WEAVING HOPE THROUGH EDUCATION

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CONTEMPORARY ISSUES OF INDONESIAN EDUCATION

EDITORS

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Preface

Education is a complicated subject. Especially in the face of changing circumstances, which have recently been extremely harsh. The paradigm of schooling had seen a shift toward the digital world, mostly thanks to the COVID-19 pandemic, but other factors such as political and technological reforms no doubt also played a role. This intricacy, to this day, still creates significant challenges for educators, students, and the Indonesian government. Therefore, experts within the field of education must accommodate the changes so that education in Indonesia does not lag in comparison to other countries across the world.

As a result, this book is written to identify and contribute to the resolution of recent educational issues. It consists of three parts of summaries of research articles and 19 chapters. The first section, titled "Education and the Covid-19 Pandemic," includes papers on research findings connected to education during the Covid-19 pandemic. The second section is titled "Education and Innovation," and it has seven chapters that examine educational innovation, particularly as it relates to the use of technology. Meanwhile, the third section of this book is named "Education and Challenge," and it has six chapters that explore the issues that the Indonesian education system is facing. The goal of these chapters is to identify, critique, and give solutions to overcome the educational problems in Indonesia.

Because dozens of authors wrote this book, we realize that the writing style, content, and orientation of each chapter are very diverse. However, we believe that each article offers insights on issues, discourses, and solutions that are beneficial for the improvement of Indonesian education in the future. The publication of this book is one of our efforts to contribute to Indonesian education at large.

Finally, we would like to thank those who have helped in the publication of this book. A huge thank you to the Faculty of Education, the State University of Semarang for facilitating the publication of this book, the authors, co-editors, faculty officials, Dr. Edy Purwanto (as Dean of our faculty), Farid Ahmadi Ph.D. (as Vice Dean in charge of Academic

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Table of Content

PART 2. EDUCATION AND INNOVATION

PART 3. EDUCATION AND CHALLENGE

PART 1
EDUCATION AND COVID-19 PANDEMIC

CHAPTER 1

Family Resilience: Changes in Family Communication Patterns During the Pandemic and Its Implications for the Formation of Resilient Families in the Future

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Abstract

Family resilience is essential in a fast-moving world full of challenges. Family resilience can bring up family strength in dealing with times of crisis, such as the Covid-19 pandemic. Communication as one of the factors that influence family resilience has a significant role as a means of transmitting beliefs, exchanging information, and solving problems within the family. Thus, an analysis of changes in family communication patterns during the pandemic can predict the formation of resilient families in the future. This chapter analyzes changes in family communication patterns towards forming a resilient family after the Covid-19 pandemic. The author writes this chapter to improve families' resilience and mental health in the face of difficulties and challenges through an analysis of changing family communication patterns. This chapter discusses the concept of resilient family communication, changes in family communication during the pandemic, and the implications of communication changes on the formation of resilient families in the future.

Keywords: family resilience; family communication; Covid-19 pandemic

Introduction

Every family must have resilience because family resilience can actively generate strength when the family is faced with pressure and crisis (Oh & Chang, 2014). McCubbin and McCubbin (as cited in Oh & Chang, 2014) defined family resilience as the characteristics, dimensions, and properties

possessed by families that can aid families in dealing with change and adapting to crises. Family resilience is the development of the concept and practice of individual resilience, which has been the object of research for years. The shift in research focus from individual resilience to family resilience is a shift of experts' understanding based on field investigations, which results in a conclusion that individual resilience cannot be optimally achieved if it is not supported by a resilient family (Southwick et al., 2011).

Weak family resilience can put families in a vulnerable position and prone to crisis. Disharmony in the household, discrimination, lack of communication, and lack of respect among family members are forms of weak family resilience. Furthermore, weak family resilience can reduce the level of family mental health. (Oh & Chang, 2014).

Communication is one aspect of forming family resilience. Good communication within the family is essential to form a fully functioning family and have resilience in the face of adversity. The increasingly complex structures and demands of today's families make communication more important and difficult. At critical times such as the Covid-19 pandemic, family communication usually experiences barriers (Myers-Walls, 2017).

The Covid-19 pandemic has affected family functions through negative events that develop tension and reduce the openness of family communication. In children and adolescents, events that cause tension make adolescents gain less support from their parents. Adverse conditions such as reduced family income and the influence of family care can increase stress on parents and indirectly affect adolescent adjustment.

Various research reports revealed the impact of Covid-19 on family life. Covid-19 has exacerbated the factors that influence depression in the elderly caused by economic hardship and layoffs (Hussong et al., 2022). Mental health problems in parents can hinder parents' ability to develop warm and sensitive relationships with children and other family members. This implicates the home environment as a child's first learning place in interacting with other people. When parents cannot respond positively to children's communication with attention, gestures, and speech, the development of communication and social skills in children is not formed properly (Crew, 2020).

Family communication functions to transmit beliefs and exchange information, as a tool for emotional expression, and as a medium for

solving family problems (Myers-Walls, 2017). Effective communication will form a harmonious family because each family member interacts and communicates positively. In addition, the formed communication tends to be more sensitive, responsive, warm, and demonstrates good affection toward partners or children (Pramono, 2020)

This chapter aims to analyze changes in family communication patterns during the Covid-19 pandemic and their implications for the formation of resilient families in the future. More specifically, this chapter explains the concept of communication to form a resilient family, changes in family communication during the COVID-19 pandemic, and its implications for forming a resilient family in the future.

Communication Concepts for Forming a Resilient Family

Family communication as the shaper of a resilient family has key elements in the form of specific skills such as speaking, listening, self-disclosure, and appreciation. These basic skills can form effective family communication, characterized by clarity of communication, open emotional expression, and collaboration in problem-solving.

Communication Clarity

The clarity in communication has several aspects, i.e., the density of the message content, the message structure is logical, explicit, avoids ambiguity, and is ready to be used by others (Bischof & Eppler, 2010). Various studies have shown that clarity in communication is essential for effective family functioning. In a healthy family, communication is direct, clear, specific, and honest. Messages are delivered directly to family members and not conveyed by other people. Verbal and non-verbal language is conveyed consistently and congruently. At one time or another, family members can choose to hide unpleasant information in silence, keeping it a secret, distorting it, and creating barriers. When family members avoid contact and avoid communication, it will be expressed in negative emotional and physical symptoms (Myers-Walls, 2017).

Family members will realize if one of them has a problem. For example, a child who prefers to hide his problems at school. If the parents discover this problem, they immediately encourage children to communicate the

problems they are experiencing. The dynamics of communication in the family allow family members to gain different understandings of an event. This must be addressed immediately in difficult situations by clarifying the message or communication in question.

Open Expression of Emotions

In a well-functioning family, the formed interactions show a warm, cheerful, optimistic tone of voice full of fun and comfort. Family members can show various feelings, such as tenderness, love, hope, and gratitude, and accept complicated feelings such as anger, sadness, fear, and disappointment. The emotional climate among parents influences children's emotional health. Research shows that children are more likely to be happy and healthy when the parents' relationship is loving, respectful, warm, and supportive of one another. A resilient family does not blame, invade, or condemn others. Each family member is responsible for every member's feelings and actions.

Couples' relationships will have positive development if they can discuss their needs and differences and feel satisfied. If sexual intimacy cannot be achieved due to stress or illness, partners can maintain pleasant and comforting physical contact through touching and hugging which can strengthen intimacy. Based on gender, women build relationships by emphasizing connectedness and understanding, while men tend to focus on facts and problem-solving. Women often complain that their partners do not listen to them, do not understand their feelings, show less affection, and are reluctant to speak of their relationship. Meanwhile, men often complain that their partners are too demanding and emotional. When a crisis occurs in a relationship and men are uncomfortable expressing their vulnerability, fear, and sadness, they tend to distance themselves from their partners. They replace the need for openness, comfort, and support from a partner by being occupied at work or spending time with friends.

Take responsibility for one's feelings and actions, and avoid blaming others. Blaming or accusing others is a unique moral judgment that is cognitive and social in nature, regulates social behavior, depends on social cognition, and requires cognitive command (Malle et al., 2014). A resilient family does not blame other family members or attack personally. Family members are responsible for their actions. In families that are not

functioning properly, the fears and worries of family members are raised in the form of criticism, blame, and the scapegoating of other family members. Expression of emotions becomes highly reactive, critical, and offensive, thereby increasing conflict to be out of control.

Cultivating positive interactions, open expressions, and positive feelings is especially important to offset negative interactions. A relationship can successfully neutralize conflict so long as there is positive communication within the family through the expression of love, appreciation, respect, and pleasant interactions among family members. Over time, the family may experience burnout and chronic stress leading to relationship burnout. If this occurs, the family can schedule fun activities such as vacations, exercise, and movie nights with family members to improve family relationships.

Tolerance of differences and negative emotions, family communication patterns will also change when families go through various phases in life. Different feelings will arise at different times and are expressed in different ways by family members. During this period, tolerance, which is full of love and support for each other, will be especially necessary.

Humor, humor is proven to have an important role when families are facing difficult times (Kuipera, 2012). Humor reduces stress and accepting the limitations of family members. Finding humor when the family is experiencing challenges can help family members to reduce anxiety and stress and restore a positive atmosphere. Humor can defuse direct confrontation, lighten the mood, assist family members in accepting failure or mistakes, lighten the load, and bring family members closer together.

Collaboration in Problem Solving

Effective problem-solving is essential for families to deal with sudden adversity and challenges. A well-functioning family is not characterized by the absence of conflict but by the ability to manage conflict and solve problems collaboratively. This ability requires tolerance for disagreements within the family and everyday problem-solving skills. Well-functioning families can solve problems efficiently, communicate, make decisions, take collective action and improve business when necessary.

Identifying sources of problems and stressors, problems within the family can arise from various sources, such as stressed and depressed

wives, husbands with alcohol addiction problems, or children with maladaptive behavior.

Creative brainstorming, when problems can be identified, family members will then brainstorm. In well-functioning families, parents act as coordinators and coaches who convey the family's opinions and theirs. All family members share their ideas and opinions and respect the opinions of others.

Joint decision making, decision-making involves a series of structured processes starting from understanding the problems at hand, sorting and assessing alternative solutions that can answer problems, deciding, implementing decisions taken, and assessing the results of decisions that have been implemented (Sola, 2019). Resilient individuals are individuals who can be in long, loving relationships and care about others and themselves. They consistently attempt to identify the needs of other family members and differentiate them from their own. They actively show effort in overcoming conflict, disappointment, anger, and frustration. The negotiation process in decision-making is especially important for optimal family functioning. In problem-solving, negotiation is as important as the desired outcome. Negotiation in the family involves accepting differences to achieve a common goal. To be successful negotiators, family members must learn to speak and listen with compassion and understanding. They should avoid negative actions such as criticizing, blaming, and withdrawing that can damage the relationship. A resilient family maintains happiness and is willing to learn how to correct bad conversations and comfort each other when enraged.

Conflict management refers to some form of friction, disagreement, or dispute that arises between individuals or groups when the beliefs or actions of one or more group members are opposed or unaccepted by other members (Madalina, 2016). The success of family relationships is not due to the absence of conflict but the family's ability to manage conflict. Some steps can be taken in the problem-solving process. First, the family recognizes the problem and communicates with other family members involved. Second, brainstorming is used to measure the family's resources and decide on a solution plan. Third, the family initiates an action, monitors progress, and evaluates the success of the action. Fully functioning families manage problems efficiently; they communicate, make decisions, and act thoughtfully.

Focus on achievable goals, resilient families continue to focus and strive to achieve goals and take concrete and substantial steps to achieve them. Michael Jordan, a successful basketball player, is a vivid example of how his focus on goals led him to become a remarkable athlete throughout history.

Confidence as the main capital in facing future challenges can be constructed through happiness, learning from mistakes with experiences of success, and cooperation among family members. Family acceptance of mistakes makes them feel comfortable within the family without any attacks from other family members. They learn not to repeat the mistakes they have made.

Keeping a proactive distance, when problems start to surface, families immediately deal with them quickly and discuss them clearly and openly, both practically and emotionally. In such a proactive way, problems can be resolved directly. In the face of new problems, well-functioning families can provide and receive direction or suggestions, manage themselves, accept each other's input, and communicate differences. In the face of unsolvable problems, resilient families find aspects of the situation where they can make decisions and accept what is unchangeable.

Table 1 below presents a summary of the concept of resilient family communication.

Table 1. Communication Process of Resilient Family

Clarity	- Clear and consistent (between speech and action) - Clarify ambiguous information - Speak honestly
Open expression of emotions	- Show various emotions (happy, sad, hopeful, and frightened) - Mutual empathy; tolerance toward differences - Bear responsibility for one's feelings and behavior and not blame others - Fun interactions; humor

Collaboration in Problem Solving	- Identify problems, sources of stress, constraints, and options - Creative brainstorming - Cooperate in decision making; negotiations; justice; reciprocity - Conflict management; correct errors and misunderstandings - Focus on objectives; take concrete steps - Establish success; learn from failure and mistakes - Maintain a proactive distance; prevent problems; prevent crises, and prepare for future challenges - Develop a backup plan

Sources : (Myers-Walls, 2017)

Changes in Family Communication during the Covid-19 Pandemic

The Covid-19 pandemic has significantly altered humans' lifestyles globally, including changing interaction patterns between individuals. To avoid the risk of infection, people should maintain their distance. Communication in the family also changes. Families are forced to use various communication media such as WhatsApp and Telegram (asynchronous), Zoom and Google Meet (synchronous) applications, and various social media platforms such as Twitter, Facebook, and Instagram. These changes have the unwanted impacts of reduced intimacy, commitment, and trust between family members, as well as potential misunderstandings in communication (Ades, 2021).

Miscommunication in the family arises from the lack of involvement of communication supports such as non-verbal language. Body gestures and facial expressions are examples of non-verbal language that can support the delivery of messages in communication. The integration between verbal and non-verbal language can reach the message and the intent to be achieved. Communication using tools, especially those that are asynchronous, tends to be flat and emotionless, allowing misunderstandings to occur that lead to conflict.

During the Covid-19 pandemic in Indonesia, the government implemented rules for studying and working from home. Students perform online learning synchronously and asynchronously, as well as parents who

10

are busy with communication tools for online work. Even though the family resides in the same house and is physically close, the intensity of direct communication is decreasing. This is supported by the characteristics of studying and working from home, which is not time-bound or does not maintain a definite schedule, such as schools and offices allowing students and workers to spend more time studying and working.

Teleworking (Andrade & Lousã, 2021) became very popular during the Covid-19 pandemic. Teleworking is working from a place away from the office where workers communicate through communication and information technology, such as smartphones, tablets, laptops, and computers, using synchronous applications such as zoom and google meet applications and asynchronous applications such as e-mail. However, the study results show that time management between work and family with the teleworking system is challenging and creates a high potential for conflict.

So long as parents and children work and study from home, the communication created is limited, and family members are busy with their respective gadgets. Families have limited time to talk about daily activities and discuss problems within the family because they have ongoing work and studies. In addition, families cannot express their fears and worries, one of which stems from the Covid-19 pandemic. With this communication pattern, the warmth and openness within the family are decreasing. At the same time, communication and support between close family members during difficult and stressful times can improve psychological health (Andrade & Lous, 2021).

The integration of work and family roles is extremely vulnerable to causing inter-role conflicts that occur when the responsibilities and demands of these roles interfere with each other. For example, for a housewife who works from home, it is possible for her time to be consumed by taking care of her child's activities, such as assisting children in online schools, thus hampering their work. On the other hand, mothers who work from home are more focused on their work; thus, household chores are neglected. This will lead to conflict when superiors and co-workers complain about work results or come from family members who sense that the mother's time is consumed with work matters. This condition can lead to mental health problems such as anxiety and stress.

Workers who Work From Home (WFH) tend to work longer hours than those working from the office because of enthusiasm and job satisfaction,

which provide benefits for the company while negatively impacting work-life balance. Conversely, work and family conflicts affect the work stress of work-from-home workers (Bimantara, 2022). Strain-based conflict is the dimension of work-family conflict that influences work stress most. This dimension is a conflict that arises when workers feel pressure and stress at work, which ultimately negatively impacts their homes. Work-family conflict is divided into two forms of conflict, i.e., work interference with family and family interference with work, where each conflict can affect work stress.

In addition to family conflicts caused by working from home, families are affected by quarantine and social distancing regulations. Both regulations cause individuals to feel socially isolated due to limited opportunities to visit family, friends, and neighbors. This is evidence that the pandemic is associated with changes in individual functioning such as stress, mental health problems such as anxiety and depression, sleep disturbances, and stress from online schooling. Several studies have shown that the pandemic causes increased marital tension, abusive parenting, and weakened parent-child relationships (Hussong et al., 2022). Parents must balance online work with parenting, such as setting up a self-study schedule for their child and completing their school assignments. In addition, parents with infants must spare time to hug their infants and put them to bed. In cases like this, parents must be efficient in balancing time with their infants and work.

Most children understand the pandemic through the news from television, social media, teachers, and friends. There are two strategies that parents can do in dealing with such situations. The first strategy is to have an open discussion, answer their questions and explain the virus and what to do. The second strategy is carried out when children feel afraid and anxious about information from various sources, i.e., by limiting access to information in the media and parents reviewing the information.

Implications of Changes in Communication Patterns for the Formation of Resilient Families in the Future

The pandemic has negatively impacted family functions, especially communication. However, there are protective factors as capital for forming a resilient family in the future. Among them is a longer family togetherness

than when parents have to go to the office for work and children go to school. Many house activities can be done together, such as cleaning, cooking, preparing food, and dining together. These activities become a "silver lining" amidst an unpleasant situation for the family. Support from outside the family, such as the community and office colleagues, can also encourage the family to deal with the impact of the pandemic.

Social support is a protective factor and can improve families' mental health during a pandemic (Li & Xu, 2022). Family gathering and supporting one another face-to-face with direct interaction and connection can increase feelings of belonging, security, and self-worth. Families actively discuss and share problems, feelings, anxieties, and concerns. For example, children are allowed to tell their experiences in implementing online schools and the obstacles they face. Parents actively provide feedback and encourage children to find alternative solutions to their problems. Likewise, with parents, family members actively listen to problems, worries, and stresses originating from work and discuss to find solutions. This activity will support family members in dealing with loneliness because of the prohibition of interacting directly with school friends and work colleagues which helps maintain mental health during the pandemic.

During the transition process, parents explain the ongoing pandemic, including the changing or increasing house rules to family members. Parents explain and discuss with children with full openness and honesty accompanied by simple language about how the virus emerges, how the virus infects humans, the occurring symptoms, and prevention efforts such as maintaining distance, washing hands, and wearing masks. The family also discusses unconfirmed news regarding the spread of the virus, such as hoax news.

