



The Andragogy-Based Learning Model to Increase Functional Literacy Learning Motivation

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The objective of this study was describing and finding out: (1) the objective condition that motivates learners at functional literacy of PKBM Pengayoman at the Correctional Facility, Gorontalo; (2) the conceptual model of andragogy-based functional literacy to increase functional literacy learners' motivation, (3) implementation of andragogy-based functional literacy learning model to increase the motivation of the learners, and (4) effectiveness of the andragogy-based learning model to increase the learning motivation of the learners. This was a research and development study with a descriptive qualitative and quantitative approach. This study was implemented at PKBM Pengayoman of the Correctional Facility, Gorontalo. The subject of this study was 10 functional literacy learners (1 group). The study found implementation of this functional literacy learning model was tried through the stages of: (1) planning; (2) implementation; (3) assessment/evaluation; and (4) development of the andragogy-based functional literacy.

Keywords: *functional literacy learning, andragogy, learning motivation.*



INTRODUCTION

The objective condition showed that the number of illiterate populations in Gorontalo province in 2015 among the age group of 15-59, was around 15,122 people and following the intervention from the Government of Gorontalo, this figure declined to 13,000 people in 2015-2016. The target was to reduce the number of literate people to 2,122 people only. The data were obtained during the Coordination Meeting on Community Education with the chief of the unit for Community Education in Gorontalo Regencies/municipality in Gorontalo province in 2015.

Basic literacy ability (reading, writing, and counting) in fact is still a problem for some people in Gorontalo Province, especially in the PKBM Pengayoman of Gorontalo Correctional Facility. The functional literacy program held by the PKBM Pengayoman is one of the efforts to eradicate illiteracy among the community. This functional literacy program was implemented for six months. The main target was a learning group, consisting of 10 learners.

As innovation in non-formal education, functional literacy relies on the learner's motivation factor (Gilster & Glistler, 1997; Scribner, et. al. 1981; Harste, 1984). Motivation is a must for functional literacy learners for them to be able to enjoy the learning. Learners need to be motivated so that through learning they can gain benefit for their future. Motivation is an intrinsic urge to do or achieve something. Motivation is also a willingness to achieve success in life and avoid failure. In other words, motivation is a process to achieve an objective. Through motivation, one will gain strength to achieve success in life (Robbins & Everitt, 1996; Emmons, 1999; Covington, 1992; Elliot & Dweck, 2013).

Based on the observation at the PKBM Pengayoman of Gorontalo Correctional facility, it was revealed that the implementation of functional literacy was as expected due to the lack of learners' motivation. This empirical study on functional literacy learners at the correctional facility showed that 10 learners had different levels of motivation. The diversity of backgrounds of the people resided in this correctional facility was due to them having committed different crimes, thus, their motivation to learn was also different. Learners were not motivated to learn. This was evident in their absence, their low spirit in learning, talking with colleagues during a learning session, sleepy, dreamy, and often paying no attention to the teaching materials delivered by the tutor. Even some learners came late to learn. These were factors that influenced the learners' motivation to participate in the functional literacy program.

The solution to this lack of motivation from the learners at the PKBM Pengayoman of Gorontalo Correctional Facility, was focused on developing an effective learning model to improve their learning achievement, through the andragogy-based functional literacy learning model. The literacy learning model is an approach to develop the learners' ability to master and use their skills in reading, writing, calculating, thinking and observing; all of which were oriented in their daily lives, as well as utilising potentials around them. Therefore, the implemented learning strategies were reading, writing, calculating, discussion, and action (shortened as Calistungdasi in Bahasa). The



activity in functional literacy learning strategy is the utilisation of a learning outcome or functionality of the learning outcome.

This study was based on the problem of whether or not andragogy-based learning could increase learning motivation of the functional literacy learners at PKBM Pengayoman of Gorontalo Correctional Facility. The questions in this study were stated as follows: (1) What was the objective condition of learning motivation of the functional literacy learners at PKBM *Pengayoman* Gorontalo Correctional Facility? (2) What was the andragogy-based functional literacy conceptual model used to increase learners' motivation? (3) How was the implementation of andragogy-based functional literacy learning model used to increase functional literacy learners? and (4) How effective was the andragogy-based functional literacy learning model in increasing the students' motivation to learn functional literacy?

