The challenges, supports, and strategies of self-directed learning among college students

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ABSTRACT

In addition to be proficient at their core subjects, college students need to master the 21st-century skills such as critical thinking, collaboration, information literacy, and many other skills. Studies on self-directed learning (SDL) have indicated that SDL is a strong predictor for 21st-century skill mastery. This study aimed at exploring the challenges, supports, and strategies of SDL among college students. This qualitative study used interviews and focus group discussions (FGDs) to obtain data on SDL. The respondents in this study were college students in a private university. The interview and the focus group discussions were then transcribed, analyzed, and coded to find emerging themes. The results of this study indicate several important points. First, social media can empower students in their learning, but can also distract them from their learning. College students needed support from parents, peer groups, and even alumni to seek knowledge independently. Making priorities and maintaining good relationship with classmates, friends, seniors, and alumni are some of the strategies that college students used.

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1. INTRODUCTION

Self-directed learning or SDL commonly refers to a learning process in which a learner take charge of their learning needs and goals, manage their learning activities, seek their learning resources, solve their learning problems, and monitor their learning progress [1]. The term SDL is often used interchangeably with independent learning, autonomous learning, or self-study [2], [3]. Knowles [4] proposed the SDL and defined SDL as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes. SDL skill is of utmost importance for students because of three main reasons. First, the transfer of knowledge is no longer teacher's privilege. Every person is capable of inquiring new knowledge. Another main reason is that learning can take place beyond classroom walls. Learning can take anywhere anytime. The other main reason is that learning is a life-long process. Learning does not take place only before adolescence. People learn a lot of new knowledge as they age [4]. Brockett and Hiemstra [1] suggested that SDL requires learners to reflect their goals, evaluate their learning needs, obtain learning resources, and manage their learning activities. Doyle [5] listed a number of personal skills that a person needs to master in order to become an independent learner. They are finding and evaluating new sources of information, recalling and reviewing new knowledge, monitoring their own learning, practicing problem-solving activities, writing reports, identifying 366 □ ISSN: 2089-9823

new information, and organizing this new information in a meaningful way [5]. Garrison [6] looks at SDL from the learning process itself. Specifically, he focused on the cognitive and motivational dimensions of learning. He defined SDL as "an approach where learners are motivated to assume personal responsibility and collaborative control of the cognitive (self-monitoring) and contextual (self-management) processes in constructing and confirming meaningful and worthwhile learning outcomes" (p.18). In his model, he emphasized three dimensions of SDL. They are motivation (entering/task), self-management (control), and self-monitoring (responsibility).

The purpose of this study is to explore the challenges, supports, and strategies of SDL among college students. Existing research on SDL has been conducted in various settings such as nursing education [7]–[13], business [14], language learning [15]–[21]. Most of the studies in SDL were mostly conducted using quantitative method [8], [10], [12], [14], [18], [22]–[28]. Studies on SDL which adopted qualitative study are those focusing on nursing or medicine education [14], [29]–[34]. Previous qualitative studies on SDL examined SDL methods and activities [34]–[36], learning experiences [33], assessment [37], barriers to SDL [29]. Qualitative studies on the challenges, supports, and strategies of SDL are still underrepresented. This study attempts to explore the phenomenon in more detail. In this digital age, SDL should be encouraged because technological advancement enables everyone to access information anytime and anywhere. New knowledge can come from anywhere and anyone. Thus, better understanding on the challenges, supports, and strategies that students encountered and adopted is crucial.

2. RESEARCH METHOD

In this study, the researchers used focus group discussions (FGDs) and interviews to obtain data. The respondents of this study were 16 university students in a private university. Two data sources were used as a triangulation tool. Triangulation is a method used to increase the reliability and validity of data collected from a study. Triangulation can be done in several ways, namely by combining theories, methods, data, or researchers. Merging some of this data aims to ensure that the shortcomings that arise from one data can be complemented by the advantages of other data. Triangulation is also an attempt to help explore and explain complex human behavior by using various methods to offer readers a more balanced explanation. In other words, each of our data sources is the perfect tool for data triangulation [38]. After the researchers completed the interviews, they downloaded the audio files to a shared location accessible only to the researchers. After saving the interview documents, they used Express Scribe, a free transcription software, to transcribe the audio files. This program allowed them to use foot pedals and headsets to easily and quickly transcribe several hours of interviews. Next, they saved the transcrips in a password-protected folder. Only the researchers had access to the folder. The next step is to use Atlas.ti to do some more in-depth coding. The researchers transferred all transcripts to Atlas.ti. Next, they assigned a specific identifier to each data source and created themes that emerged from the FGDs and interviews. To protect the confidentiality of the respondents, the researchers used pseudonyms in the report.