In facing changes in work and school that are now carried out online, one of the potential sources of problems is technological facilities such as laptops and smartphones. This will not be a problem for families with comprehensive technological facilities. However, for families from a lower economic level, the availability of technological tools for studying and working becomes problematic. Families discuss the availability of technology equipment for study and work, whether to use the existing one by setting a usage schedule or buying new pieces of equipment. Discussions about technological equipment need to be carried out to avoid

family members feeling anxious about fulfilling their responsibilities at work and study (Markowska-Manista & Zakrzewska-Oledzka, 2020).

Closing

This chapter reveals that communication significantly contributes to family resilience, especially when families face adversity. Clarity, the ability to express emotions openly, and collaboration in problem-solving are the main requirements for forming resilient family communication. During the Covid-19 pandemic, family communication shifted from direct communication to communication through various applications with the support of technology. This change provides the advantage of easy and fast communication, yet also has the disadvantage of high potential for misunderstandings and reduced intimacy. After the family returns to pre-pandemic normal life, the pattern of changes in family communication will potentially lead to conflicts in parenting styles between parents and children. Parents with more conventional generational characteristics will prefer to apply direct communication patterns. Meanwhile, children will become more attached and inseparable from technology. Discussion of the application of the rules for using communication technology such as smartphones is essential for parents and children; thus, each family member understands the communication patterns that will be applied in the family.

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CHAPTER 2

Life Skills Program for Children With Special Needs During Pandemic in Inclusive Preschool

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Abstract

Amongst infants most affected by learning during the COVID-19 pandemic are children with special needs, more so those who have multiple specialties. For this reason, it is necessary to strengthen skills that allow crew members to have the ability to train themselves in life skills that will be needed in the future and prevent problematic behaviors from developing or reappearing, which will have an impact on their development aspects. Not all children with special needs can be facilitated in all early childhood education institutions. Although, a small number of them can obtain services in inclusive preschools. This chapter provides an overview of the life skills program for children with special needs while they are studying from home with their parents due to the COVID-19 pandemic, with a starting point on developing personal skills and social skills from programs in inclusive preschool institutions.

Keywords: Life Skills Program, Children with Special Needs, Inclusive Early Childhood Education

Introduction

For two years (2020-2021), early childhood education institutions that accept children with special needs have tried to carry out the learning process from home due to the covid 19 pandemic. Life skills programs for children with special needs are also designed for the parents to apply while the child is at home. This chapter defines life skills as children's ability in four aspects: personal skills and safety, socio-emotional development, language development, and cognitive and motor development. These

abilities aim to make children have acceptance by their peers in class (The University of the State of New York, 2003). The importance of the sustainability of this life skills program for children with special needs is not only focused on their needs but will later become their asset for the next stage of their life. The success of inclusive education is largely influenced by teachers' perceptions of children who have diversity and that teachers can accommodate each individual's differences (Diana et al., 2020). Life skills are an important part of every educational program in families, institutions, and communities. Life skills in early childhood consist of personal skills and social skills. Life skills-based education in early childhood is undoubtedly related to aspects of child development, i.e., physical, cognitive, language, socio-emotional and spiritual. For this reason, it is important to instill life skills in the form of habituation related to basic personal and social skills that children with special needs must possess.

Indicators and learning outcomes for preschools with children with special needs are based on learning standards and skills appropriate to the developmental needs of all preschool children. These indicators describe the targets that must be mastered and can be carried out by all children when entering early childhood education. Student achievement starts from good instruction, where teachers must develop and carry out activities based on task analysis of indicators, goals, and objectives of individual learning programs for each child as necessary support and services. Fundamentally, the life skills program implemented at inclusive educational institutions differs from that offered in special educational institutions (Pradipta et al., 2020). For this reason, life skills programs can be designed according to the developmental achievement targets of children with special needs (UNICEF, 2003), which adapt to programs in each age range, especially preschool.

This chapter is divided into three parts. The first part presents the concept of children with special needs. The second part is a review of the concept of life skills. The third part, the core of this chapter, discusses life skills programs that can be implemented and developed for children with special needs in inclusive preschool during the pandemic. The data in this section are extracted from research reports that have been carried out by (Diana et al., 2021).

Children With Special Needs

Children with special needs have a broader meaning when compared to the understanding of extraordinary children. Children with special needs require specific services and different education methods from children in general. Children with special needs experience obstacles in learning and development, whether it is due to the lack or too much potential of the child. Therefore they need educational services that are in accordance with the learning needs of each child (Nur'aeni, 2013).

According to Susan and Rizzo (1979), children with special needs are children who are significantly different in several important dimensions of human functioning. Those who are physically, psychologically, cognitively, or socially hindered in achieving their needs and potential to the fullest include those who are deaf or blind, have speech disorders, physical disabilities, mental retardation, or emotional disorders, as well as those who are gifted and have high intelligence. (Mangunsong, 2014). It is also explained that children with special needs have certain characteristics that are distinct from children in general, with obstacles in their growth and development (Atmaja, 2019). Rachmayana (2013) defined children with special needs as children who have special characteristics that most children do not possess; the mental and physical barriers they experience are not always visible or shown. The classification of children with special needs includes: visually impaired, deaf, mentally retarded, physically handicapped, learning difficulties, behavior disorders, potential children, and children with health problems.

Children with special needs with various characteristics of obstacles and their needs require a special service to support them achieve optimal development. Students with special needs are students with various characteristics of different needs, both physically and mentally, requiring acceptance in their environment, special attention, appropriate services, and support. The concept of education for children with special needs and inclusive education is to provide the best education for children with special needs who have special educational needs to be able to develop and optimize their potential in public schools with other regular students.

The Concept of Life Skills

UNICEF (Prajapati et al., 2016) defines life skills as an approach to behavior development or behavior change designed to address balance in three areas, including (1) knowledge, (2) attitudes, and (3) skills. In addition, world bodies such as UNICEF, UNESCO, and WHO list ten core life skills, including Self-awareness, Critical thinking, Creative thinking, Decision making, Problem-solving, Effective communication, Interpersonal relations, Empathy, Coping with stress, and Overcoming emotion.

Life skills education considers psychosocial competencies and interpersonal skills to assist students in making the right decisions, solving problems, thinking critically and creatively, communicating effectively, building healthy relationships, empathizing with others, and managing and coping with life healthily and productively.

Conceptually, life skills education is described in a detailed scheme of life skills from the Directorate General of Secondary and General Education which is presented in Figure 1.1 below.
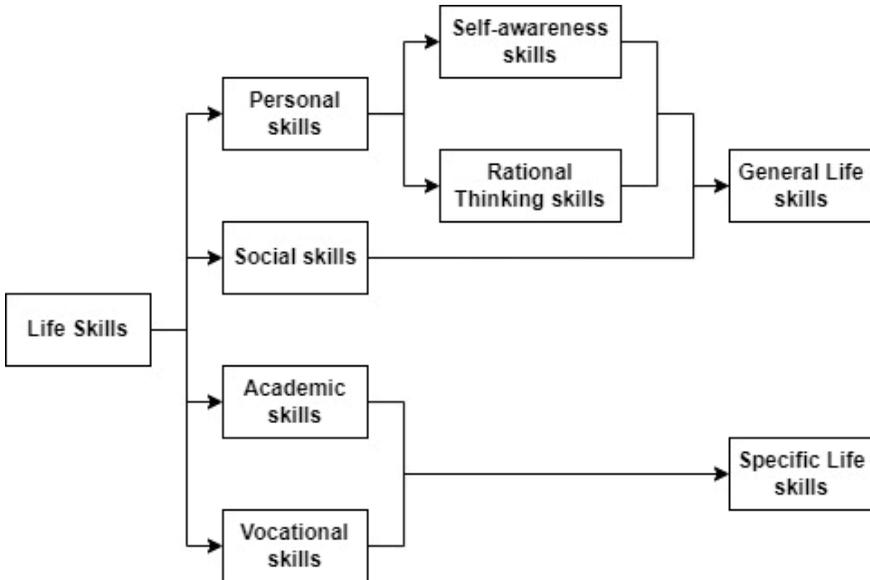
Figure 1. Detailed Scheme of Life Skills (Ditjen Penmun, 2002) as cited from Anwar (2015, p. 26)

The scheme above illustrates that life skills comprise four types of skills incorporated into two components: General Life Skills (GLS) and Specific Life Skills (SLS). Personal skills consist of self-awareness and thinking skills, where self-knowledge skills are related to self-improvement as God's creatures to realize and be grateful for their strengths and weaknesses, in addition to developing their abilities as individuals who are beneficial to themselves and their environment. In addition, personal skills include the ability to think rationally, where this skill trains a person's ability to process information and make decisions, as well as skills in solving problems creatively. This means that there is a need for external encouragement to develop oneself, which also means that learning skills are needed to support these skills (Hidayanto, 2002).

Life skills are needed to help children and preadolescents feel profound empowerment. Empowered individuals can recognize their own identities and values, belong to others, and provide power within the group to contribute to personal and social transformation. This is especially true in social achievement and gender equality (UNICEF, 2019).

Every human being must possess life skills; therefore, they have the ability to live their life. Research by (Gatumu & Kathuri, 2017) described the components of life skills incorporated in the learning process that refers to early childhood in the preschool scope, including (a) self-feeding; (b) dressing; (c) personal hygiene; (d) self-awareness — children are expected to understand themselves, be able to control emotions and calm themselves during undesired circumstances; (e) safety — children are expected to have sensitivity and the ability to avoid themselves from the surrounding dangers, during studying or playing; and (f) relating well with others.

One of the learning outcomes and indicators for children in special/inclusive preschool education is related to life skills which are included in the Personal Health and Safety Skills aspect, including: (1) personal health skills, (2) personal safety and protection, (3) interacting with adults. This shows that preschool education equips children with special needs with various skills and life skills that will later be used to achieve other skills and abilities (The University of the State of New York, 2003).

Life skills in this discussion are skills that must be possessed by children with special needs at preschool age. These skills include self-help skills which are part of personal skills consisting of the ability to eat and

dress, personal hygiene and health, security and self-protection, and the ability to interact with peers and adults (social skills).

Life Skills Development Program for Children with Special Needs During the Pandemic

This section will explain how life skills are strengthened for children with special needs to face learning during the pandemic. This section also covers a discussion on the content of life skills, procedures for strengthening life skills, and the results.

Content of Life Skills

Basic life skills that can train children in self-help and social help skills can be done by children within the environment, both at home and in the community later. The pandemic that has lasted for two years has an impact and risk for children in the long term (Velasco et al., 2021). This can also be seen in the changes in behavior and development experienced by children. Implementing life skills education programs during the pandemic presents challenges and obstacles teachers and parents face (Maalouf et al., 2019; Diana et al., 2021). The results of other studies also reveal that life skills programs are not a priority in the learning process during the pandemic (Novianti & Garzia, 2020). Regarding education, the parents' role is especially important because it is parents who can understand their children's condition, especially children with special needs. They require more affection, attention, and approach than other children (Pancawati et al., 2019). The parents' duties and responsibilities are to develop and instill life skills in children. These life skills can later be used in developing children's self-help (Rina & Karmila, 2020) and all aspects of development. Therefore, they have academic readiness when they enroll at school and other basic skills that are useful for the next life (Utami, 2018).

Some life skills activities can help children with special needs in daily household tasks according to their abilities. This activity is expected to increase independence, and responsibility, and train motor skills, including:

- ❖ Helping make food, washing vegetables, and using mixing tools such as a blender or mixer.
- ❖ Baking and cooking, weighing, measuring, pouring, stirring.

❖ Watering the plants, filling and pouring water
❖ Washing dishes
❖ Folding laundry, sorting clothes by color/family member.
❖ Cleaning the house and surroundings.
❖ Taking care of pets.

Sensory activities can also be provided for sensory exploration as sensory pleasure can stimulate children to interact, initiate and respond to various stimuli. These activities can be carried out with various activities, including:

❖ Playing with wet paste (paint)
❖ Playing with cooked pasta.
❖ Playing with dry and wet flour
❖ Playing with bubbles and soap suds
❖ Playing with ice cubes
❖ Finger/hand/food painting

In addition, life skills for children with special needs train children on self-awareness. Children can show different levels and types of self-awareness and regulatory skills based on circumstances. For example, they may communicate their needs assertively with those close to them and resolve their problems in a more intimate environment. However, they may close themselves off to new or complex situations. Therefore, we as adults recognize that our guidance and support must vary across situations.

Another major issue to consider is the child's motivation to be independent. Suppose children automatically or immediately get what they want and need. In that case, they will be less likely to use the energy needed to ask for the desired item or activity or solve problems independently. To overcome this challenge, we need to control the access to the shows our children enjoy to express themselves appropriately. If we tend to take care of children's needs and problems immediately, it will not teach them the skills they require to manage their circumstances.

The research results of Macheasy et al. (2020) outlined that distance learning conducted during the pandemic was no better than face-to-face learning due to the lack of interaction and organization in learning. Learning during the pandemic is a means of optimizing life skills learning for children because children's learning needs can be fulfilled at home.

The pandemic period also required parents to be able to carry out their duties as teachers in carrying out school programs for their children. Strengthening and mentoring in developing the life skills of children with special needs was a big challenge during the pandemic and online learning. Teachers were required to provide extra assistance for children and parents in implementing previously planned programs. Moreover, learning from home is more problematic for children with special needs because it changes their routine (Agaton & Cueto, 2021).

The reference to the life skills content in this paper develops a life skills activity program for children with special needs, which is also part of the life skills program for early childhood in general. The content developed includes:

Self-Feeding	a. Able to eat and drink independently b. Able to use eating and drinking utensils well c. Able to tidy up eating and drinking utensils by themselves d. Able to clean up eating and drinking utensils by themselves
Dressing	a. Able to dress with simple technology (zipper or button with various models and sizes) b. Able to wear socks c. Able to use automatic shoes and simple laces
Personal Hygiene	a. Able to clean themselves without assistance, washing hands properly b. Able to brush teeth using toothpaste and toothbrush in the right order c. Able to urinate without assistance d. Able to defecate without assistance
Self-Awareness	a. Able to understand themselves b. Able to control emotions c. Self-calming under undesired situations
Safety	a. Have the sensitivity and ability to avoid themselves from the surrounding dangers while studying b. Have the sensitivity and ability to avoid surrounding dangers while playing
Relating Well With Other	a. Able to interact with peers b. Able to interact with adults

Procedure for Strengthening Life Skills

Life skills for children with special needs are skills that must be mastered by children that can support their daily activities; thus, in the future, they can adapt to the environment, peers, and other adults. The life skills learning process will be more effective if it is provided through direct practice with adults, in this case, teachers and children while at school (Jaya et al., 2018). Parents should repeat at home the skills that the teacher has trained. However, this phenomenon occurs in the community in Indonesia; some people believe that schools have a responsibility to be able to meet all children's learning needs, and teachers are the main figures in their children's education. The pandemic lasted for the last two years and has changed the previous mindset and education patterns, including training life skills for their children, which was originally carried out face-to-face between children and teachers. It requires parents' involvement, who ought to be teachers for children while learning from home. However, this pandemic has also created opportunities for teachers to involve parents in education and teaching. Teachers and parents collaborated, communicated, and created various learning solutions for children with special needs that were carried out online (Willis & Exley, 2020)

Learning programs and development activities for children with special needs that should be provided at school were fully carried out by parents or family at home during the pandemic. This means that teachers designed activities that parents could perform and train their children at home. One of the activities of the programs of this inclusive teaching model was the life skills program. The pandemic period provided a great opportunity for children to practice life skills while studying at home. Life skills programs could be provided and trained to children with special needs through various activities, including playing. It is important to distinguish play-based learning, learning-based playing, and learning by playing, where fun play activities are the goal (Pyle & Daniels, 2017).

The procedures for developing life skills programs during a pandemic for children with special needs are carried out by teachers for children and parents at home. These procedures include: developing simple learning videos related to skill content that children will do while studying at home, monitoring the implementation of activities through social media (WhatsApp group) by sending videos of activities practiced by children

at home, and conducting home visits for strengthening and repetition of skills that have not been mastered by children.

Results of Implementation of Life Skills Program

The results of the implementation of the life skills program for children with special needs using the components of life skills for preschoolers described by Gatumu and Kathuri (2017) are: first, the component of life skills in the form of self-feeding is the most successfully achieved component by children. In self-feeding, there are four (4) indicators, i.e., ability to eat and drink independently, ability to use eating and drinking utensils well, ability to tidy up eating and drinking utensils themselves, and able to clean eating and drinking utensils themselves.

Second is dressing, or being able to dress themselves with simple technology (zippers and buttons with various models and sizes) are the indicators most mastered by children, while the indicator for being able to use automatic shoes and simple laces is the most difficult indicator for children, especially shoes with laces.

Third, the Personal Hygiene component, the indicator of being able to clean oneself without the help of washing hands properly, is the indicator most mastered by all children. Other indicators such as brushing teeth, urinating, and defecating are still difficult to perform for early childhood children with special needs, thus requiring assistance, direction, and repetition at each step in these skills. The three indicators of life skills described above (self-feeding, dressing, and personal hygiene) were developed as children's training in the aspect of independence and physical aspect of motoric skills. This is confirmed by Budury et al. (2020), who stated that the physical motor aspect could be developed through self-care skills activities, buttoning, tying laces, and others. These activities also develop confidence in children by being offered opportunities, time and practice. Personal hygiene in nursing is a human need. Personal hygiene is a practice carried out by a person in maintaining or caring for personal hygiene, such as maintaining the cleanliness of hair, eyes, ears, nose, mouth, nails, genitals, and appearance. Some children with special needs experience delays and obstacles in all aspects of development. Therefore, children have difficulty performing self-care (Bergström et al., 2013; Ge et al., 2019). Personal hygiene in children is part of their maintenance

effort, including sanitation and health to gain physical fitness and disease prevention. This activity must be introduced and taught from an early age (Hidayati et al., 2019, p.391).

Fourth, the component of life skills in the form of self-awareness has indicators of being able to control emotions, which children successfully carry out. Meanwhile, the most challenging indicators for children to perform well are being able to understand themselves and indicators of self-calming while facing undesired situations. Children who are aware, understand, have self-awareness, and approve of themselves, are more likely to have positive perceptions of themselves and will be able to regulate and adapt to their environment (Wehmeyer et al., 2000). Children with special needs must learn to develop their competence, master skills to understand their strengths and limitations, and be aware of their abilities.

Fifth, the component of life skills in the form of safety has two indicators that are both not very effective for children. Interviews with teachers and parents, on average, discovered that children are still unaware of the surrounding dangers, children's sensitivity has not emerged, and most of them are still busy with their world and do a lot of unsupervised activities. This causes children to not be aware of their existence in their environment. Safety can be established from children's surrounding environment. When they are playing, the environment is arranged safely and comfortably for children. This is to prevent children from threatening danger or insecurity in their surroundings (Laverty & Reay, 2014).

