that relates directly to research or previous findings that need to be developed, and ended with a paragraph of research purposes. A balance must be kept between the pure and applied aspects of the subject. The introduction is presented in the form of paragraphs of approximately 1000 words.

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Make sure that work can be repeated according to the details provided. It contains technical information of the study presented clearly. Therefore, readers can conduct research based on the techniques presented. Materials and equipment specifications are necessary. Approaches or procedures of study together with data analysis methods must be presented.

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Well-prepared tables and or figures must be of significant feature of this section, because they convey the major observations to readers. Any information provided in tables and figures should no longer be repeated in the text, but the text should focus on the importance of the principal findings of the study. In general, journal papers will contain

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Conclusion should be withdrawn on the basis of research findings, formulated concerns and research purposes. Conclusion is presented in one paragraph without numerical form of expression. Explain your research contributions to science.

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1. Manuscripts are written by using standard citation application (Mendeley/Endnote/Zotero). APA (American Psychological Association) reference style is required.

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1. The contents of the article are a form of research on non-formal education that has never been published in other media.
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o *Results and written discussion in the form of problem formulation. Serves at least 4 sheets.*
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C. Nama afiliasi untuk masing-masing penulis
Nama penulis harus disertai alamat afiliasi lengkap, nomor kode pos, nomor telepon dan alamat email.

D. Abstrak
Ditulis dalam versi bahasa Inggris dan Indonesia

Dalam satu paragraf 150-200 kata, mengandung latar belakang, tujuan penelitian, metodologi, hasil, kesimpulan penelitian, kontribusi penelitian Anda terhadap sains (Novelty).

E. Kata kunci
Ditulis dalam bahasa Inggris 3-5 kata atau kelompok kata, ditulis urut abjad.

F. Pendahuluan
Menjelaskan latar belakang dari global ke lokal, dari umum ke khusus, masalah, pentingnya penelitian, tinjauan literatur singkat yang berhubungan langsung dengan penelitian atau temuan sebelumnya yang perlu dikembangkan, dan diakhiri dengan paragraf tujuan penelitian dan manfaat atau kontibusi penelitian untuk ilmu

pengetahuan (NOVELTY). Keseimbangan harus dijaga antara aspek murni dan terapan dari subjek. Pengantar disajikan dalam bentuk paragraf sekitar 1000 kata.

G. Metode
Pastikan pekerjaan itu bisa diulang sesuai dengan rincian yang diberikan. Ini berisi informasi teknis dari penelitian yang disajikan dengan jelas. Oleh karena itu, pembaca dapat melakukan penelitian berdasarkan teknik yang disajikan. Spesifikasi bahan dan peralatan sangat diperlukan. Pendekatan atau prosedur studi bersama dengan metode analisis data harus dipresentasikan. jangan menuliskan teori atau referensi dari yang bukan pakarnya (moleong, sugiyono,dll)

H. Diskusi
Tabel dan atau gambar yang disiapkan dengan baik harus memiliki fitur penting dari bagian ini, karena mereka menyampaikan pengamatan utama kepada pembaca. Setiap informasi yang diberikan dalam tabel dan gambar tidak boleh lagi diulang dalam teks, namun teks tersebut harus berfokus pada pentingnya temuan utama penelitian ini. Secara umum, makalah jurnal berisi tiga angka dan tabel. Data yang sama tidak dapat disajikan dalam bentuk tabel dan gambar. Hasil penelitian dibahas untuk mengatasi masalah yang dirumuskan, tujuan dan hipotesis penelitian. Disarankan agar diskusi difokuskan pada mengapa dan bagaimana temuan penelitian dapat terjadi dan untuk memperluas temuan penelitian yang dapat diterapkan pada masalah lain yang relevan.

I. Simpulan
Simpulan harus ditarik berdasarkan temuan penelitian, rumusan keprihatinan dan tujuan penelitian. Simpulan disajikan dalam satu paragraf tanpa bentuk ekspresi numerik. Jelaskan kontribusi penelitian Anda terhadap sains (Novelty).