3. RESULTS AND DISCUSSION

FGDs and interviews were conducted to obtain more detailed answers about independent learning, challenges, support, and strategies used by students in conducting independent learning. From the transcripts of FGDs and interviews that have been coded, the researchers obtained several themes classified into challenges, supports, and strategies. Quotations from the respondents were given to provide evidence of each theme. The quotations were already translated into English.

3.1. Challenges of self-directed learning

3.1.1. Difficulties in maintaining learning motivation

One of the most common challenges to SDL is the difficulties in maintaining high learning motivation. This happens especially for senior students who are in the process of thesis writing. They do not have rigid deadlines when they have to submit their drafts. Hectic schedules, non-academic and academic activities, and assignments do not give a lot of leeway to relax. Ella and Prasetyo, during the FGD, agreed that deadlines often became demotivator, especially when one big project is completed, students felt too lazy to do anything else. Maria said she "did not have the mood to study...especially after a busy day". Ella emphasized what Maria said. She was fine with her courses, but spending hours doing other activities outside classes make her "feel exhausted". For Ella, mental fatigue was the most serious problem. When she experienced extreme tiredness, she did not have any motivation at all to catch up with her thesis writing. Even though she was physically healthy, she found it very difficult to concentrate. She said even if she had several deadlines, she hardly had desire to "make priorities or organize course assignments or tasks". For

Putra, physical fatigue was a serious problem "especially when students did not have good rooms, furniture, or facilities to make them comfortable when studying". Putra said he was fortunate to have a good room to study in his house. He did not have to work in other places. Mental and physical tiredness lower students' motivation to manage their own learning.

Low learning motivation can also occur from lack of support from significant people such as peers and classmates. Some students expressed that they always needed someone or some people to remind them that they need to excel in their studies. The respondents often cited parents, peers, and seniors played an important role in supporting their independent learning. This corroborates the findings of previous studies on SDL which identified the role of parents, peers, and teachers in nurturing SDL [37], [39], [40]. Interestingly, in this study, the respondents reported that they were less likely to depend on teachers.

3.1.2. Distractions from the social media

Many of the respondents admitted that one of the biggest challenges were the distractions from the social media. Many voiced their concerns over their own inability to control the use of social media and the need to connect to other people through social media. In a similar vein, Gita, a second-year student, admitted she spent "a lot of time looking at receh videos". What she meant by receh videos are videos that do not provide any knowledge at all. They are usually jokes or slapsticks. She said she could easily spend two or three hours just looking at such videos. Some students had similar experiences like Gita. In this digital age, people can easily find any kind of contents that they are attracted to from the Internet. Movies, short clips, advertisement, web novels, tutorial videos, and many other contents can be accessed anywhere and anytime. many of these contents are not even related to students' educational purposes and goals. Many students look at these contents just for the sake of the entertainment.

"I get distracted a lot from the social media, a lot. I am following TikTok, Instagram, and Twitter. There are endless streams of memes, funny videos. I initially want to spend 5 or 10 minutes, but I always end up spending a lot of time browsing them." (Dewi, interview)

This kind of distraction is not actually unwelcomed because the students felt they enjoyed the distractions. Many felt the social media helped them cope with the stressful assignments. Dini, a student from the English department, said that funny videos or memes are actually welcome distractions. She acknowledged the bad sides are of the social media but she was "unable to part because they make her entertained". One of the challenges of SDL during a pandemic is to keep the spirit of learning alive, so that they are always in the 'mood' in completing assignments and lectures. To maintain this mood, respondents said that they should take time for themselves. Non-academic activities can be a means to maintain a balance between lectures and the need to socialize outside the classroom. Just like what Gita and Dini said, social media plays a huge role on students' efforts in balancing the study time and the personal time. Even though managing time is difficult, students mostly stated that when they needed to study, they worked very hard to separate themselves from social media. Some students even uninstalled the applications they had when the midterm test and the final tests were approaching. The findings of this study confirm what other studies have found [41], [42]. Their study found that in some cases social media poses as a major threat to students' learning process.