The sixth component of life skills is in the form of relating well with others. It indicates being able to interact with adults, which indicates that all children have mastered most. Meanwhile, for indicators of the ability to interact with peers, children cannot perform well. The results of interviews corroborate that adults understand more about the condition of children, and children feel more protected by adults than their peers. Children's ability to interact with peers and adults is one of the developmental achievements that must be fulfilled in their developmental tasks. This is following IDEA's Early Childhood Programs achievement targets in 2014 for children with special needs, i.e., for children to have social relationships with peers and have good relations with adults (ECTA Center, 2016).

Training children in life skills is the same as developing and training children's physical, motor, linguistic, and social-emotional aspects. Life skills are designed to allow children to practice life skills in their daily

activities. Therefore, even if the child does not receive assistance from the teacher, parents can still provide the best possible intervention. However, the program did not run as well as expected. Friedman (as cited in Irma et al., 2019) described the factors that influence engagement, including (1) social status factors, (2) family form factors, (3) family development stage factors, and (4) role model factors. The results of this study discovered that there are supporting and inhibiting factors during the implementation process. Parental and family support at home are supporting factors in implementing the life skills program for children with special needs. Parents have a role as the first and main teacher while children are studying at home. The active communication between parents and teachers in implementing the assigned program is an important part of the program's success. In addition, the involvement and support of other family members is also a motivation for children to carry out their skill activities (Nurjanah & Diana, 2020).

Consistency in carrying out each activity on each skill is also a major element in implementing the life skills program. Therefore, through consistent practice and repetition, children will be more skilled in mastering each expected life skill item. (Defitrika & Mahcepat, 2021) have also described a similar finding in their research that parental involvement is necessary for achieving children's life skills at home. In other words, this pandemic has made parents' role in children's education more strategic. In addition, parents discover certain ways and strategies that are initially "trial and error" in every life skills activity for children. This is also influenced by various factors from parents, such as educational background, socioeconomic, and cultural differences in carrying out their children's education at home (Dewanggi et al., 2012; Lehrl et al., 2020). The results of research from Kluczniok & Roßbach (2014) also described the impact of support and cooperation between parents and teachers in optimizing the stimulation delivered to children during the learning process at home with the family. Another supporting factor is the opportunity for children to practice with the support of facilities and infrastructure that are in accordance with the ability of parents to support various life skills provided during learning from home.

Parents and families at home are inhibiting factors in implementing the life skills program for children with special needs. During the pandemic, children perform many activities and learn at home. However,

not all children earn their parents' or families' full attention while at home. Parents' activities are an obstacle in implementing life skills activity programs for children at home. Other family members are also unwilling to be bothered with various things that should allow children to be trained in their independence and responsibility. Instead, they provide services that tend to be pampering to avoid children having tantrums when they are not able or fail to do something.

The lack of support for facilities and infrastructure to train children's various life skills is also an inhibiting factor. This prevents children from practicing with media or supporting tools that supposedly assist children when learning from home. In addition, no other supporting components, such as psychologists, doctors, or therapy, can assist in observing children's development consistently and provide interventions that are partially lost in the absence of face-to-face meetings with teachers at school (Pancawati et al., 2019). Infrastructure facilities in the form of using technology are still considered difficult for teachers. The teachers need more to develop materials and train parents to teach life skills to children while at home (Cagiltay et al., 2019).

When children learn from home, teaching and social presence determine the learning success of students with special needs. Life skills that are part of habituation and development in schools are more effectively taught directly and with the support of various parties from teachers, parents, and families.

Closing

This chapter has outlined a program of life skills activities while studying from home during the COVID-19 pandemic that can positively impact children with special needs. The life skills program described in the six components of life skills that are trained for children with special needs while learning from home has generally been carried out. However, some items in each indicator are skillfully mastered, and some others are not. In self-feeding skills (eating and drinking independently with cutlery), dressing skills (buttoning clothes, wearing socks), and personal hygiene skills have been mastered well by children. Self-awareness, safety, and relating well with other skills still require intensive reinforcement and guidance by teachers and parents. Various obstacles and challenges for

parents in assisting and training their children's life skills while at home are supporting and hindering factors for the smooth implementation of the program. This is a motivation for teachers to be able to continue to provide assistance and active communication to parents by providing simple steps through learning videos that can be learned by parents, coupled with face-to-face meetings which still lack accompaniment by teachers, either through home visits or children present in the institution on a scheduled basis and with health protocols. For some of the skills children have not mastered, it is expected that their guidance and assistance can be maximized at home by parents, family members, or other adults. The supporting and inhibiting factors in the achievement of children's life skills while at home are parents and family, in addition to supporting facilities to achieve these skills. The Government and the preschool sector need to provide positive assistance and support to parents to have confidence and motivation in accompanying children with special needs while studying from home.

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CHAPTER 3

The Contribution of Gratitude Toward Anxiety in Facing the Covid-19 Pandemic: A Psychological Perspective

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Abstract

The COVID-19 pandemic has raised concerns about health, work, education, relationships, and even daily living habits. Unattended worries can develop into an unhealthy form of psychological response, i.e., anxiety. Anxiety manifestations can be seen in distorted thoughts, negative feelings, and maladaptive behavior. In overcoming anxiety, it requires personal quality in individuals, i.e., gratitude. This paper presents an analysis of the contribution of gratitude toward anxiety in the face of the COVID-19 pandemic, based on the results of research done previously by the author. The results of the research show that gratitude plays a role in reducing anxiety in the face of the COVID-19 pandemic. This paper is divided into four main sections: psychological health problems during the COVID-19 pandemic, a brief explanation of gratitude and anxiety, research findings, and the conclusion.

Keywords: gratitude, anxiety, covid-19 pandemic

Psychological Health Problems during the Covid-19 Pandemic

During the COVID-19 pandemic, mental health has become a topic that many often discuss. Various research results have proven the psychological impact experienced by people of various ages, cultural backgrounds, and educational levels, especially in mental health such as stress, anxiety, depression, feelings of social isolation, and insomnia (Biber et al., 2020;

Ozdin & Ozdin, 2020; Robb et al., 2020). The negative impact of the pandemic, which struck everyone around the world, is illustrated by Biber et al. (2020), with an increase in anxiety in a total of 1,640 students. 49% of the subjects experienced mild anxiety, 24.97% experienced moderate anxiety, and there were indications of severe anxiety in 25.89%. This problem also occurs in the elderly. As reported by Robb et al. (2020), of 7,127 older people, 12.8% of participants said they had worse depression since the lockdown was imposed. As many as 12.3% of the elderly also reported a worsening of their anxiety condition, while some other participants reported an increase in their depression and anxiety. Since the implementation of social restrictions, 27.2% of participants stated that they felt lonely, and this happened more often in women (34.8%) than men (17.7%).

Another cross-sectional study in Turkey by Ozdin and Ozdin (2020) highlighted that women are more psychologically affected by the pandemic, especially those with a predisposition to psychiatric disorders; those who live in urban areas and have chronic illnesses. According to a study report in China, the COVID-19 pandemic caused a decrease in the quality of mental health in the form of stress in residents of Liaoning Province, China (Zhang & Ma, 2020). This condition is not much different from Malaysia. Research by Sundarasen et al. (2020) also stated that the spread of the covid-19 virus and the lockdown have a significant correlation with the level of anxiety. Of the 983 research respondents, 20.4% of subjects experienced moderate anxiety, 6.6% of subjects experienced high anxiety, and 2.2% of subjects experienced very high anxiety.

In Indonesia, several studies also mention the same conditions as in several other countries. Aslamiyah and Nurhayati (2021) conducted qualitative research on two confirmed COVID-19 patients who had recovered. The results of this study report that the COVID-19 pandemic has negative impacts on psychological, social, and economic conditions. On the psychological aspect, there is a decrease in motivation, shock, sadness, stress, insomnia, and trauma; thus, it requires social support from family and closest people in the recovery process. Qualitative research conducted by Setyaningrum and Yanuarita (2020) explains the mental health condition of people in Malang City. The results of the research stated that participants had indications of anxiety and fear about the deadly and dangerous Covid-19 virus. Some factors considered to affect mental health conditions during a pandemic are social distancing and isolation,

economic recession, and social and cultural problems in the community. Women, children, adolescents, and the elderly are a group of people who are very vulnerable to experiencing mental disorders during the pandemic.

Quality is needed in each individual to overcome the deteriorating mental health condition caused by the COVID-19 pandemic. Positive psychology provides an answer to the need for qualities in the individual. Positive psychology is an approach that describes the conditions and processes that contribute to improving or optimizing the functioning of individuals, groups, and institutions. This approach focuses on subjective experiences, individual traits, and societal group values (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000).

One of the variables in positive psychology studied in recent years is gratitude. Gratitude is a positive feeling in the form of satisfaction, joy, peace, or gratitude for something that someone values as positive or beneficial, even if it is not much (Listiyandini et al., 2015). Gratitude is considered to increase personal well-being. Gratitude negatively correlates with various psychological disorders such as stress, depression, psychopathology, and feelings of helplessness. On the other hand, gratitude is positively correlated with individual positive emotional functioning, mental health, traits, and life satisfaction (Alloy et al., 2006; Wood et al., 2009; Wood et al., 2008). Wood, Joseph, and Maltby's (2009) research strengthen the explanation of gratitude's correlation with several facets of personality in the Big Five theory. It is said that gratitude is negatively correlated with the facet of neuroticism. This facet shows the individual's tendency to experience emotional instability when faced with negative experiences. Gratitude also correlates with personal well-being, positive emotions, depression, and altruism.

Previous research by Emmons and McCullough (1998) cited Gallup and McCullough et al. (2003) that 90% of American adults indicated that expressing gratitude helps them to feel happy. It was further explained that gratitude is associated with positive emotions, a sense of optimism, and lower depression and anxiety (2003). Gratitude and anxiety have also been topics studied by Siregar et al. (2021) on the subject of 115 final-year students during the covid-19 pandemic. The results of this study revealed a significant negative relationship between gratitude and anxiety. Final year students with high gratitude tend to have low anxiety, especially about the future during the COVID-19 pandemic. The same was expressed by

McCullough et al. (2002), who found that gratitude negatively correlated with anxiety and depression in a non-clinical sample study. Emmons (2013) stated that it is very easy to feel grateful when our lives are going well, but gratitude needs to be pursued when many problems occur.

A Brief Overview of Gratitude and Anxiety

Gratitude on psychological perspective

The word "gratitude" is certainly not foreign to the people of Indonesia, who prioritize religious and spiritual values. Therefore, in their daily life, the word gratitude often appears when faced with undesired situations. The term gratitude comes from the Latin concept of *gratia*, which is related to terms such as feelings of gratitude, grace, and blessing. Other related terms include kindness, generosity, gift, and the beauty of giving and receiving (Emmons et al., as cited in Snyder & Lopez, 2007). Gratitude arises after the individual realizes that he/she has obtained positive results or things from the actions of others, which are considered important and valuable for him/her. This is in line with what was conveyed by a social psychologist, Fritz Heider. The important statement conveyed by Heider is that people feel grateful when they have received benefits from others that were intended to benefit them. The perceived intention of the benefit determines whether a person feels grateful after receiving a benefit. Heider also estimated that beneficiaries prefer to have their gratitude associated with intrinsic rather than extrinsic motivation, e.g., social norms (Emmons & McCullough, 2004). There are three important components in being grateful (Fitzgerald, 1998), i.e., a sense of appreciation for someone or something, good intentions towards another person or thing, and a desire to act that arises from a good intention towards something.

Intuitively, gratitude is usually defined as a positive emotion reciprocal to happiness and well-being. In contrast to negative emotions such as anger, anxiety, and envy – which are often positioned in psychologically dysfunctional situations and misery – those who practice gratitude sometimes experience pleasure (Emmons & McCullough, 2004). Furthermore, a researcher named Robert explained the difference between feelings of gratitude and the character of gratitude. Feelings of gratitude arise when individuals find the benefits of certain moments, for example,

on birthdays, with lots of attention and gifts obtained from those closest to them. This triggers an episode of emotion, and that emotion occurs at a certain time, lasts for a while, and then subsides. It is then followed by entering another phase of a mental episode; for example: experiencing problems with superiors at work which make the individual feel less comfortable. However, later in the evening, feelings of gratitude arise as the individual reflects on what has happened at work and the assistance provided by co-workers. In contrast to feelings of gratitude, the character of gratitude does not occur at certain times in an individual's daily life but is an individual characteristic. This character is persistent in the long term, unlike moods that arise and subside in the short term.

In the same article, Robert described an analysis that gratitude is about the giver, the gift, the recipient, and the attitude of the giver and recipient towards one another. This statement contains a deep social emotion, connecting people in a quite special way. Gratitude is distinct from joy. The feeling of joy does not involve feeling indebted for something good that happened. For example, someone who sees good weather then interprets good weather as a gift and oneself as a recipient; in this situation, gratitude arises. Likewise, gratitude does not require an assessment of future possibilities, as does hope. However, gratitude often involves other positive emotions, such as joy, hope, assistance, and admiration. The definite qualities of gratitude are the giver, gift, and recipient, as well as the quality of the relationship (Emmons & McCullough, 2004).

There are three benefits of gratitude that can aid individuals in living happier lives, i.e., psychological, physical, and social benefits (Chowdhury, 2021). The psychological benefits include positive emotions and thoughts, being more self-aware, increasing self-satisfaction, and strengthening positive feelings. Physical benefits obtained from gratitude include a stronger immune system, reduced body aches or pains, optimal blood pressure, and better sleep cycles. Meanwhile, the social benefits are healthier communication, more empathy for others, stronger interpersonal relationships, and more involvement with the surrounding community.

Anxiety

One form of psychological distress that many people commonly feel is anxiety. The level of anxiety itself varies greatly from mild to severe anxiety

and is classified as a psychological disorder. Individuals with anxiety are easily recognized (Elliot & Smith, 2006), with traits such as statements "I made a mistake while giving a lecture," "I am dumbfounded on how to start a conversation when gathering with other people in a meeting," "I am afraid to travel by air," and "I get nervous if the editor does not like my writing for the magazine."

Some types of arising thoughts in individuals with anxiety include all-time worries, clueless about what to say, fearful thoughts, obsessive thoughts about something, uncomfortable thoughts about strangers, recurring thoughts about traumatic events, uncomfortable feelings when being the center of attention, poor self-assessment when making mistakes, thoughts that are full of worries about health, and being overly prepared for daily necessities (Elliot & Smith), 2006).

Some behaviors are also characteristic of individuals with anxiety (Elliot & Smith, 2006). For example, pacing when feeling worried, avoiding crowded areas, avoiding risks because they are not ready and afraid of failure, always taking refuge in safe situations, seeming restless, avoiding people or places reminding them of bad experiences, spending time assuring he/she looks dapper, shivering of the hands when nervous, and often doing the same things over and over (checking things, repeatedly assuring that the door is locked, or sorting things out the same way over and over). Individuals with anxiety also display typical behaviors when in situations with other people. For example, feeling nervous when meeting new people, being too sensitive when receiving criticism, being too worried about the wrong words, worried about being abandoned by those closest to them, appearing tense in crowded situations, and seeming uncomfortable being the center of attention.

DSM V notes anxiety disorders as chronic, uncontrollable, and excessive worry but also accompanied by somatic symptoms that trigger discomfort in several aspects of an individual's life, such as social life or work. Recurring anxiety either in interpersonal relationships, health, finances, and small things in daily life is called generalized anxiety disorder. Generalized anxiety disorder usually occurs twice as much in women as in men, ranging from 55% to 60% in women. Anxiety also often appears in the mid-adolescence phase to the mid-twenties, which continues throughout an individual's lifetime (Habsara et al., 2021).

Research Findings

From the author's research on 112 participants who live in Central Java, the sample was extracted using the online convenience technique. The research team distributed flyers through social media features. The questionnaire used was DASS-42 and the Gratitude Scale. The DASS-42 questionnaire is a self-report in the form of a scale designed to measure three types of negative emotions, i.e., depression, anxiety, and stress. Each negative emotional aspect consists of 14 items. For anxiety, this aspect assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. One example item is "I feel worried about situations where I panic and embarrass myself." This measuring instrument has good reliability and validity values (Widyana et al., 2020; Antony et al., 1998) and has been adapted into Indonesian from the original version compiled by Damanik (2006). The original version of DASS-42 was developed by Lovibond and Lovibond (1995) with a Likert scale, and 42 statement items measure depression, anxiety, and stress.

The Indonesian version of the gratitude scale developed by Listiyandini et al. (2015) has good construct and factorial validity as well as internal consistency that can measure the same construct consistently. This measuring instrument is valid enough to measure three factors: feelings of appreciation, positive feelings about life, and expressions of gratitude. Some of the statements contained in this measuring tool include "The health that I have comes from God," "I often feel happiness rather than sadness in life," and "I feel loved by the people around me."

Based on the descriptive analysis of 112 participants, 63 people (56.3%) were female, while 49 people (43.8%) were male. The age range of the participants was from 14 to 64 years old. The highest ages were 21 and 22, with 15 people, followed by seven people aged 30 years old. Regarding marital status, 34.8% (39 people) were married, 64.3% (72 people) were not married, and 0.9% (1 person) were divorced. The types of work of the participants were very diverse, ranging from freelancers, teachers, private employees, traders, entrepreneurs, stay-at-home mothers, and students. Respondents' income ranged from not having income at all to 14 million rupiahs per month. As many as 77.7% of respondents completed work at home (the popular term being 'work from home' (WFH)) and 22.3% continued to carry out their duties in the office

(the popular term being work-from-office (WFO)). Then the latest data was that 64.3% of respondents admitted that their income was reduced during the COVID-19 pandemic, while 35.7% did not experience the impact of income reduction during the Covid-19 pandemic.

Furthermore, the linear regression test showed that gratitude has a negative effect on anxiety with a significance value of 0.000 (p <0.05). If the individual's gratitude increases, his anxiety will decrease and vice versa. If the individual does not have gratitude, he has an anxiety consistency value of 36,154. Every 1% addition to individual gratitude will be followed by a decrease in anxiety by 0.194. The magnitude of the effect of gratitude on anxiety is 35.40%, while other factors or variables influence the remaining 64.60%. From the results of this study, it can be understood that gratitude has a significant role in reducing individual anxiety during the COVID-19 pandemic.

The findings of the contribution of gratitude to the reduction of anxiety are not the only scientific evidence that can be discussed because other studies also have supporting results. During the COVID-19 pandemic, every individual was demanded to practice social distancing and self-isolation to slow the spread of the virus. On the other hand, anxiety appears as a psychological impact of the condition. Biber et al. (2020) conducted a study on students studying from home due to the COVID-19 pandemic. The results of this study indicated that gratitude plays a role in reducing students' anxiety levels. Students who are grateful for things they have, such as self-competence and social support during difficulties due to COVID-19, tend to overcome these situations. This can be explained theoretically (Fredricson, 2004; Kashdan et al., 2006, as cited in Armenta et al., 2017) that gratitude can build individual psychological and social resources. Individuals with the gratitude trait also experience positive emotions in daily activities and negative emotions tend to be low.

