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The role of online learning environment on the students' basic psychological needs satisfaction during the Covid-19 pandemic

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Abstract
The transition of learning systems during pandemic is one of the factor causing the inability to fulfill psychological basic needs satisfaction that are oriented on the low level of student self-determination such as self-regulation, self-confidence and responsibility. The focus of study in this article to explain the role of online learning process toward students' autonomy, competence and relatedness satisfaction based on the perspective of cognitive evaluation theory. This theory is used to find out how the online learning environment can facilitate and support students' basic psychological needs satisfaction and the intrinsic motivation level influenced by exsternal, interpersonal and intrapersonal factors. The method in this article used narrative literature review. Through a literature review, researcher can determine what factors can build student self-determination in online learning process. The findings showed social context and teacher facilitating in online learning environment play important in encouraging and maintain students intrinsic motivation to fulfill the level of students' autonomy, competence and relatedness satisfaction in doing online learning activity.

Keywords: Basic Psychological Needs Satisfaction, Intrinsic Motivation, Self-determination, Cognitive Evaluation Theory, Online Learning Environment

Introduction

The spread of corona virus has a significant impact on the stability of a country's government system. The long-term sustainability of the pandemic has a negative impact on the stability of the education system in Indonesia, especially in the implementation of the learning process at each level of education. This is in accordance with the results of research conducted by Cao et al. (2020) and Li et al. (2020) that the impact of the long-term sustainability of the pandemic causing emotional instability includes a decrease in positive emotions and an increase in negative emotions such as depression and anxiety as well as individual life satisfaction. Disruption of emotional stability and decreased life satisfaction can have an impact on the level of self-regulation and student learning motivation during online learning activities during the pandemic, especially students who are at the level of Vocational High School Education. Therefore, writing this article aims to explain the role of fulfilling students' basic psychological needs satisfaction (BPNS) in learning as a basic factor that builds student self-determination which is reviewed based on the perspective of cognitive evaluation theory. In other words, the focus of this article is to find out how online learning environment can support and maintain intrinsic motivation level to facilitate the fulfillment of students' needs for autonomy, competence and relatedness through exsternal, interpersonal and intrapersonal factors. Online based learning environment provides a variety of benefits for students in carrying out learning activities during a pandemic such as flexibility of place and time in order to overcome various obstacle factors such as one of the limitations of available facilities (Gilbert, 2015). In addition, the application of online classes gives students the freedom of expression in generating and using innovative ideas so that the level of understanding and confidence increases. Indirectly, student involvement and interest in online learning activities can indicate that students' intrinsic motivation is involved. The application of online classes gives students the freedom of

expression in generating and using innovative ideas so that the level of understanding and confidence increases

On the other hand, the implementation of online-based learning in the long term resulted in hampering students' intrinsic motivation such as fatigue, lack of attention, feelings of pressure caused by monotonous activities and increased frequency of assignments and lack of connectivity between friends and teachers (Pandey, 2021). In addition, Pandey also explained that this problem was caused by technological interference factors in the form of low internet connections and the social environment in the form of low control from teachers in learning activities, causing a variety of unwanted external factors, one of which was noise and online learning required a lot of mental involvement from students. In other words, this can lead to the unattainable satisfaction of autonomy which acts as a basic element in order to know something that is needed, desired and must be done with certainty (Joo et al., 2013). In addition, the increased frequency of tasks can cause the need for competency satisfaction to decrease such as the variety of demands given by the teacher and the feedback received is getting less and less (Bakadorova & Raufelder, 2018), resulting in a sense of failure and doubt in students about their abilities (Li et al., 2019). Furthermore, the low level of interpersonal and intrapersonal on achieving satisfaction of engagement needs in the implementation of online learning systems is a problem that must be addressed. Failure to achieve this aspect causes students to feel frustrated, alone and isolated (Vansteenkiste & Ryan, 2013). This identifies that behavioral involvement in establishing emotional connectivity is not in accordance with expectations, so that attachment needs are damaged (Filak & Nicolini, 2018). Therefore, the theoretical study that the researcher conducted play important in knowing to what extent the online learning environment can facilitate and support the satisfaction of the needs for autonomy, competence and attachment that have an impact on the level of student self-determination.