The focus of this study was to find a relevant learning model for a functional literacy program. This was inspired by the philosophy of research that was inventing something beneficial for the community (learners, management and teachers), the institution and the advancement of knowledge and technology; especially in the field of non-formal education. The theoretical benefit of this study was to strengthen the principle of an effective, efficient, accountable, and productive functional literacy program. Meanwhile, the practical benefits of this study were that the teacher could develop the potential of the learners, and the institution and program manager could gain practical information to be further used for functional literacy program development.

In relation to the current focus of the study, there are several theories relevant to this study namely, functional literacy, andragogy, and learning motivation. Functional literacy is defined as a non-formal education effort to teach the illiterate community members to have the ability to write, read, and count by utilising the surrounding potentials for them to increase their lives' quality and welfare. Meanwhile, Kusnadi (2005) stated that the term functional literacy emphasised an ability to face a new condition, which happens among society, for them to have functional ability (functional for themselves and the community). Based on this definition, functional literacy should be beneficial for the learners themselves (Street, 1993; Potter, 2018; Williams & Snipper, 1990; Hoggart, 2017).

In harmony with that, learning innovation in functional literacy is becoming more important and needs to be adjusted with development and community needs. Therefore, literacy learning is expected to have a role in social and economic development of the community. Thus, the applied curriculum should be based on the objectives to fulfill the interests and needs of the learners. In addition, functional literacy activity is also expected to assist learners to learn to apply their ability and skills, and to increase their lives' quality and welfare. Also, the functional literacy program should be integrated with local skills to be properly implemented, and to be able to implement and to empower the community members (Whitehurst & Lonigan, 1998; Janks, 2009; Johnston, 1997; Stiggins, 1991).



This was intended for the learners to have functional ability (functional for themselves and others). The functional literacy management should implement a learning process where: (1) learners would be motivated to learn when it is appropriate with their experience, interest, and needs, (2) the learning orientation is closely linked with their lives, (3) the experience is the riches' resources and it's experience should be acknowledged in the functional literacy program, (4) each learner has the need to direct themselves, and (5) individual differences among learners increases with the increase of their age (Kusnadi; 2005; DeVoogd & McLaughlin, 2005; Sulzby & Teale, 1991).

METHODS

This was a research and development study. It refers to Borg and Gall (1989) that the research and development study is a type of research, which cycles studies on the findings related to the product that would be developed. The research and development (R&D) approach in education consists of 10 steps of development as proposed by Borg and Gall (1989) which are described in Figure 1.

The approach in this study was a descriptive qualitative and quantitative approach. The focus of this study was to comprehensively describe the andragogy-based functional literacy program in increasing the learning motivation of the learners. This study was carried out at the PKBM Pengayoman at Gorontalo Correctional Facility. The subject in this study was 10 learners (1 group). This study was implemented for 6 months from July to December 2018, which cycles were: (a) pre-site (development of research design, selection of research site, and research permits), (b) implementation of study (data collection and data analysis), and (c) report writing.

The data collection methods were observation, questionnaire, document study, and test. The andragogy learning model in the functional literacy program is modified based on the model proposed by Borg and Gall (1989), therefore this study was carried out through five stages: stage 1, product analysis; stage 2, expert validation; stage 3, small group trial; stage 4, large group trial; and stage 5, final product. The data analysis was relevant analysis of the research development model.

RESULTS

The objective condition of the learners' learning motivation in a functional literacy program

The objective condition of the learning motivation identified in this study was from the functional literacy learning activity, which consisted of: lesson planning, implementation, and learning evaluation. The data showed that the objective condition of the learning motivation of the members of the functional literacy learning program at PKBM Pengayoman at Gorontalo Correctional Facility were: first, the currently implemented learning model in the functional literacy program was centred on the tutor and yet to develop the creativity aspects of the learners to be active within the learning process; second, implementation of learning was not optimum due to the lack of learning materials available, that could be made as reference to increase the knowledge of the functional literacy learners; third, the learning situation was not supportive of the learning process as there are often riots among the prisoners (members of the correctional facility); fourth, the mastery and utilisation of the learning material by the tutor appeared to be lacking due to lack of motivation of the learners to learn; fifth, the lack of learning facilities to influence the learners for a

better learning output for the functional literacy learners; and sixth, availability of learning time is not effective, thus the learning process is not maximally managed.