The literature study by Wood et al. (2010) cited a study that showed gratitude could significantly predict anxiety disorders through diagnostic interviews (Kendler et al., 2003). When individuals are grateful, these individuals tend to have lower anxiety levels. Nguyen and Le's (2021) study of 509 adults living in Vietnam found the importance of gratitude in reducing stress due to COVID-19 and that gratitude has a significant positive correlation to individual psychological well-being. Gratitude

helps individuals to build thoughts and perceptions about reality and grants clarity in perceiving good and bad things that occur in everyday life. This can help individuals avoid negative bias, especially in times of uncertainty like today. When individuals experience positive emotions from the practice of gratitude, then this can help individuals to cope with everyday stressors (Fredrickson, as cited in Nguyen & Le, 2021).

There is a neurological explanation of gratitude for the process of reducing anxiety. By lowering stress hormones and managing autonomic nervous system function, gratitude significantly reduces anxiety symptoms. At a neurochemical level, feelings of gratitude are associated with increased neural modulation of the prefrontal cortex – the part of the brain responsible for managing negative emotions such as guilt, shame, or violence. In other words, gratitude regulates the autonomic nervous system, which activates the anxiety response and makes the brain filter out negative thoughts. Therefore, more focus is put on more positive thoughts (Chowdhury, 2021).

A book titled 'Grateful Brain' written by Alex Korb in 2012 explains that the brain is conditioned to function repeatedly. For example, an individual who is too worried about something that is predicted to harm him/herself will subconsciously make his/her brain process the negative information repeatedly. Another important point is that the human brain cannot focus on positive and negative information simultaneously. Therefore, by practicing gratitude, individuals can control the brain to encourage them to focus on positive thoughts and emotions to reduce anxiety. This finding gains strong validation, one of which is a study conducted by Lau and Cheng in 2011 regarding the correlation between gratitude and anxiety on death. The study was conducted on 83 elderly people in China, and the subjects were divided into three experimental groups. The first group was asked to write a thank you note and positive words. The second group was asked to write about their worries, while the third group was assigned a neutral task. Furthermore, after completing the task, each group faced a stimulus that evoked death anxiety (with the assumption that death is a fear that no one can avoid). This study showed that the group who wrote notes containing thank you and positive words showed fewer symptoms of death anxiety than the other groups. Another conclusion from this study also revealed that with an attitude of gratitude, individuals gained acceptance and were not afraid of the future (Chowdhury, 2021).

Emmons (2013) explained that being grateful when everything happening in life goes smoothly is very easy. In contrast, it will be challenging if the individual is in challenging circumstances, such as during the COVID-19 pandemic. Individuals also cannot control their emotions completely. Individual feelings arise from an individual's views of the world. Individuals must strive for gratitude in difficult conditions, such as during the COVID-19 pandemic. Being grateful is not merely feeling grateful. Furthermore, Emmons explained that crises, problems, and uncertainties would encourage individuals to be more grateful. Several studies have shown that gratitude can also assist individuals in coping with crises. When individuals cultivate gratitude, they will build a psychological immune system that can protect the individual. Grateful individuals are more resistant to stress, both minor daily problems, and heavy personal struggles. The dynamics of gratitude will enable us to understand our current condition. The popular thought process conveyed by Emmons is when individuals think about the worst moment in life, sadness, or loss that happened in the past. Now, individuals can go through the worst of times, face sadness, loss, trials, trauma, or survive a bad relationship and overcome it.

For some people, remembering unpleasant memories during the COVID-19 pandemic may be quite disturbing. According to Emmons (2013), individuals can also reframe their way of thinking by using the language of gratitude. Some thoughts that can be used as self-reflections during this pandemic are "what lessons have I learned through this covid-19 pandemic? "Can I be grateful for the current pandemic?" "What abilities have I gained through the pandemic?" "Are my negative feelings about this pandemic limiting my ability to be grateful?", "did this pandemic experience remove my previous personal barriers that prevented me from feeling grateful?". Some of these self-directed questions will allow the individual to gain a new perspective, not to relive the sensation of a bad experience that has been or is happening.

Reframing a mindset about the covid-19 pandemic that causes anxiety can also be accompanied by another gratitude mindfulness exercise (Fishman, 2020) to improve well-being during the covid-19 pandemic, i.e., writing a gratitude journal. In this gratitude journal, individuals can write down three things they are grateful for within one week. Sexton and Adair's research (as cited in Fishman, 2020) on health workers

stated that health workers who did gratitude journal exercises for 15 days experienced an increase in work-life balance. If this habit persists for six months or more, it will add benefits to happiness and decrease depression and emotional exhaustion at work.

Closing

This paper further strengthens previous research regarding the important role of gratitude for anxiety during the COVID-19 pandemic. The more grateful individuals are, the lower their anxiety related to the covid-19 pandemic (0.000; $p < 0.05$). The magnitude of the effect of gratitude on anxiety in this study's subjects was 34.5%; other factors influenced the rest. Various studies also support the results of this study from various perspectives in the field of psychology, such as positive psychology, social psychology, and neuropsychological explanations. On an individual level, it is challenging to be a grateful person in difficult times. However, it can be strived for. In times of uncertainty, some simple gratitude practices can be done to increase gratitude, i.e., gratitude mindfulness, which consists of keeping a gratitude journal and reframing unpleasant experiences, group discussions, and self-appreciation for the goodness or success that has been achieved. The important point is to practice gratitude at the behavioral level and become accustomed to it to produce a grateful character, not only at the cognitive level or mood.

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CHAPTER 4

Stress and Well Being of Parents, Students, and Teachers During Online Learning in the Covid-19 Pandemic

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Abstract

The COVID-19 pandemic left many tragedies. It took millions of lives and scarred millions more. In flocks, people were made redundant from their jobs and various business took a heavy toll. In particular, it struck a heavy punch on the face of education. It brought drastic changes that uproots conventional practices – such as in-class learning – and gave birth to novel ones, most notably online learning. As a result, every element of the education system–teachers, students, even parents—have no choice but to face them. The dramatic change caused new problems to bloom – in particular, the problems with well-being. Therefore, this chapter will identify the problems students and teachers faced and offer possible solutions. This chapter is divided into 4 sections: introduction, research on the pros and cons of online learning, problem identification, and the solution.

Keywords: Stress, well-being, online learning

Introduction

The COVID-19 pandemic took many lives and caused mass layoffs at numerous businesses – and it also caused problems in education. It brought about drastic changes, forcing the traditional pattern of education—education in the classroom—to give way to a new era: online education. As a result, everyone involved in education—teachers, students, and even parents—must inevitably adapt. All elements involved in this dramatic change are undoubtedly affected, and one of the impacts is the emergence of stress, which affects wellbeing.

The issues faced by the education system, particularly in Indonesia, are very complicated. In addition to having to switch from conventional systems, online learning itself has a lot of benefits and drawbacks. As a result, this chapter was written to describe the issues that arise for all parties involved in the educational system (i.e., parents, students, and teachers) during the Covid-19 pandemic; the benefits and disadvantages of online learning, before presenting a solution to address the issues. This chapter is divided into five sections: an introduction, problems identified from prior research on online learning during pandemic, the pros and cons of online learning, the dynamics of problems, the suggestion for solutions, and the conclusion.

Stress and Wellbeing of Parents, Students, and Teachers during Online Learning in the COVID-19 Pandemic

The COVID-19 pandemic had brought new problems for parents. But more importantly, it shed a spotlight on existing problems that had often been overlooked. Parental responsibility for their children's education has grown even more paramount because of the shift in schooling, and many are probably juggling multiple obligations. Parents who stay at home must adjust to new routines at home; managing the demands of their children's online school while carrying out various household tasks, especially if their children are still in the early stages of education. Whether at the office or from home, children's online learning must be supported and childcare must be arranged by parents who work. Parents who lack education and preparation will undoubtedly encounter many challenges and issues.

The American Psychological Association's (APA) annual report on Stress in America (Canady, 2020) noted that many parents are stressed out because of the double responsibility of working from home and coordinating their children's online school. According to this year's report, American parents experience significantly more stress than adults without children. Children and teenagers under the age of 18 during the pandemic may have a significant impact on parents' stress levels. According to the report, 71% of parents stated that supervising their children's school from home is an absolute stressor. Parents described that they have had to be involved with homework more than ever, including fully completing their children's assignments by themselves. Part of the reason is that during

virtual classes, students may hesitate to ask, or internet lag may prevent them from doing so – which results in all queries being directed at parents, many of whom have their own job to do from home.

The parent-child relationship may be hampered by increased parenting stress, which is frequently brought on by the parent's perception that they are unable to meet the demands of parenting (Eva & Kerry, 2021). According to a recent study (Eva & Kerry, 2021; Spinelli et al., 2020), parents who reported more stress than they did before the pandemic were those who had more trouble supporting their children's learning. Meanwhile, parental stress decreases and the level and quality of parental involvement rise when they believe that children's online school is manageable and they are pleased with the education provided by schools (Lau & Ng, 2019; Tao et al., 2019).

On the other hand, the initial expectation many students had is that working in a virtual classroom was going to be very similar to working in a physical classroom. After all, the substantive goal of school from home is to present routine learning activities for students to stay accustomed to learning and maintain a sense of regularity (Yates et al., 2020). However, due to this very reason, students may instead experience more academic stress than before. The false expectation held by students is shattered once they experience the reality of online school, which negatively affects their capacity in managing themselves. A study noted that many students have difficulties managing themselves due to the lack of supervision during school from home (Yates et al., 2020). Students were given work and were required to finish it, often without anyone marking the work afterward. Some acknowledged that poor time management had a negative impact on their motivation and learning and blamed this on the fact that they cannot do their daily habits as they used to when they were in school (e.g., waking up early, hearing the school bell, and having designated breaks). Other students made the connection between their poor time management and a perceived increase in workload caused by "teachers setting more work than they would have done at school" and a lack of subject coordination (Yates et al., 2020). According to the findings of several studies, the majority of students say they would rather attend a physical class than a virtual one during the Covid-19 pandemic (Eva & Kerry, 2021; Spinelli et al., 2020; Yates et al., 2020). The physical classroom allows students to express ideas and opinions freely and flowingly, giving it a sense of freedom and spontaneity. On the other hand, collaboration on online platforms (such as

Zoom and Google Meet) felt forced because only one person could speak and the teachers often dominate most interactions, notably discussions. Meanwhile, students turn off the microphone and video for many legitimate or non-legitimate excuses, such as the fact that online video conferences consume a large amount of mobile data, or that their camera/microphone malfunctions. Rarely do students participate in online class discussions, and some students just don't show up at all. Hence, it is wholly justifiable that students prefer learning in physical classrooms.

Researchers (Dodd et al., 2021; Eva & Kerry, 2021) identified "motivation" as the most challenging aspect of learning from home. Contextual factors that were associated with this lack of motivation include: family responsibilities – such as caring for younger siblings or helping parents at home; distractions like Youtube, video games, Netflix, social media, online chats with friends, or online shopping; and family obligations. Additionally, there is a lack of extrinsic consequences, accessibility to teachers or peers for assistance, and separation of home and school for students to feel motivated (or at least urged) to do school-related tasks.

Maintaining the motivation to learn at home can be difficult for some people, especially in the midst of an uncertain period like the pandemic. According to the study's findings (Dodd et al., 2021; Eva & Kerry, 2021), many students admitted to struggling to maintain intrinsic motivation to learn due to a lack of extrinsic motivation (i.e., grades, friends at school, consequences of not doing assignments, etc.). The predominant motivating or demotivating factor of technology was its use in asking for support through communicating with teachers. Students expressed reluctance to ask questions via zoom, particularly when they had to send emails, phone calls, or short messages to the teacher to inquire about the subject matter they did not understand. Furthermore, when students have to wait for a teacher's response to a text message question, they feel as if they are putting in too much effort just to get an answer. These factors ultimately reduce their motivation.

Meanwhile, **university students** are at the highest risk in terms of mental health issues (Dodd et al., 2021). Research on Australian university students noted that students have higher levels of psychological distress and **chronic** symptoms of depression compared to the general population during pandemic Covid-19 online learning (Stallman, 2010; Larcombe et al., 2014). Similar findings have been reported among university students

in the USA and the UK (Prince, 2015; Shackle, 2019). The specific stressor for the mental health problems of those university students is their anxiety regarding the future (e.g., their study postponed and social relationships), which cause many problems in their life (e.g., they have to pay more tuition fees due to the postponement of their study)

The problem in Indonesia has become more complex as a result of online learning. According to a study (Pajarianto, 2020) involving 1.131 high school (SMA) students from various provinces in Indonesia, 70.29% of participants experience stress as a result of the learning task during online learning during the Pandemic Covid-19. Students complain about the increasing number of assignments where the teacher only asks students to do the assignments without providing adequate material and feedback. It seems as if the COVID-19 pandemic has changed the role of teachers – from teachers as educators to teachers as task givers (Pajarianto, 2020; Livana et al., 2020). It was noted that during school from home during the pandemic Covid-19, complaints that went to the Indonesian Child Protection Commission (Komisi Perlindungan Anak Indonesia-KPAI) increased significantly because many parents were dissatisfied with the excessive amount of tasks teachers gave to their children (Rahman & Bahar, 2020). It was reported that most teachers understand the dilemma of online school: that school from home only gave assignments online and asked students to complete them in a very short time. The parents reported that their children were very burdened with schoolwork, which was exacerbated by unrealistically short deadlines. In the end, the students became overwhelmed and ran out of time to do other tasks and responsibilities. Moreover, they did not have time to play and chat with their families. As a result, children became exhausted.

Moreover, online education in Indonesia is burdened by poor Wi-Fi, mobile data caps, and difficultly-accessed apps during the pandemic. Due to its geographical terrain, where hills and mountains dominated and seas separate islands, some areas of Indonesia had difficulty connecting to the internet. Some students are required to climb to the roof every day just to get a signal (Pajarianto, 2020). Additionally, not all internet service providers can access Indonesia's sheer area.

Research noted that, from the teachers' perspectives, a virtual learning environment with no face-to-face engagement is a challenge (Spinelli et al., 2020). Online learning is made to resemble face-to-face learning in

class. Therefore, online classes during pandemic Covid-19 should ideally be made as similar to face-to-face classes as possible to give students the same experience in terms of maintaining similarity and regularity. If this is done correctly, it may potentially reduce job stress for teachers. Of course, teachers are required to spend more time preparing material in online classes (e.g., preparing easy-to-understand lesson materials) which is certainly more difficult and takes longer to make compared to relying on textbooks as the basis for the lesson – as is the norm in Indonesian schools. At the same time, teachers are not only mentoring and supporting students, but they also must learn and master new technologies used in online classes. Undoubtedly, all of this will create tremendous pressure on teachers.

According to a study (Spinelli et al., 2020) teachers were more likely to lose interest in their work when they were overburdened as fatigue can cause people to become less sensitive to the needs of others or the demands of a task. Burnout may result from this circumstance, which would have a devastating impact on academics' health and well-being. Therefore, it is no surprise that most teachers prefer the educational system as it was prior to the pandemic, per a study. Additionally, during the pandemic, teachers' job satisfaction and general well-being significantly decreased.

Pros and Cons Online Learning: A Psychological Aspect

Many studies report positive impacts of online learning – and many others found no significant differences in academic performances between online and traditional methods (Dong et, al., 2020; Edwards et al., 2012; Reeves & Brown, 2002; Taylor, 2020; Yelland, 2006) Scholars had noted several advantages of online learning. It has been suggested that, with cutting-edge online technologies, online learning could help young children engage in collaborative learning, problem-solving activities, and comprehend abstract concepts (Dong et, al., 2020; Reeves & Brown, 2002; Yelland, 2006). Online learning is best suited for most academic courses and training programs that demand cognitive learning, in which students use memorization, learn concepts, use analytical skills, evaluate data, and apply knowledge to find solutions (Taylor, 2002). Additionally, online education encourages students to be more responsible with their learning (Coyner & McCann, 2004). Students can take charge of their education and have a greater say in what they learn by using the feedback system.

Online learning can also reduce psychological and social problems. Li and Irby (2008) and Lyons (2004) noted that, for high school and university students, online education provides convenience and flexibility as it allows students to choose their desired place and time. Furthermore, online learning can reduce school bullying, stereotypes in terms of differences in race, ethnic, or cultural background, and anxiety associated with face-to-face discussion (Li & Irby, 2008; Lyons, 2004).

However, some scholars believed that online education is not appropriate for every student due to individual differences (Taylor, 2002). Studies noted that young children should not be exposed to online learning because it does not adequately prepare them socially and emotionally for school (Edwards et al., 2012) and so they would not develop mentally, potentially causing harm to their health and growth in the long run. Using the internet could also negatively impact a student's interest in learning (Lyons, 2004). This is because the internet covers a wide range of things that have the potential to distract students, leading them astray from their goal which is to learn. Furthermore, concerns have been raised for online learning because it can lead to student isolation and negatively impacts teamwork and interpersonal skills (Singh & Pan, 2004). Students who require more personalized assistance may find online interaction insufficient and become frustrated; less self-sufficient students may become overwhelmed by the vastness of resources the internet has to offer (Coyner & McCann, 2004). Students who have trouble with motivation and self-discipline may sign up for an online class but disappear halfway through (Taylor, 2002) due to external distractions – they dive into other websites, play video games, or chat with their friends. Online programs that aim to change student attitudes, such as dealing with cultural differences or behavioral training, are less effective. More importantly, online learning cannot be used for courses that require students to use physical skills. The importance of hands-on experience in practical-oriented courses cannot be overstated.