Fulfillment of basic psychological needs satisfaction (BPNS) plays important in increasing students' intrinsic motivation in carrying out a learning activity. Abeysekeraa and Dawson (2014) stated that meeting the needs of autonomy and competency as a driver and supporter of students' intrinsic motivation. Meanwhile, the need for relatedness plays an important role in developing intrinsic motivation to foster a sense of security and connection in a social context (Van Nuland, Taris, Boekaerts & Martens, 2012). The need for autonomy is related to the independence of students to regulate themselves in bringing up a certain learning behavior that is oriented to the variety of available choices (Sulea et al., 2015). In the school context, the desire of students to be involved and play an active role in learning activities is one sign that the need for autonomy has been met (Ratelle & Duchesne, 2014). Intrinsic motivation based on the needs and desires of students can affect the level of involvement, make decisions, be responsible for behavior and determine achievement targets that are in accordance with the level of need (Powers et al., 2012). Competency needs are related to the level of self-efficacy and students' ability to meet the target achievement of the task being done (Ulstad, Halvari, Sorebo & Deci, 2016; Kapp, 2013). This means that mastery and expression of skills in the form of an ability based on the results of achievement in a challenge is a sign that the competency needs have been met (Kaiser, Grobman & Wilde, 2020). In other words, optimizing the ability to obtain consistency of achievement result that aim to master the required competencies and strive to achieve other achievements from the next challenges that have a higher level of complexity, so that the previous achievements do not have a significant enough meaning. Obtaining feedback from the results of achieving the previous task targets is a factor that can encourage the level of individual self-efficacy in order to avoid a variety of unfavorable things (Cook & Artino, 2016). Relatedness need refered to students' wants and needs to connect emotionally with other individuals (Ryan & Deci, 2017). The sense of interconnectedness between each student can increase interest in establishing a form of collaboration in the classroom (Noour & Hubbard, 2014).

In other words, the autonomous learning environment provided by the teacher can facilitate the level of connectivity between students and students with teachers in order to create an attitude of mutual respect, care and support for one another (Cook & Artino, 2016; Ulstad, Halvari, Sorebo & Deci, 2016). The independent variable in this study refers to the online learning environment role in facilitating learning system process. Meanwhile, the dependent variable is related to the level of Student BPNS that influenced by mechanism in doing online learning system. The method that the researcher used in this article is narrative literature review based on the perspective of cognitive evaluation theory. According to this theory, the provision of various awards can reduce the level of intrinsic motivation for learning behavior on a task that has been previously enjoyed, it can even damage or eliminate the motivation that has been obtained. The focus of cognitive evaluation theory is related by how the learning environment can facilitate and support BPNS through the provision of rewards, feedback, interpersonal and intrapersonal processes and various other external factors in the learning process that have been internalized into self-regulation, so as to encourage and increase or decrease students intrinsic motivation (Ryan & Deci, 2017). In addition, there are several previous studies that examine the satisfaction of students' basic psychological needs in an online learning environment. According to research result conducted by Boardman, Vagas, Cotler and Burshteyn

(2021) showed that the emergency effect of switching offline to online learning systems resulted in less engagement with classmates, less motivation and procrastination in doing assignments. However, they tend to be more connected to their lecturers compared to pre-pandemic learning. Research conducted by Harnett (2015) showed that the online learning context and existing social factors damage student learning motivation such as student perceptions, the level of task load and high value demands, minimal feedback, instructions in a complicated learning process and obstacles to communicating with others classmate. Hsu, Wang and Bristol (2019) in their research showed that satisfaction of students' basic psychological needs can improve the regulation of motivation levels which are characterized by involvement in achieving online learning goals.