Development of andragogy-based functional literacy learning was based on adult learning and in implementation of the learning process, directed toward the non-formal education concept to ease the learners in their learning process. The activity steps in implementation of this andragogy-based functional literacy learning were: needs analysis, establishing the elements that would be developed, developing the andragogy learning model, validating the developed learning model with the non-formal education experts, educational practitioners, colleagues, and developing the final product. Based on the initial study, through interviews with the management, the tutor, and the functional literacy learners, as well as document study and observation, facts were found. The facts were that the objective condition on andragogy-based functional literacy in increasing learners' motivation at PKBM Pengayoman, was that the learning is not yet optimised either from the planning, organising, implementation, assessment, or the development aspect. Thus, it was yet to support the learning that oriented towards the adult learning principle in achieving the learning objectives.

Based on this statement, an andragogy-based functional literacy learning model needs to be developed to increase the learners' motivation. The developed learning model stages were planning, organising, implementing, assessment, and development. This was an alternative proposed to optimise the functional literacy learning model implemented in a non-formal education institution: (1) development of andragogy-based functional literacy learning model, (2) validation of the developed model, (3) revision of the developed andragogy-based functional literacy learning model. Implementation of the andragogy-based functional literacy learning model needed to increase the motivation of the learners; implementation of the andragogy-based learning model was tried on with the following stages: (1) planning; (2) implementation, and; (3) assessment/evaluation. These stages were objectively proven to have appropriately increased the learning motivation of functional literacy learners.

To find out the implementation of the learning model, limited trial, analysis of the limited trial, and revision of the model based on the limited trial result were carried out. The revision of the developed model was described as follows: (1) the inappropriateness of the needs analysis and the implemented learning, (2) involvement of the learners within the learning process, (3) core learning activities, especially the discussion process, dialogues, and learning experience; and 4) learning evaluation activity.

Effectiveness of the andragogy-based functional literacy-learning model to increase the motivation of functional literacy learners

Development of an andragogy-based functional literacy learning model has proven to be appropriately effective in increasing the learners' learning motivation. The effectiveness of this model was proven through field trials (large group trial), analysis of the field trial, and revision of the model based on the field trials.

The revision of the model was based on the input from the field trials. In general, from the field trials, it was found that the developed model was able to increase functional literacy learners' motivation. The aspects of these findings were: (1) the planning in the functional literacy learning process was synchronised between the identification process and the needs of the functional literacy learners, (2) implementation of learning was part of the core activity in learning process, which was designed in reference to the adult learning, and (3) evaluation activity in functional literacy learning needed a combination of a writing evaluation model and experience-based evaluation. Based on this revision, the developed model was effective to not only increase the learners' motivation but also develop learners' independence. Functional literacy learners had the attitude and behaviour to decide and not to depend on others in solving their problems.

DISCUSSION

Based on the qualitative analysis, it was found that the developed andragogy-based functional literacy learning model could increase the learning motivation of the learners to read, write, and count. Meanwhile, quantitative analysis also accurately supports this qualitative data on the increased motivation of the learners through the implementation of andragogy-based functional literacy learning model. This was supported by the quantitative analysis, which indicated that there was a difference in learning outcomes between before and after the implementation of the andragogy-based functional literacy learning model. Thus, it indicates that the developed model was proven to effectively increase the motivation of the learners.

On the learning implementation, the developed learning model also increased the self-confidence and independence of the learners. This description is supported by the quantitative analysis of the increase of learners' motivation. The research indicators refer to the increase in the motivation aspect. The quantitative analysis also showed that there was an increase of motivation to learn by the functional literacy learners based on the pre-test score, which was 540, while the post-test score was 745.