The Dynamics of Stress and Well-being Among Parents, Students, and Teachers During Online Learning Covid-19

The issues that parents, children, and instructors encountered when learning online during the COVID-19 pandemic form a circle of mutual influence. The difficulties faced by parents—the majority of whom believe

they don't have enough time to accompany their kids while they learn online at home—and their inability to deal with issues relating to their kids' schoolwork are what caused the issues between parents and their children. The conflict that arises between parents and kids will unavoidably lead to additional stress that affects both their welfare. In the meantime, the difficulties teachers face—including their incapacity to use technology, the growing responsibility of creating materials, and the limited engagement they have with students— lead to new issues in their relationship with … . Students are, of course, the victims. Teachers are unable to perform at their best in online classes as many of them are unprepared for technological change. Additionally, many of the materials used in online classrooms call for extra preparation, forcing instructors to compromise their time, and sometimes even carry out lessons without adequate resources. In the end, teachers often merely offer assignments since they don't have much to offer their students. During the online learning period, students believe that their teachers assign more tasks. The internal elements of students—where students feel 'liberated' due to the physical absence of teachers—create a contradiction which makes this situation worse. What comes out of this debacle is reduced external desire to learn and poor self-discipline, both caused by lack of self-control and teacher's (and parents') monitoring.
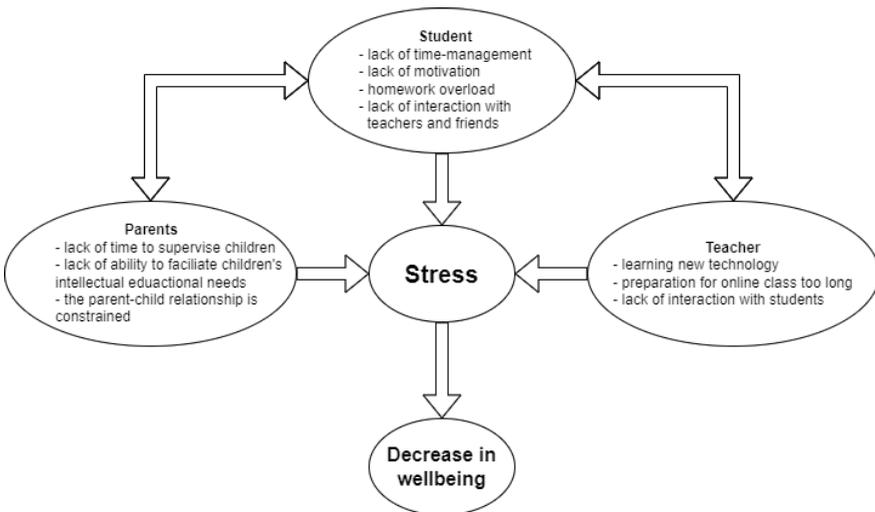

Figure 1. Problems between parents, students, and teachers during school from home in the Covid-19 pandemic are related with one another.

Reducing Stress and Increasing Well-being : A Solution

Given that this wave of learning innovations has occurred suddenly rather than gradually, it is understandable that it isn't always convenient for parents, students, and teachers. Some research suggests that parents greatly advocated for a variety of supports in helping their families, including work and governmental policies as well as school procedures (Spinelli, 2021; Lau & Ng, 2019). Therefore, their stress can be reduced.

Greater parental support and perceived control during the pandemic can act as a protective factor against perceived stress and unfavorable parenting during the pandemic. In contrast, families who report feeling unsupported by their social network and community report higher levels of parental stress. Therefore, offering parental support and enhancing their sense of control may be a useful intervention strategy to lessen the stress among parents during the COVID-19 pandemic.

Schools and teachers must provide more manageable tasks during distance learning and provide a learning experience that is the same in quality as a face to face classes. Online learning that offers similar quality to face-to-face learning is expected to not only reduce the parents' stress in accompanying children's learning during online classes, but will also reduce student stress, boredom, and lack of motivation during distance learning.

The teachers then are the first person who has the responsibility to conduct a good classroom environment for the students. To engage students, online teachers must use their skills creatively in a variety of collaborative practices. These abilities include fostering a sense of belonging and community, expressing care and sensitivity, and customizing feedback and feedforward to meet the needs of students. Online instructors must foster a "community of inquiry" and "integrate cognitive, social, and teaching presence" in addition to helping students socialize. They must facilitate discussions, boost motivation, foster encouragement, and provide constructive, high-quality feedback as well as feedforward that offers clear development guidance.

Should the teachers be able to apply all of these strategies, distance learning may not only increase student motivation but could also assist young children to engage in collaborative learning, problem-solving activities, and understanding abstract concepts. Online education is also

then able to encourage independent learning and builds accountability for students. Through the use of the feedback system, students can take more charge of their education and have a greater say in what they should learn. This can bring new challenges, opportunities for learning, and responsibilities.

However, all of these could only be achieved with substantiated support from the governing body such as the school or the government. For example, the government must be involved and should also collaborate with universities and schools to provide guidance for parents (e.g. parenting courses on how to educate children during online learning). The government should also provide adequate resources such as reliable and evenly-distributed internet connection, affordable/free internet for the lower classes, and peripherals such as laptops and tablets for those who lack them. The government must also take into consideration the scope of the curriculum during online learning. For instance, the government could set a national standard to trim the number of topics required for the exams to alleviate the burden on both the teachers in preparing their lessons and students in their day-to-day online learning. The curriculum should also incorporate physical and psychosocial components rather than only focusing on the academic components. The main consideration in the minds of colleges and universities when promoting online education should be the establishment of a structured and user-friendly environment for this mode of instruction, one that is accessible for all without placing a financial burden on students and teachers. Additionally, as is discovered to be a necessary prerequisite for effective online learning implementation, the need to provide teachers with adequate technological training about how to conduct online classes should be prioritized.

For academia, this presents a chance to assess the efficacy of various pedagogical approaches and create their own hybrid teaching and learning model that is tailored to particular educational needs. To create a learning environment that is advantageous to everyone, suggestions from parents, teachers, and students should be sought after.

Long-term disruptions brought about by the aforementioned strategies will necessitate further feasibility testing, quality control, and regulation of the educational delivery system. In order to maintain control, the government should create regulating bodies. Similar changes should be

made to the current educational budget in an emergency to include such educational reforms.

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CHAPTER 5

Nutritional Status and Eye Health of Preschool-Age Children During Online Learning

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Abstract

This chapter analyzes children's nutritional status and eyesight during home learning with screen-based devices. One of the unknown things during online learning in early childhood is nutritional status and eyesight. Online learning using electronic devices is faced with controversy, i.e., positive and negative impacts. The positive impacts include ensuring the health and safety of children and fulfilling their right to education during the pandemic. In contrast, the negative impacts of online learning include lack of physical activity and increased intensity and duration of screen time. Knowing children's nutritional status and eyesight during online learning can be a consideration for policymakers to evaluate online learning by focusing on children's health. Therefore, it is necessary to describe the nutritional status and eyesight during online learning.

Keywords: online learning, eyesight, nutritional status, screen time

Introduction

The world is in a critical state due to the COVID-19 pandemic. The World Health Organization states that 1.6 million students have been affected in more than 150 countries. Various policies emerged during the pandemic, including learning and working from home. In the education world, online/distance learning is an alternative learning method during the pandemic (Kemendikbudristek, 2020). This policy raises the pros and cons of following the government's advice. The COVID-19 pandemic forces children to study at home, and many parents have their ways for children to learn to

follow the system on the internet by using gadgets. Gadgets are a modern communication medium. There are many kinds of gadgets which include: mobile phones, laptops, computers, tablets, etc. (Sianturi, 2021).

Thus far, parents rarely monitor their children's use of gadgets. Before the pandemic, gadgets were usually only used for playing games and watching movies; thus, the dominant use of gadgets had a negative impact on children. Not to mention prolonged use of smartphones, especially during the current COVID-19 pandemic situation. This aligns with Rowan, who stated that the American Academy of Pediatrics and the Canadian Association of Pediatricians emphasized that children aged 0-2 should not be exposed to technology. Children aged 3-5 years are limited to using technology only 1 hour/day, and children aged 6-18 years are limited to 2 hours/day. Children who use technology beyond the recommended duration can pose a health risk (Anggraeni, 2019). Excessive use of gadgets can negatively impact children's growth and development. One of the impacts is reduced physical activity. In addition, another negative impact of using gadgets is that prolonged use of gadgets can impact the eyes and brain. Increased duration of screen use is associated with the development of myopia and eye fatigue (Jamroni, 2021). Several studies show the impact of prolonged use of gadgets, i.e., disruption of brain growth, lack of sleep, mental disorders, aggressive character, lack of concern for the environment, and radiation (Anggraeni, 2019; Pebriana, 2017; S et al., 2015). Radiation from gadgets triggers various eye problems, i.e. eye strain, dryness, irritation, burning sensation, redness, blurred vision, and double vision (Sarla, 2020).

Before the pandemic, the learning process of early childhood education was previously carried out face-to-face. The learning process covers all aspects of development ranging from values, religion, morals, physical, cognitive, language, and social-emotional to art (Nugraha et al., 2018). It now turns into online learning using a device. An initial search in urban areas, according to Sumanto (Sumanto et al., 2021), showed that most children use gadgets for a longer duration. In addition, there are changes in physical activity; children tend to be lazy to move because physical activity is limited and focuses on core learning activities.

This chapter is divided into three parts. The first part presents the implementation of the online learning policy, the second part overviews the monitoring of nutritional status and eyesight during the pandemic, and the third part presents the nutritional status and eyesight during online

learning. This refers to a research report entitled the impact of the COVID-19 pandemic on the health of preschool children; the effect of screen time and physical activity on eyesight and nutritional status during online learning (Sumanto et al., 2021).

Implementation of Online Learning Policy

Learning from home is a step toward providing education rights during the Covid-19 pandemic. Amid uncertainty and the rise and fall of new cases of Covid-19, the online learning policy has become a solution to (a) ensure the fulfillment of children's rights to receive education services during the pandemic, (b) protect educational institutions members from the adverse effects of Covid-19, (c) prevent the spread and transmission of Covid-19 in educational institutions and (d) ensure the fulfillment of psychosocial support for educators, students, and parents/guardians. The target of implementing online learning is to protect subjects in the learning process, starting from all elements of the Dinas Pendidikan (Indonesian Education Office), heads of educational institutions, educators, and students.

The implementation of the policy refers to the principles of online learning implementation which include: (a) the safety and health of students, teachers, school principals and all school members are the main considerations in implementing online learning; (b) online learning activities are carried out to provide a meaningful learning experience for students, without the burden of having to cover all of the curriculum; (c) online learning can focus on life skills education, including regarding the Covid-19 pandemic; (d) inclusive learning materials are designed in accordance to age and level of education, cultural context, character and type of specialization of students; (e) activities and assignments during online learning may vary between school districts and students according to their respective interests and conditions, including the consideration of the gap in access to online learning facilities; (f) students' progress during online learning are evaluated through qualitative and useful feedback from the teacher without being required to provide a quantitative score/value; and (g) prioritize positive interaction and communication patterns between teachers and parents/guardians.

Online learning can provide a new atmosphere for learning activities and be an alternative to studying in classrooms (Isman, 2017). The implementation of the approaches in online learning carried out include

(a) online distance learning – using gadgets and laptops through several portals and online learning applications – and (b) distance learning outside the network/offline – using television, radio, self-study modules and worksheets, printed teaching materials, teaching aids and learning media from objects in the surrounding environment.

In addition to the method, the implementation of learning can run well if media and learning resources support it. In New York, as noted in the Institute of Digital Media and Child Development, the most common use of online media is Google Classroom, Zoom, and podcasts by teachers. In Indonesia, offline learning media and resources during the online learning period can be implemented through television, radio, self-study modules, worksheets, printed teaching materials, teaching aids, and learning media from environmental objects. Online learning resources can be accessed using gadgets or laptops through several portals and learning applications facilitated by the Indonesian Ministry of Education and Culture (*Kemendikbud* in Indonesian), such as https://belajar. kemdikbud.go.id, https://tve.kemdikbud.go.id/live/, http://rumahbelajar. id, http://pustakadigital.kemdikbud.go.id (Kemendikbud, 2020). The implementation of the use of media and learning resources in West Sumatra Province during online learning includes the use of WhatsApp (53.3%), TVRI (short for Televisi Republik Indonesia or the Television of the Republic of Indonesia) (2.3%), Google Meet (8.2%), Zoom (6.5%), and other media (29.5%) (Susanti et al., 2021).

Overview of Monitoring Nutritional Status and Eye health in Preschool Children During the Pandemic

Preschool children's health is defined as the state of children's physical, mental, social, and spiritual health aged 60 to 72 months that allows children to live socially and economically productive lives. During preschool, development occurs with increased physical activity, skills, and thought processes. The readiness of the five senses and the receptor system for receiving stimuli and the children's memory process must be ready to allow children to learn well (Kemenkes RI, 2009, 2016).

Monitoring nutritional status and eyesight has been stated in the Stimulation, Detection, and Early Intervention of Growth and Development (SDEIGD) guidebook. Parents, educators, and health workers are

expected to be able to jointly implement the elements of SDEIGD within the scope of the educational institution. The benefits include providing an overview of the health condition of preschool-aged children and having the basis for further examinations if deviations are found. The concept of fostering SDEIGD provides opportunities for parents and health workers to stimulate children's growth and development as well as perform early detection of growth and development. Growth indicators include weight, height, head circumference, and arm circumference. Physical health indicators include hearing and sight. And developmental disorders indicators include emotional and mental disorders, autism and attention deficit, and hyperactivity disorders (Kemenkes RI, 2016). The algorithm for implementing early detection and intervention stimulation for child development is set out in the following chart:
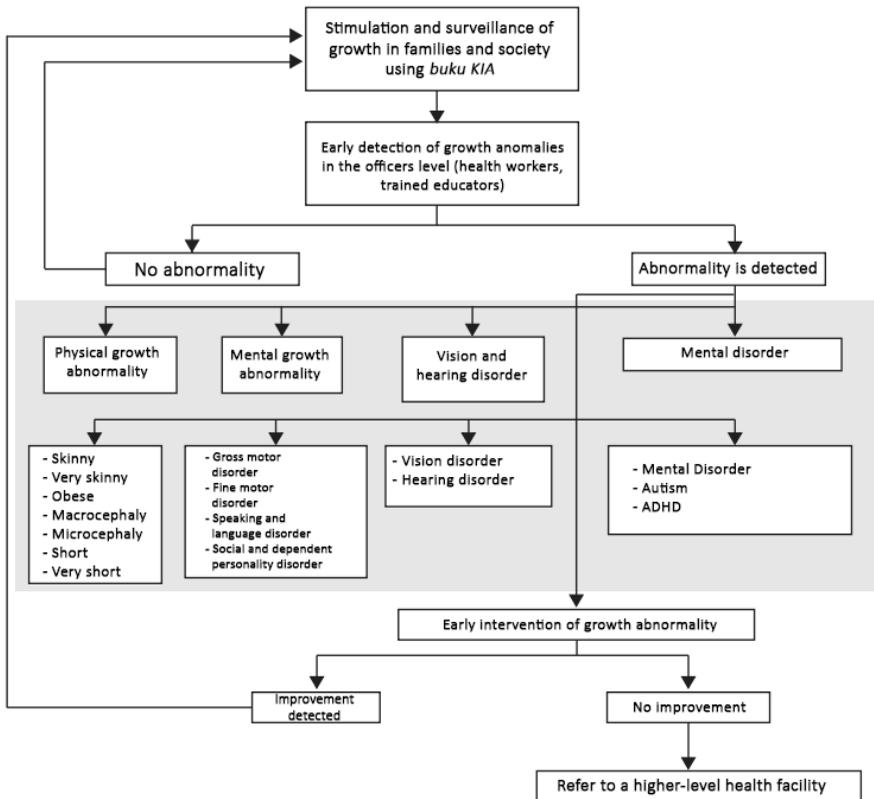

Figure 1. Algorithm of SDEIGD for Toddlers and Preschool Children

Shifts in behavior occurred during the pandemic, which initially occurred normally (face-to-face) and later on in the new normal (screen-based) using electronic or technology-based devices. Health checks through SDEIGD on aspects of growth (nutritional status) and sight organs (eyesight) are necessary for monitoring children's health status.

Instead of continuing to operate, growth and development monitoring has been neglected because all health efforts are focused on dealing with COVID-19. It can be seen in the study by Ntambara & Chu (2021) that health efforts are focused on overcoming COVID-19. Thus monitoring of health status, including the nutritional status of children, family planning programs, and food supplements is neglected. Child health services during the pandemic were limited to only 19.2% of services running through the Posyandu. Meanwhile, monitoring of growth and development in schools was temporarily abolished in line with the implementation of the online learning policy (Mar'ah, 2020).

In the long run, neglect of growth and development monitoring is predicted to cause problems. Reduced coverage of health services for six months is predicted to cause a 10 - 45% increase in mortality of children under five years of age and an increase in wasting by 10%. Furthermore, if service coverage is low for more than six months, it is estimated that there will be an increase of 253,500 child deaths (Roberton et al., 2020).

The community has made independent efforts to keep Posyandu as the spearhead of maternal and child health services running. Through an online mobile-based application, Styawati and Ariany (2021) presented innovations to parents, district heads, and Puskesmas to monitor child growth and development. However, this breakthrough has not been adopted by the government; thereby, the distribution of monitoring of children's health status during the pandemic is nonoptimal. The lack of monitoring has led to the falsification of the health data of children. Data on nutritional status, the health of the eye, hearing, and growth and development are not informative. This circumstance can trigger the emergence of new health problems in children, which could result in long-term implications, including increased risk of chronic disease, low access to education, and economic status (Ferreira et al., 2018).

Results of Monitoring Nutritional Status and Visibility in Preschool Children During Online Learning

A child's nutritional status determines the potential for development into adulthood, referring to the neurogenesis process in which there is an increase in the number of nerve cells; growth of axons and dendrites, synaptogenesis, cell death, synaptic pruning, myelination, and gliogenesis. The whole series of neural cell networks in the brain occurs most rapidly in early childhood, specifically below the age of two. This process occurs well with the support of biology, psychosocial and genetic inheritance. If disturbances occur during neurogenesis, there is a long-term impact on brain structure and function; Cognitive and emotional dysfunction persists into adulthood (Grantham-McGregor et al., 2007). Undoubtedly, the growth and maturation of organs occurs most dominantly in the first 1000 days of life and continues to process until after. A short period of great opportunity is often known as the window of opportunity (Barker, 2007). We can certainly gain a big advantage by optimizing nutritional status.

Determination of nutritional status is done by comparing age and weight, age and height, weight and height, and arm and head circumference. The interpretation of the results obtained from comparing age and weight is overnutrition/obesity, good nutrition, undernutrition, and poor nutrition. The interpretation of the results of the comparison of age and height is very short, short (stunting), normal, and tall. Furthermore, the interpretation of the results of the comparison between weight and height shows the nutritional status of very thin, thin, normal, and obese. Several factors affect nutritional status, i.e. direct and indirect causes. Direct causes occur due to low daily nutritional intake and health status, while indirect causes include income and economic inequality, trade, urbanization, globalization, social security, food system, health system, agricultural development, and women's empowerment (Bappenas, 2018).

The study of differences in nutritional status before and after the pandemic in children under five years of age on weight per age indicators showed a trend of improvement, as seen from the data: an increase in good nutrition status (82.5%), a decrease in poor nutrition status (5%) and undernutrition status (7.5). %). The comparison of age and height showed no change, which was 100% normal. Based on the comparison

of weight and height, there was also no change in the normal (52.5%), fat (20%), and thin (15%) categories (Pane & Aritonang, 2019). In line with these findings, a survey of preschool-aged children with a population of 71 children who came from families with middle education and economic status showed good health status, i.e., good nutrition status (93%), undernutrition nutritional status (7%), and poor nutritional status (0%). The comparison results of age based on height were in the normal (97%) and high (3%) categories. Furthermore, the comparison results of weight and height showed the normal (93%), fat (4%), and thin (3%) categories (Sumanto et al., 2021). The assumption built from these data is that the pandemic period is still running for one year during the research process. Therefore, long-term observations are still needed. Also, parents' educational and economic backgrounds contribute to optimizing children's nutritional status (Pane & Aritonang, 2019).