The result of Chiu's research (2021) showed that the use of supportive strategies in online learning affects the satisfaction of students' basic psychological needs. Shah et al (2021) in their research showed that the satisfaction of students' basic psychological needs is mediated by their perception of the facilities provided in virtual learning. Then, research result conducted by Irawan, Dwisona and Lestari (2020) showed that feelings of boredom, anxiety, mood swings are caused by the level of task demands. On the other hand, the results of research conducted by Alqurashi (2019) showed that learner content interaction and online self-efficacy are the most significant predictors that affect student learning satisfaction, while interactions between students do not predict student satisfaction and perceptions in online learning. In general, previous research described that the context and variety of social factors in online learning affect perceptions and damage learning motivation and the use of a strategy in online learning affects the level of students' basic psychological needs. The literature review research that the researcher did was different from previous research, because the researcher used a cognitive evaluation theory perspective, which basically stated that the provision of various rewards can reduce the level of intrinsic motivation for learning behavior and even damage it. However, the researcher used the theory as a reference to find out that various external factors can affect the level of students' intrinsic motivation, so that motivation can last in the long term facilitated by an autonomous online learning environment. Therefore, researchers want to know whether a variety of external factors can support and encourage students' intrinsic motivation in addition to internal factors, so that satisfaction with the needs of autonomy, competence and relatedness can increase and have stability in carrying out online learning activities in the long term.

Literature Review

Basic Psychological Needs Satisfication' Role in Building Student Self-Determination

Based on decades of research conducted by Deci and Ryan on intrinsic motivation and the internalization process. Deci and Ryan found a set of basic psychological needs that serve as a driving factor in eliciting effective behavior and the acquisition of psychological health. The basic psychological needs that must be met by the individual include the needs for autonomy, competence and relatedness (Gagne & Deci, 2014). Ryan and Deci (2017) stated that psychological basic needs play an important role in achieving optimal self-development, integrity and well-being. Furthermore, Ryan and Deci explained that failure to fulfill is manifested in the form of decreased self-development, integrity and health. The achievement of psychological basic needs satisfaction acts as a mediator between the social context and the variety of results obtained in terms of performance and health as well as the relationship between BPNS with motivation and individual goals (Deci & Ryan, 2012). Vallerand & Lalande (2011) stated that The relationship between social context, individual motivation and action is mediated by the ability to fulfill basic psychological needs that function as a basic factor in regulating individual behavior motivation.

Vansteenkiste, Ryan & Soenens (2020) explained that the need for autonomy refers to experiences and desires that are based on the individual's internal drive and the satisfaction of autonomy needs is characterized by feelings of satisfaction, integrity as what is done, thought and felt comes from the internal drive of the individual. This form of need dissatisfaction causes individuals to experience a variety of pressures and conflicts that cause deviations in the form of behavior. Second, the need for competence refers to the effectiveness of experience and mastery. The achievement of this need is characterized by the involvement of individuals to develop their skills and expertise and the unattainability of this need is manifested in the form of feelings of ineffectiveness, failure and powerlessness. Third, relatedness need refer to experience, bonding and attention. This form of need fulfillment is characterized by feeling satisfied with the connections that have been established and feeling important for other individuals. Dissatisfaction with this need is manifested in the form of a sense of alienation in the social context and loneliness. On the other hand, Stanley, Schutte and Philips (2021) stated that achieving the fulfillment of BPNS can provide support in developing positive affect and reducing the development of negative affect levels.