The analysis above showed that the andragogy-based functional literacy learning model was able to increase the learners' motivation from its implementation aspect, and it was accepted by the learners on its learning activity. Therefore, the developed model was appropriate and had advantages to be implemented in non-formal education. However, it should be supported by the tutor competency to play the role of the facilitator, as well as the support from the flexible environment to establish the learners' independence.

Wahyudin (2012) argued that functional literacy could increase the self-confidence of the learners. The ability to learn, write, and count increases the self-confidence of the learners. Self-confidence is needed in life as it will motivate one to make something beneficial for themselves and their environment. Therefore, development of self-confidence could help a person to solve their problems. Further, andragogy is derived from the Greek word which means adult and *agorog* which means guide. Therefore, andragogy literally means guiding the adult. One becomes



psychologically adult if a person has the self-concept to be responsible in his/her life; the concept to self-direct, such as making their own decisions.

Adult learning reflects a process where an adult learns to care and evaluate their experience. For this to happen, adult learning should be started on the hope that learning is focused on the problems in their lives (work environment, community, etc.). According to Lindeman (Brookfield, 1986), an adult learning concept is non-authoritarian learning, which is more informal than general learning and is focused on finding the meaning of experience and/or seeking standards of behaviour. Therefore, adult learning is about making the learning suitable for daily life.

In adult learning, experience and knowledge of the learners should have similar proportion to experience and knowledge of the teacher/tutor. Both can share and exchange information/experience and often find it hard to determine who learns more; the tutor or the learner. Lindeman (Brookfield, 1986) proposed several success keys to adult learning as follows: (1) Adult learning activities should be relevant to the needs and interests of the learners, thus, can satisfy the learners; (2) The adult orientation in their learning is centred on their lives, thus, the learning management should be relevant to their lives' situation; (3) Experience is the most important source of learning for the adult. Therefore, the learning method is experience analysis; (4) The adults have profound needs to manage themselves. Thus, the role of the teacher should be more the role of a facilitator (sharing experience with the learners) rather than transferring the knowledge/experience to the learners. Further, tutors should be able to provide evaluation on the consensus built with the learners; and (5) Individual differences among learners, such as age difference, work background, educational background, social background should be considered, thus, adult learning should consider these differences in their decisions.

Knowles (1970) proposed several models of adult learning that are different from child/youth learning, related to the needs to find out, self-concept, role of experience, learning readiness, learning orientation, and motivation. From the description of the success key and learning model assumption for adult learning as described above, Suprijanto (2007) proposed the following things: (1) Andragogy learning approach: Adult learning approach is non-authoritarian or persuasive, informal, provides security, flexibility, and is non-threatening in its learning process. Adult learning is heavily focused on finding the meaning and discovery to formulate standard behaviour. Therefore, the learning technique should focus on making the learning in harmony with real-life problems. It implies that the experience of the tutor on the substance of the text-book is critical, thus the learning method is more of experience analysis; (2) The extent of adult learning: Adult learning should encompass new discoveries on the meaning of life. Therefore, adult learning is initiated with providing attention to real-life problems (such as the work environment). Therefore, adult learning would be effective when it is linked to the needs/interests of the learner, real life situation/work, life experience, and considers the differences among learners as individuals; and (3) The objectives of adult learning: in general, the objective of adult learning is to assist learners as adults to carry out their social roles responsibly among the community. Adult learners constantly

develop themselves through life-long learning to obtain self-confidence, independence, and to be actively involved in the development process.

Therefore, according to Suprijanto (2007), the specific objectives of the adult learning were: (1) to raise self-confidence and optimism; (2) provide ability and skill to do something; and (3) provide the ability to accept or refuse something on the bases of the rule, values or ethics among the community. Other theories used in this study mentioned that motivation is a hypothetical construction used to describe a need, direction of intensity, and the firmness of a behaviour which is directed by objectives. Within motivation, there are aspects such as the need to perform, the need to affiliate, habit, and curiosity toward something (Good and Brophy, 1990; Wigfield & Cambria, 2010; McClelland, 1987).