K. Referensi

Manuskrip ditulis dengan menggunakan aplikasi kutipan standar (Mendeley / Endnote / Zotero). APA (American Psychological Association) diperlukan gaya referensi.
1. Sebaiknya Mengutip artikel dipastikan minimal ada nomor DOI-nya (jika artikel)
2. Dalam daftar referensi minimal 10 tahun terakhir untuk buku dan 5 tahun terakhir untuk artikel, rujukan harus didaftar dalam urutan abjad.
3. Minimal 40 Referensi. Kurang lebih 80% referensi untuk ulasan literatur harus menjadi jurnal terkini (terbaru) yang diterbitkan dalam 5 tahun terakhir, namun referensi 20% lainnya dapat dikutip dari laporan penelitian dan atau artikel.

Berikut ini adalah contoh pesanan dan gaya yang akan digunakan dalam manuskrip:
1. Journal articles:
Ehsanpour, A. A. & Amini, F. (2003). Effect of salt and drought stress on acid phosphatase activities in alfalfa explants under in vitro culture. *African J Biotechnol*, *2*(5), 133-135.
2. Articles in proceedings:

Rahayu, E. S. (2001). Potensi alelopati lima kultivar padi terhadap gulma pesaingnya. Dalam: *Prosiding Konferensi Nasional XV Himpunan Ilmu Gulma Indonesia*. Buku 1. Surakarta, 17-19 Juli 2001. Surakarta: Himpunan Ilmu Gulma Indonesia. Hlm 91-98.

3. Books with editor:

Arnim, A. G. (2005). Molecular Aproaches to the Study of Plant Development. Dalam: Trigiano RN & Gray DJ. *Plant Development and Biotechnology*. Washington DC: CRC Press.

4. Thesis and dissertation, research reports:

Nursusilawati, P. (2003). Respon 16 kultivar kacang tanah unggul nasional terhadap stres kekeringan dan evaluasi daya regenerasi embrio somatiknya. *Thesis*. Bogor: Sekolah Pascasarjana, Institut Pertanian Bogor.

5. Articles from the websites:

Hsu, Y. H., & To, K. Y. (2000). Cloning of cDNA (Accesion No AF183891) encoding type II S-adenosyl-L-methionine synthetase from Petunia hybrida. *Plant Physiol 122*:1457. (PGROO-33). Retrieved from http://www.tarweed.com/pgr/PGROO-033.html.

Daftar Periksa Persiapan

Sebagai bagian dari proses pengajuan, penulis diminta untuk memeriksa kepatuhan pengiriman mereka terhadap semua item berikut, dan kiriman dapat dikembalikan ke penulis yang tidak mematuhi pedoman ini.

1. Isi artikel adalah suatu bentuk penelitian tentang pendidikan nonformal yang belum pernah dipublikasikan di media lain.
2. File pengajuan ada dalam format file dokumen OpenOffice, Microsoft Word, RTF, atau WordPerfect.
3. Artikel ditulis dalam bahasa Indonesia dan / atau bahasa Inggris dengan ketel dengan kerapatan jarak spasi 1, Calisto MT 11 huruf, ukuran kertas A4, format kolom tunggal dengan margin (atas 3,5 cm, 3 cm, 3 cm); 3 cm), minimal 10 halaman dan maksimal 15 halaman secara keseluruhan.
4. Artikel hanya dikirim via email jne@mail.unnes.ac.id dengan konfirmasi sms ke nomor HP 085730223344 (Journal Manager). Semua artikel yang dikirim ditinjau untuk kelayakan oleh editor dan perancang. Kepastian pemuatan artikel jurnal akan diberitahukan via sms / telepon dan email penulis.