Positive affect is related to a subjective experience characterized by excitement, self-efficacy, interest, enthusiasm, alertness and energy (Sin, Moskowitz, & Whooley, 2015). Meanwhile, negative affect comes from subjective experiences characterized by feelings of anger, difficulty, guilt, shame, fear, humiliation and

disgust (Koch, Forgas & Matovic, 2013). The study of the relationship between basic psychological needs and well-being focuses on the relationship between needs, affection and mental health outcomes (Schutte & Malouff, 2018). Ng et al. (2012) found that the association of basic psychological needs satisfaction gave more positive affect and less negative affect such as anxiety and depression related to satisfaction fulfillment in work setting. Van den Broecket et al. (2016) found that the need for autonomy and relatedness gave greater affection and the need for competence provided less affection. In other words, the ability to fulfill basic psychological needs affects an individual's affection, cognition and behavior (Hodge & Guciarrdi, 2015). Therefore, interest in learning, development of abilities and progress of individual learning achievements are various factors that are promoted in self-determination theory (Ryan & Weinstein, 2009). In other words, BPNS of individuals play a role in facilitating individual intrinsic motivation such as encouraging, growing, developing, maintaining intrinsic motivation. Thus, self-determination theory assumes that the individual is an active organism based on the need for autonomy, competence and relatedness. Therefore, the three basic psychological needs are the basic factors that build the level of individual determination.

Self-Determination's Role in Students Academic Performance

The theory of self-determination emphasizes the tendency of individuals to bring up a series of behavioral effectiveness that is oriented towards the achievement of learning outcomes (Siddiqui, Soomro & Thomas, 2019). The focus of the study of self-determination theory is based on intrinsic motivation and internalization processes that are oriented towards individual attitudes and goals in generating behavior that is focused on learning outcomes (Abeysekeraa & Dawson, 2015). On the other hand, self-determination theory assumed that social and cultural context are factor that influences the well-being and quality of individual performance based on the acquisition of intrinsic and extrinsic motivation levels that have been regulated into self-regulation (Ryan & Deci, 2017; Ryan & Deci, 2020). it meant, when individuals get the opportunity to meet basic psychological needs in the social and cultural context of the learning environment, the drive for internal motivation and integrity increases significantly. This stimulates the individual's cognitive processing in carrying out learning activities such as exploring and trying to master the material being studied, increasing the tendency to increase the knowledge possessed, reducing avoidance efforts, so this leads to an increase in individual academic abilities (Betoret & Artiga, 2011). In other words, learning interest, competency development, progress and learning outcomes based on the achievement of basic psychological needs are various factors that are promoted in the theory of determination.

Christenson et al. (2012) stated that the involvement of students in the learning context lies on their participation to be actively involved and committed to carrying out learning activities that are based on the goal of achieving learning outcomes that are oriented towards the ability to achieve a certain level of achievement. Furthermore, Sinatra et al. (2015) mentioned that there are four dimensions of student engagement with the learning context. First, behavioral involvement is oriented to the level of participation, persistence, focus of attention and effort. Second, cognitive engagement which refers to the complexity of behavior aimed at the completion of learning tasks. Third, emotional involvement which refers to the level of affection that students have for teachers, classmates, learning activities, learning experiences and relationships. Fourth, Agent involvement refers to the student's initiative behavior to contribute to the process of learning activities (Reeve, 2013; Reeve & Tseng, 2011). These four dimensions of involvement are oriented towards ways of thinking, feeling, communicating and acting in the learning process (Reeve, 2013; Wang & Eccles, 2013). In other words, the four dimensions of involvement are the result of a motivational process in order to foster a variety of motivations that should be possessed in being actively involved in the context of the learning process (Reeve, 2013). On the other hand, based on the results of research conducted by Schutz, Quijada, de Vries and Lynde (2011) that an effective learning strategy will affect the impression of an individual's emotional experience, so that individuals have a fairly high level of attention and focus and good academic abilities. Meanwhile, feelings of anxiety indicate that students do not have comfort in learning activities and identify students who have low learning achievement and cognitive abilities, so they tend to experience psychological stress and poor health. Ciani, Sheldon, Hilpert and Easter (2011) found that the level of emotional and academic adjustment was predicted by the level of satisfaction of basic psychological needs obtained by students. This finding identified that school well being play important role for students.