3.1.3. Too many non-academic and academic activities

Many respondents said that the non-academic and non-academic activities they participated in took a lot of time and energy. Especially during this pandemic, many respondents stated that student activity meetings were often held at night or on holidays because online meetings could be held from home. This time irregularity is a big challenge for students who still have a lot of credit hours to take because they have to study in the morning and take part in non-academic activities in the afternoon and evening. Their study time, thus, is reduced. In addition, students also feel tired so that they cannot study optimally. One student, Anna, said:

"We often have problems when studying especially when we have a big project. in my department, sometimes a project can last a whole day. We have to spend several hours under project. Then on top of that we have non-academic activities like student organization or varsity clubs. Therefore, we are juggling with both activities. Sometimes we have more than one non-academic activity, so we sometimes struggle meeting the deadlines." (Anna, FGD)

Many of our respondents were students who served in the student executive board in their departments. Many of them expressed the same sentiments regarding the non-academic and academic activities. Almost all of them had activities in the university and outside the university, such as youth

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organization in their churches. Many said that they joined the organization or student clubs to get experiences working with other people and to hone their soft skills. Nobody forced them to join non-academic activities. Even their parents did not object. They would like to be able to explore the student life in universities. In a way, they had expected that they would have to negotiate between their class assignments and the responsibilities that come from their participation in student organizations, committees, and events.

3.2. Supports for self-directed learning

3.2.1. Adequate learning tools and facilities

From the collected data, all respondents in this study reported to have sufficient learning tools and facilities. All respondents had a gadget, a computer, or a laptop that can be used for online learning. Respondents said their Internet connection was much better than what they had during the start of the pandemic. At the beginning of the pandemic, students were not ready with the facilities and infrastructure that support online learning. But over time, students have more adequate learning facilities. The respondents stated that they had a private room to attend online lectures, and usually they used their bedroom as a study room. Computers or laptops are digital equipment that they must have. Their mobile phones were also compatible with the latest requirements for online lectures. Benny, one of junior students, said he had his own learning space. He reported that he was used to studying in a quiet room. Thus, he had his own space where no one entered when he needed to work on his assignments.

Some students emphasized the importance of gadgets for their independent learning. Some teachers used various applications for their classes, especially those of natural sciences such as architecture and design and engineering. Most students reported that they were very technology savvy. They required very little help in operating digital technologies. When they encountered technical difficulties, they relied on Google to solve their problems. Ian, a senior student, talked about "how important it is to have good and compatible gadgets to manage his schedules, organize his activities, and complete his assignments". Various applications such as Google Calendar and Sticky Notes are some of the applications that students used to manage their own learning time. Students said that good gadgets are essential because many they used many applications for their particular subjects. English department students, for instance, used Memrise or Duolingo to practice their English outside of class. Some students also made use of websites for language learning.

3.2.2. Support from the closest friends and families

Independent learning can be done well if there is support from the closest people. The closest people can be parents, classmates, or seniors. The respondents said that parents are the closest people who strongly support independent learning. Parents often remind respondents when they have to go to college and remind them not to leave any assignments left to collect. The attention of parents is not only for financial matters or the provision of facilities, but the most important of all is the motivation to always follow the lectures well. Parents' supports have been cited as key in students' learning and achievement [22], [43].

"My parents always encourage me to study. They ask whether I have done my homework or submit my assignments. I know some of my friends might think such treatment is invasive, but I did not think so. It's the parents' job to make sure their children study well." (Prasetya, FGD)

"My parents make sure I eat and rest well. They don't help with my homework, of course, but they are very concerned with my, my health, my well-being. They are very supportive of me. I have many activities in campus and outside campus, but they did not say anything, and they are very supportive." (Mia, FGD)

Classmates are of course other closest people who are very supportive of independent learning, especially for time management and learning materials. Some of the respondents said that they have a WhatsApp group whose members remind each other of task deadlines, types of assignments, as well as sources of materials needed. WhatsApp group here can refer to a group of one class, or a group that contains only a few friends in the closest circle. These people often remind and encourage each other. Such a support group is needed so that students are encouraged and motivated to learn. Elisa said:

"I have my own WhatsApp group with my 2 -3 close friends. In our WhatsApp group, we remind each other of our deadlines. They are my support system. For instance, if we would like to ask, but we are reluctant, they say "Come on, ask questions, please"." (Elisa, FGD)

Most students had their own circle of friends whom they depended on with whatever they needed during their study. Many admitted that they did not want to ask their lecturers because they were too shy to ask. However, they had close friends who were always ready to help with any problem they had. Dita said:

"I ask my friends whenever I have problems with my course. If I don't understand the materials, I have close friends to ask, even if sometimes we don't have the answers. If that happens, we work together to solve our problems." (Dita, interview)