Even though, in general, the data shows that nutrition status appears optimal, preschool-aged children are still faced with the possibility of obese nutritional status. The data shows that 4% of preschool children are overweight. One of the risk factors for obesity is the lack of physical activity, which causes an imbalance between calorie intake and energy released by the body. Likewise, in Shanghai, China, children's activity decreased from 65.6% to 21.3% during the pandemic, while in Latin America, physical activity during the lockdown showed 2.98 times of inactivity (Mi Xianga et al., 2020; Ruiz-Roso et al., 2020). Low physical activity is significantly associated with nutritional disorders (Anggraini & Mexitalia, 2014).

In addition to the decrease in physical activity during the pandemic, there has also been a change in activities that were originally oriented toward direct/face-to-face interaction to rely on screens. The ability of the eye is the main focus of using the screen. Visual acuity is the most basic function that must be detected to determine abnormalities in the eye. An eye examination is useful for the early detection of visual disturbances that can further interfere with health, especially in preschool-aged children. Eye coordination and other body organs are needed for the maturity of all aspects of development (Jamroni, 2021).

The eye examination is one of the must-pursued health services, considering the radiation emitted from the screen can threaten the physiology of the eye organs. Electromagnetic radiation is one of the

harmful waves. High-intensity RF waves emitted from the screen can damage body tissues. Damage to body tissues can manifest as symptoms including eye strain, dryness, irritation, burning, redness, blurred vision, and double vision (S et al., 2015; Sarla, 2020). Eye examinations have been carried out every six months in preschool children aged 36 to 72 months. This examination was carried out by health personnel. An eye examination aims to detect visual impairments at an early stage to take further action immediately; thus, the opportunity to obtain visual acuity is greater. (Kemenkes RI, 2016).

During the pandemic, five elementary school students stated that the duration of using gadgets in a day was longer than 2 hours, and their use was mostly intended for playing video games. Some of the five students stated that after prolonged use of gadgets, they complained of both eye and physical fatigue (Sarla, 2020). Whereas in studies of preschool children, screen-gazing behavior has not been associated with decreased vision (Sumanto et al., 2021). The duration of using gadgets in early childhood in the Covid-19 pandemic situation is relatively good because the implementation of 3D (short for *dibutuhkan, didampingi, dan dipantau* or required, accompanied, monitored) is effectively implemented. Therefore, children use gadgets to study, play games, and watch videos for 1-3 hours per day (Lubis et al., 2020). Families are the main key to limiting the use of gadgets in children at home by encouraging them to do interesting things, such as: inviting children to play outdoor, socialize with their peers, and do other activities (sports, playing music, drawing, etc) (Ariston & Frahasini, 2018).

The findings presented in this paper provide an understanding that the threat due to screen-based physical activity persists. However, the observations show that the nutrition status and the eye health of preschool children while studying from home are still within optimal limits. Various factors can support the optimization of children's growth and development: education level, economic status, and family support.

Closing

This chapter shows that implementing online learning policies brings a different atmosphere to children's growth and development, and threats to health problems such as nutritional disorders and sight disorders

are very likely to occur in preschool children. In this paper, it appears that the monitoring of nutritional status during the pandemic has decreased. However, the monitoring results of the nutritional status and visibility of preschool children while studying from home are in optimal condition, which is good news for us that preschool children are still in good health. Based on the explanation in this paper, education level, economic status, and parental support are the keys to optimizing growth and development. Hence, the government and stakeholders can promote family functions to parents with different educational backgrounds and economic statuses.

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CHAPTER 6

Digital Storytelling for Preschool Teaching in An Uncertain Time

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Abstract

This chapter reports on a project which aimed at helping preschool teachers' creating digital material as an alternative teaching tool following the outbreak of COVID-19. The project itself was carried out in response to the fact that, unlike for the upper education levels, online and distant education are more complex to offer to preschool level. This partially is not only because the learners at this level are young children but, even complicating the matter, most preschool teachers were prepared limitedly for direct teaching. While COVID-19 pandemic opened new possibilities for digital transformation, including for early childhood education sector. For this reason, the development program referred to as story-telling podcasts was chosen as an alternative. The program participants (as many as 15 people) are teachers, with various backgrounds of work experience (2 to 7 years above), with good internet access skills. The teachers found that Podcasts could be an alternative and variety of digital learning media and prevented them from being dependent on platforms such as Youtube

Keywords : COVID-19, PAUD, teacher development, Podcast

Introduction

Disasters, whether natural disasters, disasters due to the failure of modernization (man-made disasters) or others such as the current COVID-19 outbreak, have a systemic impact on education. In the context of COVID-19, this systemic impact is reflected in the (physical) closure of educational institutions and the shifting of learning modes from conventional (face-to-face) to virtual learning. Although common and recommended, virtual learning is not easy to implement at the early childhood education (PAUD) level.

The following conditions are also a challenge for virtual learning for PAUD. First, and most fundamentally, of course, compared to higher levels, PAUD is relatively not high-stake for students. Consequently, families may not pay "sufficient" attention to the learning of young family members. Second, the nature of play-based pedagogy for early childhood education (play-based pedagogy), so that families may be of the view that as long as their young children play, it is enough to be a "substitute" for learning. This condition is exacerbated by the fact that PAUD educators are not specifically prepared to teach (facilitate play) children virtually. Third, virtual learning at the PAUD level may also be influenced by the pros and cons of using technology. Some people think that technology has a bad impact on the AUD (Yelland, 2005; Yelland, Lee, & O'Rourke, 2008). On the other hand, hands-on experience and the experience of interacting with real objects are considered the best learning modes for PAUD (Evans, Meyers, & Ilfeld, 2000).

On the one hand, these three things and the fact that PAUD is currently in a COVID-19 emergency situation requires alternative learning, especially those assisted by technology. One alternative learning medium that can or at least have the potential to be used is Play On Demand Broadcast which is commonly called Podcast. (Salmon, Edirisingha, Mobbs, Mobbs, & Dennett, 2008). The use of Podcasts for example is recommended by Barber (2016).

Learning materials in the form of story recordings are technically profitable and feasible to be made by PAUD teachers. First, different from the use of audio books, which are mostly paid for and have patent content, through Podcasts, teachers can create content independently, according to the learning theme. Second, there are many applications that can be used in the production process. Third, the audio in the Podcast is the voice of the teacher that the child knows, so there is no need for a transition period for the child to build an emotional bond. In the same way, the emotional bond between children and teachers is maintained even without physical encounters.

ECE Learning and COVID

Learning in PAUD has at least two types of content, namely content that is directly related to developmental aspects (religious moral values,

physical-motor, cognitive, language, socio-emotional, and art) and conceptual material (basic skills in mathematics, science, technology and social studies) (Direktorat Pembinaan PAUD, 2015). Which of the two types of content, of course, in general, learning in PAUD is carried out or facilitated through a play-based pedagogy approach.(Brewer, 2007; Sudono, 2000). In the field there are a number of commonly known PAUD learning methods or strategies, which are considered as derivatives of the game approach in PAUD. These methods include demonstrations, field trips, socio-drama, and storytelling (Tanu, 2019).

Teachers may face major challenges in implementing learning strategies during a pandemic. All the methods that Tanu (2019) the above can almost certainly not be done by the teacher. As a result, of course the absorption of content cannot be accounted for, because of the lack or even the impossibility of direct teacher-child interaction. Research by Agustin, Puspita, Nurinten, and Nafiqoh (2020) for example mentioning the teacher's confession that they had communication difficulties. Their research, furthermore, also found that teachers experience confusion in determining learning methods, planning lessons and determining appropriate learning media. Different from the findings of this research, the study of Ayuni, Marini, Fauziddin, and Pahrul (2020) shows the good news, that only 40% of respondents admitted that they were not ready to face learning during the COVID-19 period. However, this study only involved 10 PAUD teachers; and on the other hand, the study focused on teachers using the Whatsapp and Zoom applications and/or using other media prepared by the teacher. Thus, it can be said that the latest study examines learning which is not necessarily done by the teacher directly.

Podcasts As An Alternative Learning Media

One of the methods that can be implemented during a pandemic is storytelling, although it requires modification. This method is more or less the activity of the teacher telling stories or events, both real and fictional orally (Tanu, 2019). The modification in question is by utilizing technology in carrying out the storytelling method. One alternative that can be taken to implement the storytelling method, as mentioned in Chapter I, is Podcast (Play on demand broadcast). Podcasts are digital media files containing sound that can be accessed from websites and can

be opened or downloaded to be played on a computer or digital audio player (Salmon et al., 2008). Salmon, Edirisingha, Mobbs, Mobbs, & Dennett, 2008).

Podcasts generally contain voice recordings; in the context of this paper is a story recording, or a digital recording of storytelling activities (digital storytelling). The use of Podcasts in education is recommended, among others, by Barber (2016). Podcasts in the context of education are also reviewed by Forbes (2011), especially in teacher education. In the context of PAUD teacher education in Indonesia, podcasts are unfortunately not yet one of the preferred skills that must be mastered. This Forbes study thus indicates the need for some kind of "compensation" for teachers who have never had the opportunity to develop these skills, as referred to in this chapter.

Cebeci dan Tekdal (2006, p. 49) in their study they identified a number of advantages of using Podcats as follows. First, Podcasts can be an alternative to mobile network-assisted learning. Podcasts can be downloaded and played anytime and on almost any mobile device. Second, Podcasts, which are in the form of audio, facilitate listening learning. In this case, one of the important skills that can be stimulated in children is listening to stories and content delivered by the teacher. Third, podcasts can facilitate teachers in expressing and integrating their skills. In this case, teachers can express and integrate their skills in language (making and reading stories) and skills related to information and communication technology.

Overview of teacher development carried out

Given the variety of tools that can be used to create podcasts, in this service program, Anchor (https://anchor.fm/dashboard) is chosen as the application used by teachers. This selection is also based on the experience of the author who uses the application for lecture purposes, so that the devotees are also familiar with using and sharing experiences (training) with the participants.

The development of storytelling podcasts for alumni of the PGPAUD Study Program is realized through training and mentoring activities. The series of programs consist of preparation, implementation, monitoring, and reporting, which involve the staff and program targets. In the preparatory

stage, participant data was collected. At the implementation stage, the program is implemented through presentation of materials for making Podcasts and Mentoring/Workshops by Servant I, simulating Podcast making. At this stage the output of the activity is that each participant installs the Podcast application on their smartphone device and creates an account, and performs a simulation of making Podcast storytelling. At the monitoring stage, carried out through WA-Group, the participants were assisted to make Podcasts. Meanwhile, at the reporting stage, participants report and share Podcast links with their students parents and fellow trainees.

Participants

Fifteen participants in this development program have various working backgrounds. A total of 11 people worked between 2-4 years; 3 people are more than 7 years old and one participant is an educator who has worked for less than one year (Figure 1).

Given that the use of podcasts requires internet access and this may affect the expenditures of participants and their students' families, information was also obtained from participants about the socio-economic background of their students. regarding this, the participants admitted that they work for families with medium socio-economic abilities of various kinds; 6 people claimed that their students were from the upper middle class, 6 others said their students were from the middle class, 1 was lower middle class, and 2 other people said their students belonged to the high economic group.

The participants further described the condition of their students' families in terms of digital literacy. In this case, more than half (66.7%) of the participants admitted that their students' families had adequate digital literacy (intermediate) and others stated that their family's digital literacy was in the high range. The participants of this second category also added information that their students' families actively use social media or access Youtube and are responsive to the blended learning they organize during the COVID-19 emergency response period.

The participants themselves claimed to be active internet users. This is a good potential for the development of digital learning media menus such as Podcasts. Moreover, the participants were impressed to get

internet access support from the institution where they worked. Figure 3 shows only one participant who stated that the institution where he works does not have/provide internet access. In addition, the participants added information, during the COVID-19 emergency response period, communicating with students' families relied on the internet, starting from using the Whatsapp conversation application, Zoom, to sending voice notes. The experience of using the internet to communicate with parents and students' families is a good initial potential for the development of digital learning media such as podcasts.

The participants also admitted that they were quite familiar with Podcasts. However, they are more of a listener/accessor, especially those available on the Spotify application, Google Podcasts, or Podcasts for influencers on Youtube. They had heard of the Anchor app but had never used it to produce their own Podcast. In addition, these teachers added information regarding how they modified their conversation strategies during the COVID-19 emergency response period. As understood, having a conversation is one of the ways of learning in PAUD. During this pandemic, it is almost impossible to do this, unless it is done by means of a virtual or home visit. Regarding this, participants gave various information. Some stated that they sent video recordings of teachers to parents or students' families via cell phones, others did story-telling using the Zoom application. The second way may be an alternative, but it certainly requires a high internet load, and story-telling cannot be played back. Meanwhile, the first method requires a high internet quota and has the potential to take up memory space on the family cell phone.

Training results

As stated earlier, this Podcast development training uses the Anchor platform application. From the training conducted, participants were given basic Podcast material and guided to download the Anchor application and install it on their smartphones, and create an account. Then the participants were accompanied to do a simulation of making Podcasts before finally making their own Podcasts in the monitoring and reporting stage. Figure 1 shows a screenshot of the Anchor account of the author and 3 participants.
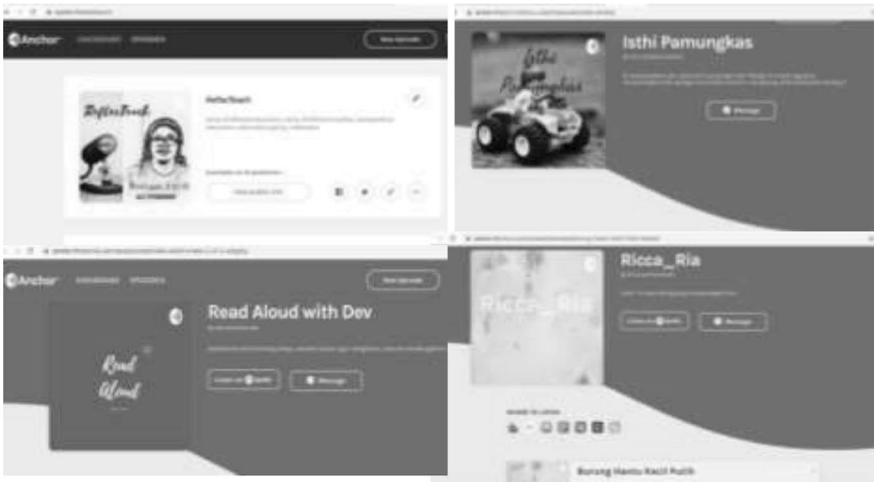
Figure 1. Sample pages of Participant's Podcast

Through the assistance that was carried out, the participants first did exercises to make Podcasts. To facilitate the exercise, participants are advised to read story books, so that they do not need to be bothered with preparing scripts or story scripts (Figure 5). In this way, participants are also expected to quickly adapt and be familiar with the new technology they are learning and not get a relatively heavy learning burden.

Figure 2. Participants practice recording via Anchor during mentoring

Figure 6. Example of screenshot of the participant's Podcast episode

In line with PAUD learning, the theme of fairy tales used by the participants is generally about animals, with content in the form of character development. The fairy tales or stories are partly taken from children's books they have. However, some participants also developed other themes, for example about natural phenomena, such as rainbows or plant themes. Figure 6 shows screenshots of sample episodes that the participants created. It is hoped that later the participants will be able to develop more varied Podcast content.

Potential Use of Advanced Podcasts

After the training and being able to independently produce and publish their Podcasts, the participants showed a positive interest in using their productions in learning. Indeed, the participants did not directly confirm that they would use Podcasts as a learning medium. However, none of the participants showed resistance to Podcasts); and actually, in line with the

purpose of this service, Podcasts are not intended to replace learning but as a supplement or backup for learning media.

Furthermore, the participants also added a number of other information, which showed the potential of Podcasts for learning in the PAUD institutions where they worked. For example, Podcasts can be an alternative digital media for students—in this case an alternative to Youtube. This indicates the dependence of some participants on Youtube during this COVID-19 emergency. Another thing that was also conveyed by the participants was that participants will continue to try to develop their Podcast products; and stated that the ability to produce digital media such as podcasts is important for teachers. However, participants also provided input so that the intensity of digital skills development programs such as this Podcast production could be increased.

Podcasts As A TPACK Application in PAUD

Based on the results of the service programs that have been carried out, in general the development of Podcasts has been going well. Of course, further steps are needed to ensure the sustainability of the new capabilities of the participants who are the target of the program.

Podcast development, especially in this emergency period, is an important skill for educators, amid the demands that they maintain the quality of learning, on the one hand and the need for the integration of technology into PAUD learning. Apart from that there are still pros and cons to this, it is widely known that in the field children are exposed to technology massively. The consequence for teachers is not to ban technology but to provide an appropriate alternative (Yelland, 2005; Yelland et al., 2008).

As described by the participants, learning during the COVID-19 emergency response period partially relied on YouTube as a platform— something they themselves wanted to avoid. Podcasts in this case can be an alternative to YouTube. In addition, compared to YouTube which relies on motion pictures, Podcasts can be an alternative media for students to practice attentive listening (Cebeci & Tekdal, 2006). Attentive listening is one of the language skills and learning skills that are important to master and get used to.

In addition to the reasons above, currently there are also developing concepts and demands to strengthen Technological Pedagogical Content Knowledge (TPACK).(M. Koehler & Mishra, 2009; M. J. Koehler, Mishra, & Cain, 2013; Mishra & Kereluik, 2011). This concept refers more or less to the need for teachers to not only understand and be qualified in terms of content and learning strategies (pedagogy) but also capable of choosing the right technology in teaching students. (M. J. Koehler et al., 2013). So far, the technology in the TPACK concept refers more to matters relating to information and communication technology (ICT), including technology and digital literacy. The better availability of smart digital devices such as smartphones, is an opportunity for teachers to integrate TPACK in their learning. Just a note, some time ago, the integration of technology into learning always connotes the use of computers—of course, at an expensive price, so that integration is experiencing problems. The physical nature and size of a computer that seems more "suitable for adults" is a separate obstacle for children to access it. Now a number of complex computer functions have been "encapsulated" in smartphones, devices that most families and their young children also access. This, again is a potential that needs to be harnessed (Park & Hargis, 2018) teachers and the world of PAUD in general.

Unfortunately, the integration of TPACK itself is not specifically trained adequately for educators when they participate in the PAUD teacher academic program. This of course does not mean that there is no TPACK menu in PAUD academic or professional education programs. However, even if there is a program, it places more prospective teachers as users and not producers of learning technology.