External Event as Factors in Supporting Basic Psychological Needs Satisfaction's Fullfilment in Students Learning Environment in Pandemic

The success of students in achieving learning goals and tasks in the online learning environment system based on the level of motivation they have. Bolliger, Supanakorn and Boggs (2010) stated that the achievement of learning satisfaction in online learning environment settings depends on the level of student motivation. When there is no supervision from the teacher, students are still required to be able to complete the assigned tasks and motivate themselves to participate in online learning activities until the specified time limit (Boardman, Vargas, Cotler & Burshteyn 2021). Students who have a high level of motivation have a

significant success presentation, compared to students who have low learning motivation (Hsu, Wang & Levesque-Bristol, 2019; Nelson, Oden & Williams, 2019). Online learning provides opportunities to develop students' needs for autonomy and requires them to regulate the level of self-regulation towards a higher level, so that intrinsic motivation has a role in achieving learning tasks (Barak, Watted & Haick, 2016). The level of self-regulation that is owned can identify the level of student involvement in bringing up effective learning behaviors in the online learning environment (Bayanova et all., 2020; Buhr, Daniels & Goegan, 2019; de Barba, Kennedy, & Ainley, 2016; Irtuganova, 2018; Karkina, Mena Marcos, & Valeeva, 2021; Minakhmetova et al., 2017; Razumovskaya et al., 2019; Rubio et al., 2020; Tugun et al., 2020). Huber et al. (2020) assumed that the level of self-regulation affects the effectiveness of goal setting and planning of student learning processes in online-based learning environments related to autonomy and competence. Furthermore, Ryan and Deci (2017) stated in cognitive evaluation theory that the self-regulation style shown by students in learning affects their intrinsic motivation.

The level of motivation and involvement of students in the learning environment is influenced by various contextual factors such as support from teachers and classmates (Lietaert et al., 2015). In the implementation of learning activities, teachers play an important role in growing students' learning motivation (Allen et al., 2013; Roorda et al., 2011; Wang & Eccles, 2012). Teacher support in online learning can encourage student autonomy and interpersonal involvement (Hartnett, 2015; Xie & Ke, 2011). Lietaert et al. (2015) and Roorda et al. (2011) stated that there are three dimensions of teacher support in online learning, namely, support for autonomy, competence and involvement. The autonomy support provided by the teacher is in the form of offers and recommendations for digital learning media including web links, videos and slides and their various links (Bedenlier et al., 2020; Trenshaw et al., 2016). Second,the use of digital media formats as a means of completing learning tasks given to students that allows students to do learning asynchronously (Trenshaw et al., 2016). Furthermore, the support of the teacher structure is in the form of providing instructions related to sending assignments via digital (Bedenlier et al., 2020). Second, designing online learning materials that have been designed in such a way that requires and requires students to use cognitive aspects conferencely (Chiu & Churchill, 2015; Chiu & Mok, 2017) and provide responses in the form of multimedia-based feedback in discussion forums on asynchronous learning systems (Chiu, 2021). Then, the involvement support provided by the teacher is in the form of implementing interactive learning (Chiu, 2021), preparing learning materials that involve emotional aspects (Chiu et al., 2020) and using visual aids that aim to create a positive atmosphere and minimize misunderstandings (Chiu, 2021). Therefore, linkages can predict behavioral engagement such as the level of sense of interconnectedness between teachers and students as a factor driving behavior to participate and be actively involved in the online learning process, foster a positive sense of students towards learning activities (emotional involvement), teachers facilitate students' cognitive involvement through giving challenging assignments and encourage students to speak about the learning needs that are needed and want to be achieved, the involvement of agents (Reeve, 2013; Ruzek et al., 2016; Vollet et al., 2017). Alqurashi (2019) found that the form of interaction between students and learning content and interaction between teachers and students played an important role in the process of achieving learning objectives and the satisfaction obtained, so that the form of interaction between students does not identify a predictor. In other words, interaction in online learning is a factor that influences students' perceptions and learning motivation (Ku, Tseng & Akarasriworn, 2013).