Many students admitted they did not want to ask their teachers whenever they needed help because they were too shy to ask or too afraid to disturb them. Many of them used the word *sungkan* or being reluctant to interact due to social distance or lack of familiarity or out of respect for elders when they talked about their reluctance to ask teachers whenever they encountered problems. Even many junior or senior students expressed that they preferred to ask teachers during office hours. Many of these students had good relationships with teachers because they served in the student organization. However, they did not want their teacher "to feel obligated to help out, especially after office hours our during the weekend". Despite the important roles of teachers in SDL [44],especially in giving feedback or directing learning goals, the notion of *sungkan* prevented students from interacting further with their teachers, and, thus, they lacked learning guidance. Research by Geertz [45] stated that in Javanese culture *sungkan* is a form of politeness and respect for elders. Students obviously felt that as young people, they should respect teachers' personal or family time out of office. Students considered teachers as people with higher power and authority and should not be disturbed for small problems.

3.3. Strategies for self-directed learning

3.3.1. Making priorities

When asked how students manage their study time, they said that to make their time effective, they prioritize. They determine which tasks must be done first and which tasks can be postponed. If there are students who still have to take part in non-academic activities, they also prioritize when to do assignments and when to participate in student activities or other off-campus activities. To make learning management more effective, they used planners, sticky notes, reminders from Google calendar, and other applications that can help them remind them of deadlines. These tools are very useful for them because they cannot always depend on other people, such as classmates, seniors, siblings, or parents. Even though they claimed they were tech savvy person, many of them said they preferred to have books or planners to record and manage their activities. Putra, a college of law student, said he "did everything conventionally". He used books and planners to manage his schedule. Evita, a junior, said she was a person who liked to write down everything. She said:

"To manage my activities and schedule, I use calendars. And I am a type of a person who likes to write everything down. I even have a whiteboard in my room. I put my deadline on it." (Evita, FGD)

Similarly, Maria, a student of architecture department, who had many campus activities said she had everything planned out in the beginning of the semester. Like Evita, Maria set up her own target and priorities. She wrote down her assignment due dates in her planner or Google Calendar. In her department, she had to submit her work every Saturday. Therefore, she made sure that on Thursday or at least Friday, she completed her assignment. Prioritizing well is key to SDL. Maria is one of the few students in her department who excelled in her class. She participated in many activities and still managed to perform well academically. This is consistent with what Geng *et al.* [46] found in their study. They found that people who are highly motivated tend to be independent learners because they always establish goal setting [46].

3.3.2. Utilizing social media as a tool for self-directed learning

For adult learners who must be independent, social media is the most useful source of material for them. Various types of free social media can be easily accessed anytime and anywhere. The most widely used social media are YouTube, Instagram, Twitter, TikTok, and instant messenger applications such as Line and WhatsApp. For now, YouTube is still a very helpful social media for independent learning because there is a lot of content related to their courses. The type of application they use for self-study also depends on the field of knowledge they take. For example, for respondents who are learning foreign languages, there are also those who use applications such as Duolingo or Memrise, and other applications that support foreign language learning. Students from the English department said that YouTube, Instagram, and Twitter are some of the most common social media that they think are useful to learn English skills independently. In the interview, Bonny, a sophomore in English department, said he preferred to watch English movies with no

subtitles. He did not have any experiences using applications like Memrise or Duolingo. Exposure to YouTube was enough for him. Maria, an architecture department student, said:

"For me, usually in our department, teachers put references in the course outline. When I have an assignment, I try to do it independently. We have the Internet, so that is what I use. I use Google or websites on architecture or architectural designs. I also use Pinterest a lot. Most of the time, I rely on social media, even if sometimes I get distracted." (Maria, FGD)

Dhina, an English department major, reiterated Maria's statements, she said she studied after midnight and if she had language problems to solve, she did not have anyone to ask. Therefore, she resorted to the Internet for information, "YouTube is particularly helpful" in solving her problems. As an English department student, Dhina benefited significantly from YouTube, especially for her language skills. In addition, many of her lecturers in the department often gave videos to watch or learn. Social media serve as the main source of information for these students. In situations where they had minimal assistance, online resources were their 'life savers', a term Dhina used to express the advantage of social media for SDL. Research on social media and SDL have identified the interplay of social networking sites (SNS) on SDL [10], [24], [47]. Research by Salleh et al. [24] found that SNS was a partial mediator between SDL and lifelong learning, while in another study, SDL is one of the predictors of the attitude towards social media [10]. In this study, social media provides abundant resources for students they can use to accomplish their tasks, especially when they had no one to help them with their tasks.