5. Penulisan sistematis disusun dengan urutan sebagai berikut:

- o Judul tidak lebih dari 14 kata ingin nama pengarang bisa berafiliasi. Jika penulis lebih dari satu orang dan berasal dari institusi yang berbeda, maka semua alamat affiliasi tercantum secara berurutan. Nama penulis korespondensi diberi tanda bintang (*).
- o Abstrak ditulis dalam satu paragraf, ditulis dalam dua bahasa (bahasa Indonesia dan bahasa Inggris) diikuti dengan kata kunci (keywords). Abstrak berisi masalah atau tujuannya, metode dan hasil temuannya. Panjang abstrak tidak lebih dari 200 kata.
- o Pendahuluan di balik latar belakang, masalah dan sasaran yang ditulis tanpa subtitel. Bagian penulisan awal tidak lebih dari 25% dari keseluruhan halaman.
- o Metode penelitian dan strategi penelitian; Populasi atau sampel dapat mencoba teknik pengambilan sampel (kuantitatif) atau subjek penelitian (kualitatif); Rekayasa data; Pengolahan dan analisis data.
- o Hasil dan diskusi tertulis berupa formulasi masalah. Melayani minimal 4 lembar.
- o Kesimpulan dan saran ditulis dengan subtitel (Kesimpulan dan Saran). Kesimpulannya berisi jawaban singkat yang menjawab rumusan masalah atau tujuan. Sarannya hanya terkait dengan kesimpulan yang didapat.
- o Bibliografi paling sedikit 30 referensi, yang ditulis harus sesuai dengan rujukan yang dimaksud dalam artikel ini.

6. Kutipan menggunakan tanda kurung (nama, tahun dan halaman) atau saat Tabel dan gambar harus diberi nomor (angka Arab) dan judul dan deskripsi yang digunakan; Nama (tahun dan halaman jelas sumbernya.
7. Judul tabel ditempatkan di atas meja, sedangkan judul gambar atau bagan diletakkan di bawah gambar.
8. Referensi ditulis secara berurutan menurut nama alfabetis dengan komposisi: nama pengarang (nama akhir di depan). Tahun. Judul buku (huruf miring). Kota: penerbit Contoh: Shofwan. Imam. (2015). Analisis Kebijakan Pendidikan Nonformal. Yogyakarta: Pustaka Pelajar.
9. Referensi paling sedikit 40 referensi, berasal dari min 6 referensi jurnal dan sumber lainnya yang ditulis Sesuai dengan keabsahan ilmiah yang berlaku serta kutipannya.

Apendixes

**Total words should be 4000 – 5000 words, Calisto MT 11,
in MS-Word, or compatible.**

The title consists of 12 up to 15 words, must be to the point.
The full name(s) of the author(s) (at least 2 authors/ not a single author)

All of the authors' institutional address(es) and the e-mails of the author for correspondence should be inserted

Info Articles

_____

Abstract

_____

Abstracts 150-250 words, contain brief information on:
- _The Background (2-3 baris)_
- _Aims/objectives of the research (2-3 baris)_
- _Methods_
- _Results and conclusion_
- _Novelty/New findings/significance of contribution (harus ada)_
- _Benefit for science development/society (harus ada)_

_____

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INTRODUCTION

Introduction (± 1-1.5 pages, 1.5 line spacing). Introduction Include:
- The important issues in general and specifically encountered
- Research that has been done as the references and what has not been done (research gap)
- The solution offered, the importance of research conducted
- The research purposes
- The benefits to the science / society

METHODS

Methods (± ½ - 1 page, 1.5 spacing). Methods Include:
- Explanation of how / step of research in a systematic way and detailed step by step written in the section.
- The method does not contain any theory, but rather emphasize what has been done in research to obtain results in line with the objectives.

RESULTS AND DISCUSSION

Results and discussion are combined in one part. It contains:
- The results of the findings to answer the research objectives
- Figure and table should be clear and the description must be concise and clear
- Discussion must reveal the in depth analysis of the obtained results it is critically and in-depth synthesis accompanied by proof of evidence related latest references
- Explain the novelty of your research
- The benefits and contribution of research for the science/ society

CONCLUTION

- It is written in one paragraph without numbering, singkat padat sudah tidak ada pembahasan lagi (± ¼ halaman, 1.5 spasi)
- Answering the research objectives

REFERENCES

- Written alphabetically, using the "APA" style
- References contain at least 80% refers to the primary references/ research journals and the latest sources (at least at last 10 years)
- Citing the related journal article/s in JNE (Journal of Nonformal Education) which have been published, at least 2-3 article
- The written reference must be in the text body or vice versa
- Min 40 references