Shah et al. (2021) stated that the lack of interpersonal interaction in learning between teachers and students or fellow students can reduce the fulfillment of the need for linkage. Furthermore, Wang (2017) stated that the emergence of student learning involvement in achieving learning goals is based on the level of intrinsic motivation that is oriented to the level of interest or joy in learning. On the other hand, Ryan and Deci (2017) stated in the sub theory of self-determination, namely cognitive evaluation theory that external factors that can affect the fulfillment of BPNS through increasing intrinsic motivation in the form of the use of informative rewards, so that these rewards do not damage motivation but tend to maintain or increase students' intrinsic motivation. On the other hand, rewarding can trigger behavior repetition on the basis of the response received, so that it can produce positive reinforcement in learning. Furthermore, Purwanto (2014) stated that there are several awards that teachers can give to students in the form of body gestures such as nodding the head as a sign of appreciation justifying students' answers, giving praise for students' abilities, giving higher levels of assignments as appreciation and giving objects as gifts. achievement reward. In other words, rewards can be in the form of verbal praise, good scoring and achievement of learning needs satisfaction. Purwanto (2014) stated that there are several awards that teachers can give to students in the form of body gestures such as nodding the head as a sign of appreciation justifying students' answers, giving praise for students' abilities, giving higher levels of assignments as appreciation and giving objects as achievement prizes. In other words, rewards can be in the form of verbal praise, good scoring and achievement of learning needs satisfaction. Purwanto (2014) stated that there are several awards that teachers can give to students in the form of body gestures such as nodding the head as a sign of appreciation justifying students' answers, giving praise for students' abilities, giving higher levels of assignments as

appreciation and giving objects as achievement prizes. In other words, rewards can be in the form of verbal praise, good scoring and achievement of learning needs satisfaction.

Based on the results of research conducted by several researchers related to the analysis of the use of rewards in a positive role, it showed that rewards can affect students' attitudes and learning motivation in the form of increasing enthusiasm for learning without expecting rewards. The results of this study also explain that the use of rewards needs to be varied and consider aspects of student needs. In addition, Ryan and Deci (2017) in their research found that verbal rewards and positive verbal feedback significantly increased intrinsic motivation and concrete rewards weakened students' intrinsic motivation. Twigg (2015) found that feedback plays an important role in the learning process. Other research results stated that providing informative feedback produces the opposite response in the form of persistence in completing tasks and withdrawing from the learning process (Brown et al., 2016; Duchaine et al., 2011; Lorens et al., 2016; Huges et al., 2014). In other words, it can be concluded from the results of research conducted by Ryan and Deci (2017) that the various external factors studied in cognitive evaluation theory in the form of rewards, feedback, time limits, choices, and supervision are various social events. These external events are connected with interpersonal communication behavior among students and basic psychological needs such as autonomy, competence and relatedness.

The Positive and Negative Effects in Doing Online Learning toward Student's Self-Determination

An online-based learning environment provides a variety of benefits for students in carrying out learning activities during a pandemic such as flexibility of place and time in order to overcome various obstacle factors such as one of the limitations of available facilities (Gilbert, 2015). In addition, the application of online classes gives students the freedom of expression in generating and using innovative ideas so that the level of understanding and confidence increases. Indirectly, student involvement and interest in online learning activities can indicate that students' intrinsic motivation is involved. On the other hand, the implementation of online-based learning in the long term results in inhibited students' intrinsic motivation such as fatigue, lack of attention, depressed feelings caused by monotonous activities and increased frequency of tasks as well as a lack of connectivity between friends and teachers (Pandey, 2021). The results of research conducted by Brazendale et al. (2017) showed that students save more time at home and the use of electronic devices such as mobile phones and laptops as learning media that is used continuously makes students feel bored and even experience symptoms of stress such as mild stress and even symptoms of severe stress. In other words, this can lead to the unattainable satisfaction of autonomy which acts as a basic element in order to know something that is needed, wanted and must be done with certainty (Joo et al., 2013).