3.3.3. Maintaining relationships with peers, seniors, and alumni

Support for independent learning is obtained through interpersonal relationships with friends, seniors, and alumni. When asked how the respondents organize the learning materials, the respondents said that good relationships between friends greatly help their success in completing all tasks. Friends, seniors and even alumni are very helpful to the respondents. This support is usually in the form of information about the lecturer in charge of the course and the characteristics of the tasks given, books used, and other references to complete assignments. Support can also be in the form of encouragement to encourage each other to complete. Evita, who is one of the top students in her department, said:

"During the online classes for the last two years, I have a separate WhatsApp group. More than one. In one group there are two or three people. Usually, we remind each other of our deadlines or assignments. They are like...like my social support. Even when we are in the online classes, we encourage other people to ask for teachers' clarification. If one of us wants to ask questions, but she is too shy, then we say "Come on, ask questions". When we are asked to read, but no one responds, we say "Please say something. Read please." It is one of the effects of the online classes. We get closer." (Evita, FGD)

Reflecting on her experiences during online classes, Evita emphasized the importance of establishing friendship with her peers. From her statements, it is evident that peer support was vital in SDL. Support from peers often becomes a strong motivator to succeed. During the course of their study, students encounter challenges, and experience ups and downs. Their problems are not always related to academic achievement, but more to their experiences in finding their identity, strengths, and weaknesses. Similar to Evita's comments, Andy maintained good relationships with his seniors. He reported:

"I have many nice and kind seniors. To remind me and to support me. "Hey, good luck with your lecture" and so on. They are really that nice. Not only seniors in my own department but also in other departments. I am fortunate to have had so many good seniors. Every day I receive supports from them who say simple comments such as "What course are having today? Good luck" This short sentence or comments are important support for me." (Andy, FGD)

From the above quotation, Andy reiterated what Evita said about the importance of friendships. Little random comments and greetings from friends and peers can make a difference in one's learning process. The fact that someone cares about them can be a strong motivator to achieve their learning goals. Social media has made this support system easily accessible and available.

Kerka [48] categorized SDL into two types, individual and social. The findings of this study reinforce the notion that SDL often happens with the help of others. Social relationships and community are essential in SDL. In his approach to SDL, Garrison [6] highlighted the importance of collaboration with other people. Learners need to have shared moral vision of the good for learning [49]. These shared visions are

obtained from students' interactions with other people in their community. Aldrian, a sophomore, noted the importance of collaboration for SDL. As a quiet person, he appreciated his friends' help in and out-of-class activities. Aldrian admitted he was often too shy to ask his teachers. Fortunately, he had a a few friends whom he could work with well. His circle of friends was the main motivator and his driving force to the success of his study. Friends send reminders, exchange information, share tips and tricks, comfort each other, and inspire creativities. Great creative ideas and smart ways to manage tasks often come from small talks and brainstorming. Peer group can be a strong driving force especially because students might feel they had someone to lean on, someone who can help boost their self-confidence and self-esteem [17]. Collaborating with other people might help students to become good and independent learners.

The findings of this study highlight several salient issues that universities should address to foster SDL. First, this study found that students were reluctant to ask teachers for help even if they had problems with their tasks. In this study, the Javanese culture of *sungkan* is more likely to be a barrier for students, especially when they need to seek feedback or guidance to complete their tasks. Universities need to provide supports by training tutors or assistants. Students might likely be less reluctant to contact these tutors or assistants. The support from universities can be in the form of workshops on SDL. Research by Voskamp *et al.* [3] found that teachers often had different perceptions of SDL; thus, their perception affects how they deliver the materials and the teaching strategies. Another issue is related to the important role of social media in the academic and non-academic lives of college students. Technology has been inseparable and intricately woven into all aspects of life. This study found that social media has become both enablers and distractors. Lecturers should make greater efforts in minimizing the role of social media as distractors. Class activities should be designed in such a way that empower students to make use of social media outside of class more rewarding and challenging.

4. CONCLUSION

This study intends to examine the challenges, supports, and strategies of SDL among college students. The data highlight the fact that social media is a two-edge sword. Social media has been cited as the enabler as well as the distractor during SDL. Students can get distractions during their study, but at the same time, students need social media to find resources, to connect with other students and teachers, share knowledge, and create contents. The findings, in addition, reported the importance of supports from parents, peers, seniors, or significant others for students to be able to manage their own learning. This study is a qualitative study with college students. Future research in this area should explore SDL in adult learners in informal and formal settings. Studies on SDL can also employ quantitative or mixed method to investigate different facets of e-learning.

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