There are two approaches that can be used to understand motivation: (1) motivation as a process; and (2) motivation as a tool to determine the characteristic of process based on one's behaviours (Gardner, 2001; Schunk, 1991; Lichtenberg, 2013). According to McDonald (Hamalik, 2003) that motivation was a shift of energy within oneself, which was signified by the emergence of feeling and reaction to achieve an objective. Within this concept, there are three correlating elements, motivation which started from the change of energy within oneself (Dann, 1981). This change is due to the certain shift within the neurophysiology of the human organism, for instance, due to the change of digestive system, thus, motivation arises. Motivation is signified by affective arousal, such as psychological strain, then emotional stance (Herzberg, 2017; Lawrence, 1995; Maslow, 1943). This emotional stance resulted in motivated behavior. This change can be observed through action. For instance, someone who is engaged in a discussion, he/she is interested in the topic currently being discussed, therefore, he/she tries to state their opinion correctly and appropriately. Motivation is signified by reactions to achieve an objective. Motivated individuals provide responses to achieve certain objectives. These responses are to minimise the strain due to the shift of energy within oneself. Each response is a step to achieve the objective. There are three main components in motivation (Weiner, 2012; Frey & Jegen, 2001; Dimiyati and Mudjiono, 2006), namely: need, motivation, and objective. Uno (2012); Porter, et. al. (2003); and Buck 1988) also proposed three key elements to motivation namely: (1) effort; (2) organisational objectives; and (3) needs.

CONCLUSION

The initial condition on the andragogy-based functional literacy learning is to increase the motivation of the learners at the PKBM *Pengayoman* Gorontalo Correctional Facility who showed that the implementation of functional literacy at this learning centre was based on the fact that there were prisoners who were illiterate. Thus, they needed to be taught literacy to increase their welfare. Development of the andragogy-based functional literacy was oriented on adult learning, and in its learning, the process refers to the non-formal education concept. Based on the stages of the development model, this learning model conceptually provides benefit for the management, especially the tutor, to ease the learners in their learning process through an adult learning approach, which utilises the environment as a means of interaction to optimally achieve the learning objective.

Implementation of this andragogy-based functional literacy learning model was through the following stages: (1) planning; (2) implementation; and (3) assessment/evaluation. Based on the trial, it showed that the developed learning model was proven to be effective and appropriate, to increase the motivation of learners through the analysis of model appropriateness, model validation, limited trial, and field trial, as well as acceptance of the learners based on their responses on the increase of their learning motivation.

Development of this andragogy-based functional literacy learning model was proven to be effective to be used in increasing the motivation of the functional literacy learners. This was based on the quantitative data analysis, where there was an increase in the learners' motivation following the implementation of this developed model. Further, the increase of this motivation was also supported by the result of their reading, writing, and counting ability in learning

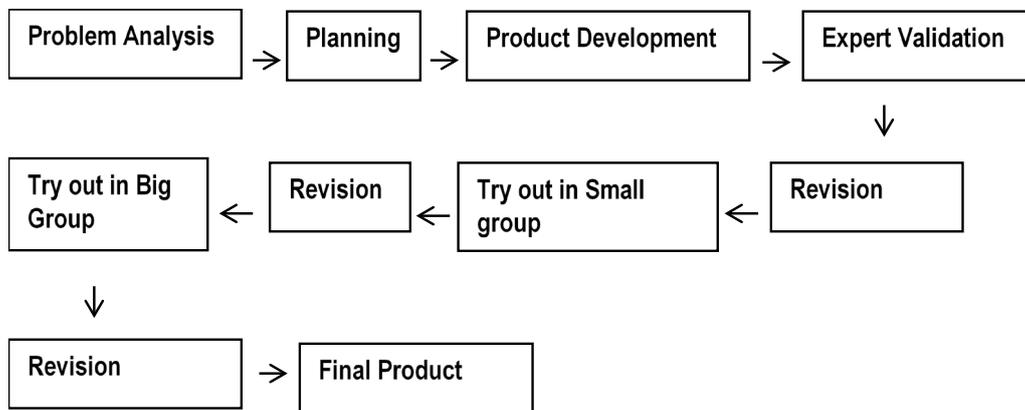


Figure 1 R & D Steps (Borg and Gall, 1989)



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