In addition, the increased frequency of tasks can cause the need for competency satisfaction to decrease such as the variety of demands given by the teacher and the feedback received is getting less and less (Bakadorova & Raufelder, 2018), resulting in a sense of failure and doubt in students about their abilities (Li et al., 2019). This is supported by the results of research conducted by Sharp and Theiler (2018) that emergencies during a pandemic have a psychological impact on students such as anxiety, and fear. The results of other studies also show that the length of time distance learning makes students bored and experiences emotional instability (Irawan, Dwisona & Lestari, 2020). The feeling of boredom experienced by students is caused by the lack of interaction obtained. This causes anxiety, and ultimately interpersonal communication cannot be fulfilled (Galea, Merchant, & Lurie, 2020). In other words, interaction and communication in online learning that utilize digital media cannot get the meaning of non-verbal communication cannot be fulfilled (Irawan, Dwisona & Lestari, 2020). The low level of interpersonal and intrapersonal on achieving satisfaction of engagement needs in the implementation of online learning systems is a problem that must be addressed. Failure to achieve this aspect causes students to feel frustrated, alone and isolated (Vansteenkiste & Ryan, 2013). This identifies that behavioral involvement in establishing emotional connectivity is not in accordance with expectations, so that attachment needs are damaged (Filak & Nicolini, 2018). Therefore, theoretical study that the researcher conducts plays an important role in knowing the extent to which the online learning environment can facilitate and support the fulfillment of the needs for autonomy, competence and engagement that have an impact on the level of student self-determination.

Method

This study used narrative literature review method. Through this method, researcher will identify previous studied that are relevant with the research topic being studied by summarizing each article that has relevance based on the researcher need related by the research topic, so as to produce a comprehensive report to obtain research gaps that have not been studied previously and avoid plagiarism from previous research (Ferrari, 2015). The literature review technique that the researcher used in this article begin to determine the research topic, searching relevant literature related by the research topic based on several articles' database from google scholar, selecting literature, processing data and making conclusions. On the

other hand, the literature review applied in this research aims to identify, evaluate and synthesize the previous research results that have relevance with the research studied about how online learning environment can facilitate students' basic psychological needs satisfaction and support the intrinsic motivation level. The grand theory in this study is the theory of self-determination which was coined by Deci and Ryan in 1985, but the researcher used the development and renewal of the theory that Deci and Ryan (2012) and Ryan and Deci (2017) did. The researcher adopted one of the mini theories in the self-determination theory, namely cognitive evaluation theory. In addition, the reference sources used in this literature review are ninety references that are related to the research topic in this article about the role of the learning environment in facilitating the satisfaction of students' basic psychological needs. In other words, the researcher wants to explore further what kind of support is provided by the online learning environment in facilitating the satisfaction of the needs for autonomy, competence and relatedness and how it can occur so that students' intrinsic motivation can survive and even increase in implementing the learning system during the pandemic based on in the previous research literature through cognitive evaluation theory perspective.

Results

The results of the literature review of the research objectives showed that social context influences perceptions, well-being and involvement in the online learning process. On the other hand, external factors such as the support of teachers and classmates in conducting online learning activities significantly affect the level of students' intrinsic motivation in an effort to achieve satisfaction of basic psychological needs in learning. Therefore, achievement of satisfaction fulfillment of autonomy, competence and relatedness are facilitated by the context of the social learning environment. Student perception plays important role in carrying out online learning activities in the long term, because it can affect student involvement in the learning process. Students' observations and perspectives on perceived objects can affect the development and progress of student learning, especially in learning behavior (Abrams & Weilder, 2015). This student involvement can be related in participation to play an active role in the learning environment. This involvement is related to the level of affection such as the well being of students in the learning environment, planning, personal goals, point of view, optimizing ability to play an active role in the classroom, the amount of effort invested in learning. Student involvement in learning is certainly influenced by the level of student self-regulation related to the ability to control and be responsible for their learning tasks (Arabzadeh, Kadivar & Dlavar, 2012). Students who have good self-regulation will have effective learning methods that are oriented towards academic achievement and look at their future with optimism. Besides the student perception factor that can affect student involvement in doing online learning.