On the other hand, studies on teachers have shown that "teachers tend to teach the way they were taught"(Baran, Chuang, & Thompson, 2011, h. 374). The result is predictable, because in the past they were taught or prepared without an adequate TPACK component, so they are ultimately teaching their students today. Baran, Chuang and Thompson (2011) further underscores the importance of teaching faculties to adopt the TPACK concept as part of the education and preparation of teachers. This dedication is one way to make up for what the teachers who participated in it had left behind in learning and preparation (learning/ preparation lags) in the past. Of course this does not mean that the ability to produce Podcasts automatically makes them overcome the lag. But at

the very least, this ability becomes an additional new skill for teachers in responding to demands for the integration of TPACK in particular and for learning development services in general.

Closing

The COVID-19 pandemic has had a major impact on PAUD learning practices. The loss of face-to-face opportunities between teachers and potential students to change the quality of interaction and at the same time threaten the achievement of PAUD learning. Unfortunately, teachers are not prepared to teach students in an emergency. On the other hand, the COVID-19 pandemic has also opened up creative spaces for teachers to develop a variety of alternative learning and learning media. Among the alternative learning media during the pandemic are online and digital media. Podcast in this case is one type of digital and online media that can help PAUD teachers organize learning. At the same time, the use of podcasts can also be seen as a response to the demands for integration of Technological and Pedagogical Content Knowledge (TPACK). Unfortunately, they are not adequately prepared for such integration. Podcast training offered through this service program tries to fill the gap and the learning/preparation gap.

Given that emergency learning, such as what happened during this pandemic, can happen at any time, it is important for teachers and teacher education institutions to prepare adequate response capabilities. Teachers and teacher education/development institutions need to think about a variety of alternative skills, while continuing to strengthen the learning capacity of teachers in "normal" situations, which teachers can use to support their learning. This response is also important in anticipation of the birth of the "post-COVID-19 generation", which may view positively blended learning with a combination of off- and online and the combination of independent learning with teacher-facilitated learning. This experience will stick with them, and it is not impossible for this generation to think that this is "normal" and "natural" learning. This anticipatory attitude is certainly not aimed at denying the existence and duties of the teacher, but rather looking for the appropriate combination for the best interests of the students.

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PART 2

EDUCATION AND INNOVATION

CHAPTER 7

Students' Negotiation of Digital Good Virtues in Social Media

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Abstract

The use of social media by students was guaranteed to increase during the COVID-19 pandemic. It could happen not only due to the isolation that forces people to communicate using social media but social media is also used as a learning medium. However, social media's fluid and flexible characteristics allow someone to share valuable and accurate information or hoaxes. This is feared to damage the noble behavior of students and college students while accessing social media. In the context of this chapter, noble behavior is referred to as conservation-oriented behavior, which is a set of good behavior (good virtues) including inspirational, humanist, caring, innovative, creative, sportsmanship, honesty, and fairness as outlined by the State University of Semarang. This chapter analyzes how students negotiate conservation behavior via social media during online lectures. The information here is vital to comprehend and discuss further as material for the community of students, lecturers, and universities in general in developing digital ethics in particular and developing students' character.

Keywords: digital ethics, social media, conservation behavior, online learning.

Introduction

The use of social media by students and college students were guaranteed to increase during the Covid-19 pandemic. This was not only due to the isolation that forces students and college students to communicate using social media but also because social media is even used as an online

learning medium. Through online learning, students have the flexibility of learning time; they can study regardless of time and location. Students can also interact with lecturers either synchronously, i.e., learning interactions at the same time such as using video conferences, telephone, or live chat, or asynchronously, i.e., learning interactions at different times through learning activities that have been provided electronically (Isman, 2017). Thus far, the available online learning system is used by lecturers to present and send assignments and lecture materials. The learning system should be able to accommodate students learning needs which impact student conservation behavior on social media.

However, social media's fluid and flexible characteristics allow students and college students to share useful and accurate information or hoaxes. This is feared to damage the noble behavior of students and college students while accessing social media. As agents of change, students and college students must be able to exercise social control over themselves from the bad influences caused by the freedom to access the internet during the pandemic.

In the context of this chapter, noble behavior is referred to as conservation-oriented behaviors, a set of good behaviors including inspirational, humanist, caring, innovative, creative, sportsmanship, honesty, and fairness, as outlined by the State University of Semarang. This chapter analyzes how students negotiate conservation behavior via social media during online lectures. The use of social media among students can pose a risk to the value and character of conservation. Social media encourages a sense of curiosity and willingness to investigate a vast virtual world in students. This is due to the creative nature of students and the desire to progress, the desire to repair past failures with new efforts. Therefore, it is undeniable that the use of social media also brings changes in students' behavior.

This chapter consists of 3 parts. The first part presents an overview of online learning and social media. The second part discusses the use of social media in online learning. Lastly, the third part discusses ethical negotiations in the digital space. This information is necessary to comprehend and discuss further as material for the community of students, lecturers, and universities in general in developing digital ethics in particular and developing student character.

Overview of Online Learning and Social Media

Online learning

The development of learning, which is both student and college-student oriented, can be a solution to improve learning quality. Actions that can be accomplished by establishing a learning system allow students and college students to have the ability to make learning more engaging, interactive, and varied. Along with the development of technology and its supporting infrastructure during the pandemic, efforts to improve learning quality can be achieved through using technology in a system known as online learning.

Online learning is a system that can facilitate students and college students to learn more broadly and more varied. Through the facilities provided by the system, students and college students can study regardless of distance, space, and time. The learning materials studied are more varied, both in verbal form and in more varied forms such as visual, audio, and motion. In line with Moore et al. (2011), online learning uses the internet network with accessibility, connectivity, flexibility, and the ability to bring up various learning interactions. Research conducted by Zhang et al. (2004) shows that the use of the internet and multimedia technology can change how knowledge is conveyed and can be an alternative to learning in traditional classrooms. Online learning can bridge students and lecturers to carry out learning interactions with the assistance of the internet (Kurtarto, 2017).

Online learning is also a learning system that is not done face-to-face but uses a digital platform that can assist the teaching and learning process and is carried out remotely. This learning requires adaptation and effort to run smoothly (Kadir & Idrus, 2021) – and it is undeniable that initially many lecturers and students may not understand the use of learning media such as Zoom, Google Classroom, and other applications that support the implementation of online lectures. Also, online learning often induces motivation and interest in using technologies such as audio-visual to avoid students feeling bored or displeased.

At the implementation level, online learning requires the support of mobile devices such as smartphones or android phones, laptops, computers, tablets, and iPhones that can be used to access information regardless

of time and location (Gikas & Grant, 2013). In its implementation, the existence of this learning transformation undeniably has both supporting and inhibiting factors. The availability of smartphones, data packages, a steady internet network, and the use of social media as learning media are supporting factors for a smooth running of online learning.

The Covid-19 pandemic has made online learning an alternative to online learning methods. The advantages of online learning include 1) a reduction in transportation costs; students are usually required to be present at the campus to attend lectures, but online lectures automatically save transportation costs, and 2) less time and energy expended, meaning that students do not have to stay in the campus during breaks in between classes, and 3) students are more relaxed and unrestrained from noise, meaning that students can study more quietly, more relaxed, regardless of location (at home, in a room, in a café) with the main condition being steady internet access and an adequate device.

Social Media

Social media is an online media where users can easily participate, share, and create content, including blogs, social networks, wikis, forums, and virtual worlds. Blogs, social networks, and wikis are the most common forms of social media used by people worldwide. According to Van Dijk (as cited in Nasrullah, 2015), social media is a media platform that focuses on the existence of users who facilitate them in their activities and collaboration. Therefore, social media can be seen as an online medium (facilitator) that strengthens the relationship between users and a social bond. The characteristics that exist in social media include networks between users, information, archives, interactions, social simulations, user-generated content, and sharing.

The development of science and technology in the era of globalization, especially in technology and communication, has given social media many benefits and uses. According to Ninok Leksono (as cited in Sumardianta & Dawani, 2014), the characteristics of information and communication technology have lengthened and expanded humans' power of thought and whole minds. This opinion of Ninok Leksono can explain the destructive impact of information and communication technology on modern human civilization and culture.

Social media, which was initially a communication medium, can turn into learning communication where it has the same use as a transmitter of information. According to Wijaya and Arismunandar (2018), social media is categorized as an independent learning media because it can be accessed regardless of location and is done self-consciously to develop oneself. The advantage of using social media as a learning medium lies in the aspect of interaction and a wider variety of information (Selwyn, as cited in Kamhar & Lestari, 2019).

Al Rahmi et al. (2015), as cited in Wijaya and Arismunandar (2018), stated that social media could support improving students' academic performance and ethical researchers, lecturers, and supervisors to integrate social media into their learning methods. The use of social media can facilitate collaborative learning and student engagement which improves the academic performance of students and researchers. According to Indahwati and Basri (2017), the use of social media sites for students significantly influences the learning process. Similarly, Setiawan (2020) explained that using social media is very important to educators because it significantly supports success in the learning process.

This first section shows that the emergence of policies regarding transforming learning methods from offline learning to online learning significantly impacts the learning process. Students and lecturers feel forced, coerced, and compelled to adapt to the learning system implemented during the Covid-19 pandemic. In addition, the use of social media by students must also be balanced with a good understanding of social media itself, including how to use it, its benefits, its risks, and its actual function of social media.

Use of Social Media in Online Learning

With the restrictions on activities during the Covid-19 pandemic, activities were being carried out online. Elimination of face-to-face lecture activities can be replaced with online lectures to maintain the teaching-learning process (Purwanti & Krisnadi, 2020). Nowadays, with increasing access to technology, students can use various forms of social media to increase their knowledge. Social media allows students to access any information regardless of location. In addition, social media also facilitates communication without the boundaries of space and time.

A positive impact of social media is that it facilitates students to obtain online literature . Meanwhile, the negative impact is addiction. Social media can alter students' thinking and behavior. Based on the results of a survey extracted from Andriani and Sulistyorini (2022) with the research title "Use of Social Media Among Students During the Covid-19 Pandemic", the most widely used social media applications by students during the COVID-19 pandemic can be seen in Figure 1 below.
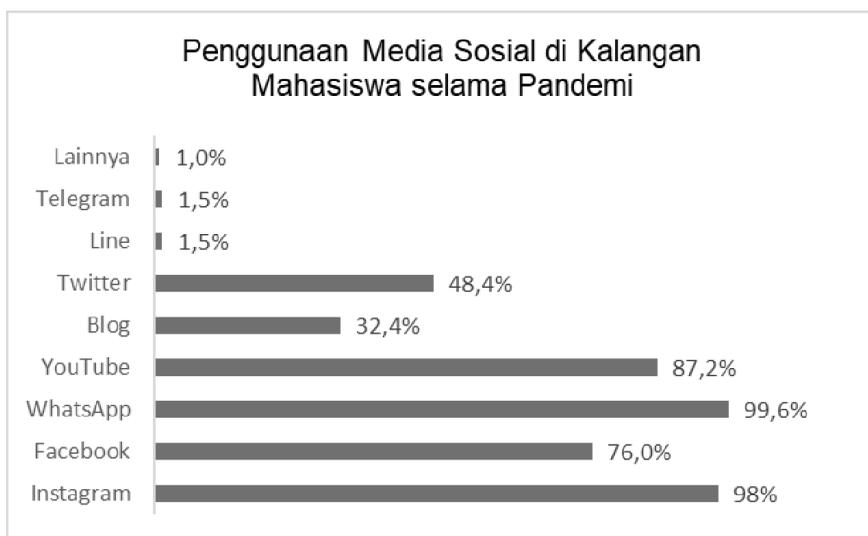
Figure 1. Social Media Used by Students During the Covid-19 Pandemic

Figure 1 shows that Whatsapp was the most used social media by students with 99.6%. Instagram was second with 98%; Youtube was third with 87.2%; Facebook was fourth with 76%, and Twitter was fifth with 48.4%. The use of blogs for students was 32.4%, followed by Telegram and Line applications with 1.5% each, and other social media applications with 1%. Whatsapp, Instagram, Facebook, and Twitter were the medium for students to communicate and express opinions that allowed students to speak and write freely regarding anything (Pramanda et al., 2018). This is because social media is not only a means of interaction and communication but also a learning medium for students.

Furthermore, the factors behind students creating social media accounts (Facebook, Instagram, Whatsapp) can be seen in Figure 2 below.
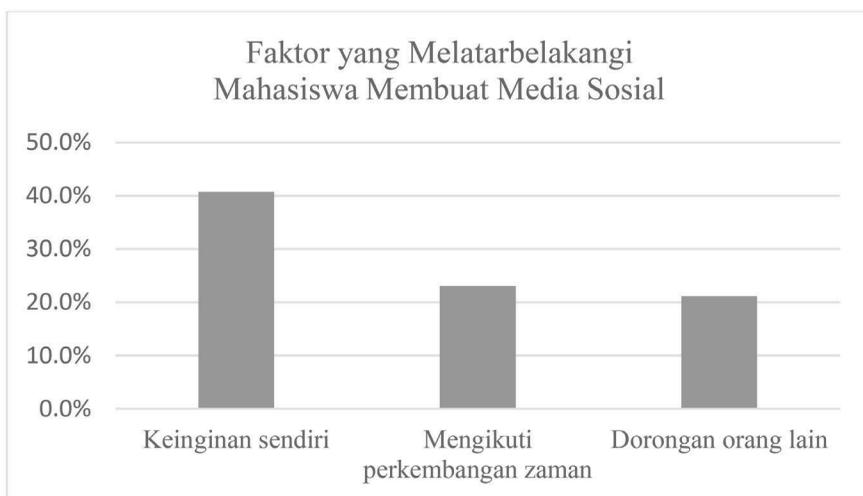
Figure 2. The Underlying Factors for Students Subscribing to Social Media

Figure 2 shows that the underlying factors for students subscribing to social media accounts of their conscious intention and without coercion were 40.7%. Then, students who only followed the trend were 23.1%, and 21.2% followed encouragement from others. Students access social media like Facebook, Instagram, and others daily – although there are some who don't. They access social media regardless of time, with some spending 3-5 hours; some only 1-2 hours; and others for more than 5 hours (Andriani & Sulistyorini, 2022).

The use of social media in online lectures affects students with a percentage of 35.5%. Some felt strongly influenced by social media, with 29.8%. This is in accordance with the statement of Al Rahmi et al. (2015), as cited in Wijaya and Arismunandar (2018), which stated that social media could assist students in improving their academic performance by integrating social media into online learning. The use of social media can also facilitate collaborative learning involving students. This is supported by research conducted by Arlinah and Subuh (2019), which stated that the use of social media provides five (5) benefits for students: the benefit

of communication is the main goal of students by 36%, the benefit of accessing and obtaining information by 30%, the benefit of entertainment by 23.4%, benefits for exchanging opinions by 10%, and benefits related to economic activities were only 0.6%.

The various descriptions in this second part indicate that the use of social media in online learning is a collaborative bridge between lecturers and students. Through media literacy, students gain knowledge and are invited to think critically concerning the content shared on various social media. In addition, social media is also used as a means of collecting assignments for lecturers, displaying academic activities carried out by students, and sharing information with friends at other universities.

Ethical Negotiations in the Digital Space.

This chapter presents data on student ethics in the digital space. Alinurdin (2019) states that digital ethics are norms applied in the use of technology to maintain the emotions and comfort of other users in making people responsible digital citizens. In other words, digital ethics can also be said as a combination of the application of values and character. A person is said to have good character if one knows morally good things or what is considered acceptable, has a desire for morally good things, and does things that are seen as noble behavior. Forming behavior requires a long time, thus, the process of forming noble behavior is carried out constantly through education. Therefore, all parties must be committed to realizing noble behavior in life, even using social media during online learning.

Digital ethics is an individual's ability to realize, model, adapt, rationalize, consider and develop digital ethical governance (digital etiquette) in daily life (Kominfo et al., 2020). This relates to four (4) main focuses, i.e., digital skills, digital culture, digital ethics, and digital safety. In addition, the concept of ethics in the digital space consists of three basic concepts i.e., 1) Respect, which means respecting oneself and respecting others, including ethics, access, and digital law; 2) Educate, which is educating oneself and relating to others and communicating both formally and normally; and 3) Protect, meaning protecting oneself and others in terms of safety, rights, and responsibilities, health, and welfare (Alinurdin, 2019). Therefore, the importance of digital ethics is related to

the ability to manage and monitor behavior in using technology, which includes security, ethics, norms, and culture.

Based on the results of the questionnaire analysis, the proportion of students with an understanding of social media for more than two years amounted to 53.4%, and almost all students have social media such as Instagram, Facebook, Whatsapp, Youtube, Blog, and Twitter. This is because the advantages of using social media as a learning medium lie in the aspect of interaction and a wider variety of information (Selwyn, as cited in Kamhar & Lestari, 2019). With the findings of digital ethics in collecting assignments via social media such as Instagram, most students tend to create social media accounts (second accounts). Students tend to show the good side without seeing other faces that are their real faces. In addition, students' social media accounts are often found using profile photos of their idols or depictions of certain characters (which are not their real faces). The ethics in creating social media accounts is that one should use real identities, and in terms of profile pictures, one should use pictures of self instead of others.

This matter is feared to damage the noble behavior of students while accessing social media, especially concerning ethics in the digital space. Here is the importance of students' ability to behave in using the internet (digital citizenship). Students should use the internet to facilitate the learning process through browsing to increase knowledge, outside of books. In the digital space, KEMS has regulated three things; the prevention of crime and the protection of personal safety, the prevention of legal violations in cyberspace, and respecting copyright. This is also related to the appropriate use of language, the reasonable use of social media, and not being persuaded by radicalism and terrorism (Alinurdin, 2019). In the use of language in the digital space, especially in writing social media status, students should use polite, courteous, acceptable, and correct language. This aims to avoid misunderstandings in transferring and receiving messages and pay attention to standard writing rules.

The use of polite, courteous, acceptable, and correct language is related to the behavior of Semarang State University students, which is reflected as conservation-oriented behaviors, which are a set of good behaviors including inspirational, humanist, caring, innovative, creative, sportsmanship, honesty, and fairness. Figure 3 below shows the application of student conservation behavior in the use of social media.
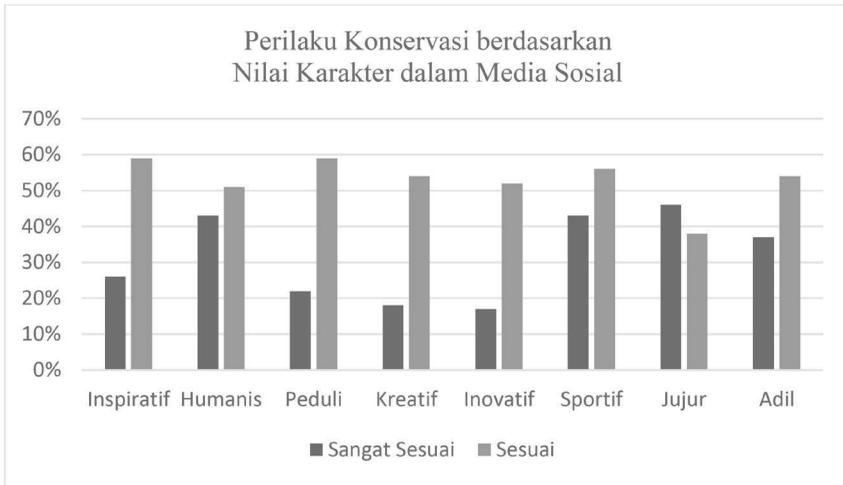
Figure 3. Conservation Behavior Based on Character Values in Social Media

Figure 3 shows a description of noble behavior referred to as conservation-oriented behaviors, which is a set of good behavior (good virtues) including inspirational, humanist, caring, innovative, creative, sportsmanship, honesty, and fairness. The eight behaviors started to show that students' conservation behavior was in accordance with the categories of inspirational, humanist, caring, creative, innovative, sportsmanlike, honest, and fair. This is in line with the research of Saddam et al. (2016), which states that the value of conservation could shape the personality of students to be inspiring, humanist, innovative, and creative. The values of justice have become habits, while the values of caring, sportsmanship, and honesty are developed.