Another finding in this study is teacher support that can facilitate students' basic psychological needs in learning. The role and efforts of teachers in fostering and facilitating students in the online-based learning process can determine the level of involvement of students' learning behavior in the classroom. Appleton and Lawrenz (2011) stated that teachers must improve and develop learning methods so that the process of engaging student learning behavior can occur, so that it can foster student learning motivation. Achieving the success of the learning process requires a variety of techniques and teaching styles so that the involvement of active and independent student learning behavior can occur. This means that teachers must provide an autonomous environment for students. Based on the findings, support for autonomy, competence and relatedness between teachers and students are related to achieve the success of the learning process requires a variety of techniques and teaching styles so that the involvement of active and independent student learning behavior can occur. This means that teachers must provide an autonomous environment for students. Based on the findings, support for autonomy, competence and the relationship between teachers and students are related to achieve the success of the learning process requires a variety of techniques and teaching styles so that the involvement of active and independent student learning behavior can occur. This meant, that teachers must provide an autonomous environment for students. Based on the findings, support for autonomy, competence and relatedness between teachers and students are related by characteristics of the learning system in the classroom, task characteristics related to providing authentic task instructions and social support so that student involvement in schools can affect the level of academic achievement, classroom management that can create a caring and supportive learning environment.

In addition, the findings in the study showed that the use of rewards in the form of verbal rewards, positive gestures or informative feedback can maintain the level of intrinsic motivation of students in undergoing online-based learning activities in the long term. This award takes into account aspects of student needs in online learning activities. Giving awards to students according to the level of learning needs can be in the form of rewards given based on class attendance, time span interacting with activity targets, completing assignments, and achieving performance standards in achieving learning activity goals. This is in accordance with the results of research conducted by Ryan and Deci (2017) that verbal rewards and positive

feedback were found to increase students' intrinsic motivation and real rewards weaken intrinsic motivation. Furthermore, Ryan and Deci (2017) explained in their research result that real rewards in the form of non-contingent tasks do not affect intrinsic motivation, but rewards for contingent involvement, contingent task completion and contingent performance can reduce intrinsic motivation, and even damage it. In other words, it can be concluded from the results of research conducted by Ryan and Deci (2017) that the various external factors studied in cognitive evaluation theory in the form of rewards, feedback, time limits, choices, and supervision are various social events. These external events are connected with interpersonal communication behavior among students and basic psychological needs such as autonomy, competence and relatedness. Therefore, the social context in the online learning environment affects the level of students' intrinsic motivation in achieving satisfaction of learning psychological needs.

Conclusion

Social context in learning activities is a factor that plays important in the successful implementation of online-based learning activities. Implementation of online-based learning in the long term can lead to decrease the level of intrinsic motivation of students. The results of the study show that the level of self-regulation that students have determines the level of involvement in taking an active role in the classroom. On the other hand, other external factors which include support for autonomy, competence and relatedness provided by teachers to students are factors that can facilitate in improvement of students' intrinsic motivation, so that the fulfillment of autonomy, competence and relatedness needs is achieved. Besides that, the provision of informative rewards and feedback can maintain the level of students' intrinsic motivation in carrying out online-based learning processes. Therefore, the achievement of the fulfillment of the psychological basis of student learning is facilitated by the social context of the learning environment. In other words, autonomy, competence, relatedness and various external factors that have been internalized are basic elements in building student self-determination.

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