Inspirational behavior can be defined as an awareness in the individual to care and be willing to deliver messages, both verbally and in action, which stimulate enlightenment, creativity or effective effort, determination, and happiness to others. These are reflected in attitudes and behavior in interacting with the surroundings. Inspirational behavior indicators include offering motivation, thinking positively concerning something, increasing the curiosity of others, being helpful, and the inclination to read.

Humanist behavior can be interpreted as respect for everyone in their integrity as humans, in their dignity as free beings who have the right to

determine their direction of life and beliefs (Suseno, as cited in Wibowo et al., 2017). Indicators of humanist behavior include not wanting to stand out, being tolerant, like to give in, being polite, respecting others, and having sympathy and empathy for others.

Caring behavior is a concern that is not only oriented to oneself but also a system (other people, agencies, and the environment). The indicators of caring behavior include sympathy, empathy, helpfulness, altruism, giving, initiative, self-sacrifice, not prioritizing profit, prioritizing usefulness for others, and sincerity.

Innovation behavior contains the meaning of new ideas, visions, or concepts which are then implemented. Innovative behavior indicators include the creation of many ideas, not giving up easily, always wanting to be the best, working to obtain satisfaction, having the will to produce new findings, being able to think quickly, precisely, as well as logically, carefully, and in detail; always taking the initiative, and always willing to contribute.

Creative behavior is a tendency to construct ideas, alternatives, or opportunities that are useful in problem-solving. Indicators of creative behavior include not giving up easily, being certain that what is proposed is good and right, multi-directional thinking, paying attention to the process, being able to think quickly and precisely, respecting the views of others, always taking the initiative, and giving the best.

Sportsmanship behavior is a habit of excellence, friendship, respect, fair play, and integrity (Wibowo et al., 2017). Indicators of sportsmanship include upholding the truth, an inclination to goodness, being able to accept defeat, a dislike for cheating, and the willingness to admit that one's actions are wrong.

Honest behavior is a student's true behavior without being diminished or exaggerated regarding information or anything else. Indicators of honest behavior include speaking the truth, not hiding facts, and being ashamed if one does something bad.

Fair behavior is student behavior based on human rights and obligations by upholding differences in religion, race, gender, social status, and cultural diversity. Thus, they can avoid arbitrary and discriminatory actions (Wibowo et al., 2017). Indicators of fair behavior include being non-discriminatory, not prioritizing oneself, prioritizing obligations, accepting the consequences of what has been done, and weighing things before deciding.

This third section describes the importance of applying student ethics in the digital space because digital ethics is closely related to the ability to manage and monitor behavior in using technology, which includes norms, security, and culture. Therefore, all parties must maintain a high commitment to realizing noble behavior in the use of social media during online learning. The behavior of Semarang State University students is reflected in conservation-oriented behaviors, which is a set of good behaviors including inspirational, humanist, caring, innovative, creative, sportsmanship, honesty, and fairness.

Closing

This chapter has analyzed how students negotiate ethics in the digital space as noble behavior via social media during online lectures. The behavior of Semarang State University students is reflected in conservation-oriented behaviors, which is a set of good behaviors including being inspirational, humanist, caring, innovative, creative, sportsmanlike, honest, and fair. This information is important to comprehend and discuss further as material for the community of students, lecturers, and universities in general in developing digital ethics in particular and developing student character.

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CHAPTER 8

The Development of Massive Open Online Courses for Technopreneurship Courses

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Abstract

The Covid-19 pandemic has changed the structure of the economy and education. Nearly all aspects of life are now either in the digital world or in making their way there. With the exponential growth in information distribution, massive open online courses (MOOCs) opened up new opportunities for learning for everyone. Technopreneurship courses that use the MOOC model would be done more comprehensively. MOOCs could also increase motivation to learn in students due to the flexibility it offers, allowing students to learn at their own pace. This chapter is intended to explain the implementation of MOOC in technopreneurship courses. It consists of three parts: introduction, discussion, and closing. The concept of MOOC, technopreneurship, an analysis of students' needs concerning MOOC-based technopreneurship courses, and the product design of MOOC in technopreneurship courses.

Keywords: massive open online courses (MOOC), technopreneurship

Introduction

The pandemic has changed the structure of human life that we have previously taken for granted. Most especially in the field of economics and

education. Almost every aspect of life has now resided in the digital world or is in the process of becoming technology-based (Knox, 2014). The emergence of online shops, online government, online medical services, and online learning is one of the many signs that we are undergoing a shift to a new era. The use of technology in every aspect of human life presents both a challenge and a need that needs fulfilling by higher education institutions (HEIs), which have the capacity to prepare future workforces to jump into the world of work.

The advancement in technology has opened new doors for the growth of entrepreneurship. It provides new methods of management as well as new and more effective and efficient business models which encourage better innovations. It also allows instant retrievals of information which give business owners healthy competition. Not only does it benefit the production process of a business, but administration processes also reap the benefits in the form of automation, allowing members of the team to focus on product innovation (Lal, 2018). This integration of technology in entrepreneurship is called technopreneurship.

Technopreneurship is a concept where entrepreneurship is applied in a technology-intensive context (Amante & Ronquillo, 2017). It is often linked with innovations combining technology and the demand of the market, resulting in products and services that are high-value, relevant, and scalable. In today's industry, it has become an important skill that is highly beneficial when mastered. As such, HEIs are faced with the challenge to muster skilled, tech-savvy, graduates with an entrepreneurial mindset. Education is the first line in introducing technopreneurship and an innovative mindset to students and faculty members alike. One such way to do that is through MOOCs.

Higher education in the modern era is easily accessible thanks to the growth of MOOCs. MOOC itself is a relatively new format of distance learning. It is massive, free to use, and open to everyone. Online platforms such as Coursera, edX, and Udacity offer various MOOCs in various fields (Knox, 2014; Semenova, 2020). The current traditional model of education thus faces a global challenge – one where HEIs have to innovate to modernize learning and focus on creating affiliations with other HEIs to make courses easily accessible to the masses. With technopreneurship MOOCs, learning can be done more comprehensively as MOOC focuses on the accesibility of learning materials.

The development of technopreneurship MOOCs is done through developing a digital system of education that is novel to students. MOOC platforms use e-learning and utilize the distribution of networks as well as the reusing of learning resources. MOOCs are made to allow learners to undergo peer-to-peer learning, review scores, and have online discussions and debates (Calvo et al., 2018). The learning materials in MOOCs are made to allow both formative scoring and experience. They're also different from typical online courses in that they provide interactivity through forums that bolster interaction between learners. The underlying system of MOOCs is built upon the principle of participation, inclusivity, collectiveness, and collaboration between learners. The social bonding between learners is viewed as an integral part of learning via MOOCs, where the quality of relations between learners can be understood through the concept of social capital.

Learning via MOOCs is thought to increase HEI students' motivation. Research shows that it helps students to pay more attention to the learning material, increase self-confidence and the determination to learn, and fulfill their satisfaction to learn through access to various learning sources. Other research on the effectiveness of MOOCs show that MOOCs can assist students to meet their learning needs, prepare skills for the future, satiate their curiosity, and connect with other students around the world.

This chapter is extracted from the research of Purwanti et al., (2021) on the optimization of international mobility through FIP UNNES' and Overseas Partners' development of MOOC between Universitas Negeri Semarang, Indonesia, with National Chung Cheng University, Taiwan. Technopreneurship. This chapter discusses the concept of MOOC, technopreneurship, and the development of MOOCs in technopreneurship.

The Concept of MOOC

MOOC is an online learning approach that can be used to facilitate learning throughout the Covid-19 pandemic. MOOC brings several benefits – one being the way it is carried out on a large scale to cater to a large number of people without worrying about a shortage of teachers. MOOC is free and open to everyone with an internet connection without special requirements. The main characteristic of MOOC that highlights its ease of

access is the fact that it is accessible online for students to access through their smartphones (Baturay, 2015).

MOOCs are freely accessible to everyone and can hold a large number of users. There are no costs or special requirements to participate in a MOOC, and they generally reward users with a certificate upon completion. They are made in English which allows them to be understood by people around the world. MOOCs could provide 1) teacher's involvement – albeit only to a small extent due to the lack of formal scoring/academic credits; 2) engagement – participants communicate with each other via a discussion forum; 3) reusability – participants can go back to the learning material whenever they wish to; 4) ease of access – video lessons, questions, and feedback are easily accessible (Czerniewicz et al., 2015).

MOOCs are beneficial for learning during the Covid-19 pandemic as almost all college students learn from home online. They facilitate effective learning and become almost like a savior to education during the pandemic. Safri et al. (2020) explained MOOCs are seen in this light due to their flexibility and stability. They offer college students opportunities for independent learning. In addition, MOOCs are easily accessible with smartphones which makes learning easier during the pandemic. Other benefits include the flexibility for teachers in creating lesson materials online.

Technopreneurship MOOCs are based on students' and lecturers' need to carry out technopreneurship courses that are more interesting and attractive. The lesson materials needed are on the topic of marketing strategy, with a learning model that integrates practical activities and is focused not only on the lecturer but on the students too. A learning media that is deemed interesting incorporates images, sounds, animations, and practice questions. The interactivity essential in MOOCs is the lecturer's lecture and peer collaborations, such as marking the works of other peers. Technopreneurship MOOCs are designed based on the needs analysis done in the past. They can be accessed through http://kelastechnopreneur.com/.

Entrepreneurship, Technopreneurship, and MOOC

Entrepreneurship is one of the many factors that has highly influenced the economic growth in Indonesia. The higher the number of entrepreneurs, the more developed a country would be. Entrepreneurship develops a nation through creating jobs, innovations, and prosperity (Acs & Audretsch,

2010). Moreover, it can become the main driving factor of an economy's growth by introducing high-quality novel goods, new production methods, opening a new market, collecting new supplies from new components, and running new organizations in the industry (Darwanto, 2012).

Technopreneurship is the synergy between the mastery of technology and the thorough understanding of the concept of entrepreneurship (Sosrowinarsidino, as cited in Marti'ah, 2017). It is the forming of a new business involving technology at its foundation with the expectation that, with the right strategy and innovation, technology can become one of the driving forces of a nation's economy. To put it simply, technopreneurship is technology and entrepreneurship combined into one.

It is crucial for technopreneurship education to be developed in HEIs in Indonesia, in particular Universitas Negeri Semarang. However, challenges are inevitable – from lack of regulations to the readiness of an HEI (or the workforce of an HEI) to name a few. A large proportion of graduates in Indonesia still lack an entrepreneurial mindset. This is because learning activities still mainly revolve around theories and information retrieval. Through technopreneurship, learning materials on entrepreneurship are expected to be complemented with technological skills to ensure students master both entrepreneurial (e.g. marketing and business planning and management) and technological skills (e.g. inventing a new product, understanding supply and demand in tech, intellectual property management, and product design) (Hamid, 2011).

Throughout the Covid-19 pandemic, technopreneurship courses in HEIs faced many hurdles, mainly because learning activities are done completely online. Such hurdles present a challenge for lecturers to provide an adequate online learning platform to supplement college students' learning of technopreneurship.

Students and Lecturers' Need for Technopreneurship MOOCs

Both students and lecturers alike are in need of interesting and attractive technopreneurship MOOCs. The lesson materials needed are on the topic of marketing strategy, with a learning model that integrates practical activities and is focused not only on the lecturer but on the students too. A learning media that is deemed interesting incorporates images, sounds,

animations, and practice questions. The interactivity essential in MOOCs is the lecturer's lecture and the peer discussions, such as marking the works of other peers.

A summary of the need for technopreneurship MOOCs is collected through a questionnaire consisting of 10 questions:

- ❖ What topics do you like in Technopreneurship learning
- ❖ What do you think about the development of a MOOC-based model for Technopreneurship courses?
- ❖ Are you interested in joining the MOOC?
- ❖ What kind of learning do you need to support the learning process in technopreneurship courses?
- ❖ What is your opinion on learning media equipped with animations, pictures, and sounds, complete with practice questions?
- ❖ In your opinion, what kind of interaction do you need in online learning?
- ❖ In your opinion, what kind of student interactions can be done during a technopreneurship class?
- ❖ What kind of learning media do your lecturers often use to carry out technopreneurship learning?
- ❖ In your opinion, what kind of learning resources are appropriate for technopreneurship courses?
- ❖ In your opinion, what benefits do you expect from using MOOC-based learning media for technopreneurship courses?

Below are the results of the questionnaire (N=162).

1. What topics do you like in Technopreneurship learning?
162 jawaban

- a. Digital Market
- b. Team building
- c. Marketing Strategic
- Belum mengetahui
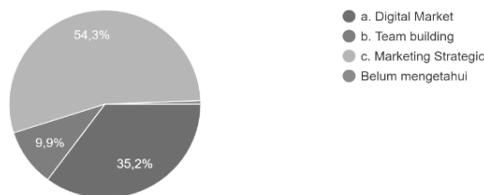
Based on the results of the survey on the topic most favored by students in the technopreneurship course, 54.3% chose strategic marketing, 35.2% chose digital marketing, and 9.9% chose team building.

2. What do you think about the development of a MOOC- learning based model for Technopreneurship Courses?

162 jawaban

- a. Interesting
- b. Neutral
- c. Not Interesting

24,1%

75,9%
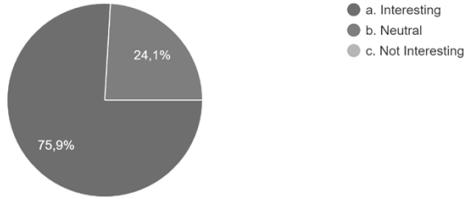
Results show that 75.9 percent of students are interested in using the MOOC-based learning model in technopreneurship courses.

3. Are you interested in joining the MOOC- learning based model program for Technopreneurship Courses?

162 jawaban

- a. Interested
- b. Neutral
- c. Not interested

39,5%

59,3%
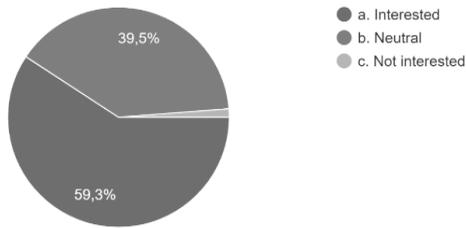
59.3% of students are interested in joining Technopreneurship MOOCs.

4. What kind of learning do you need to support the learning process for technopreneurship courses?

162 jawaban

- a. Self-learning
- b. Teacher-and-student learning
- c. Learning by practice
- Teacher and student learning and learning by practice
- Teacher-and-student learning And learning by practice

37,7%

59,9%
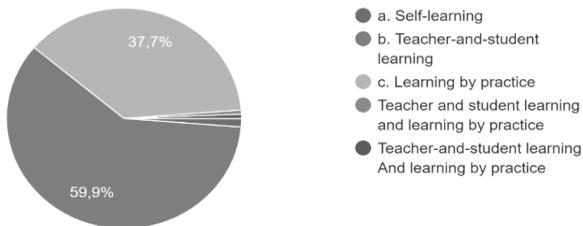
59.9% of students said they need the teacher-student learning model and 37.7% of prefer learning by practice.

6. What is your opinion on learning media equipped with moving animations, pictures, and sounds, complete with practice questions?

162 jawaban
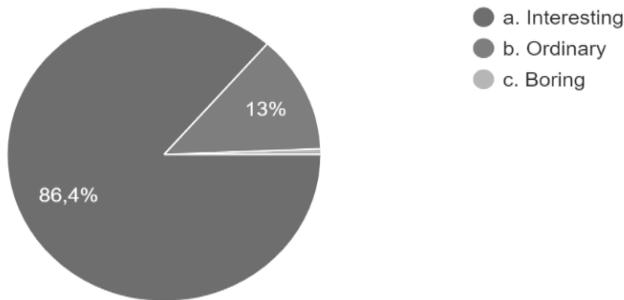
86.4% of college students are interested in the inclusion of animations, pictures, sounds, and practice questions in a learning medium.

7. In your opinion, what kind of interaction do you need in online learning?

162 jawaban
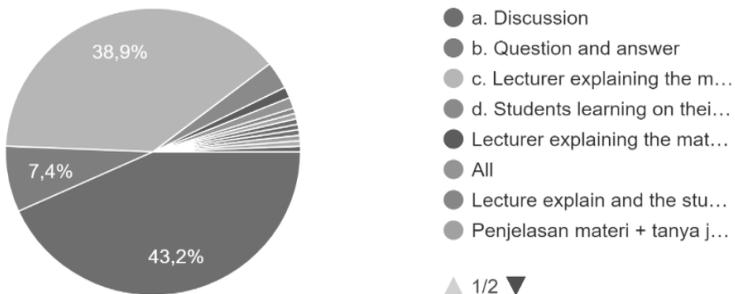
In online learning, most students need a live explanation from the lecturer so that they could ask immediately should they get stuck. Students also need an open discussion with the lecturer and a lecturer's evaluation of the results of the discussion at the end of a session.

8. In your opinion, what kind of student interactions can be done during a Technopreneurship class?

162 jawaban
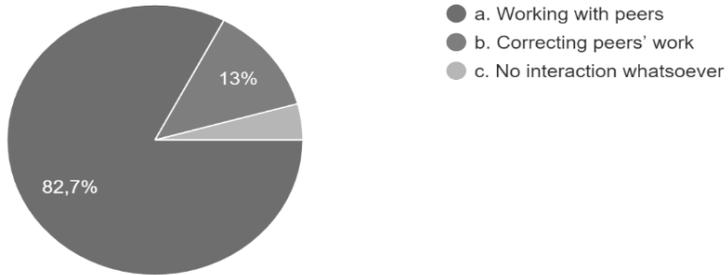
82.7% of students think peer collaboration can be done, which suggests their need for peer collaboration.

9. What kind of learning media do your lecturers often use to carry out Technopreneurship learning?

162 jawaban
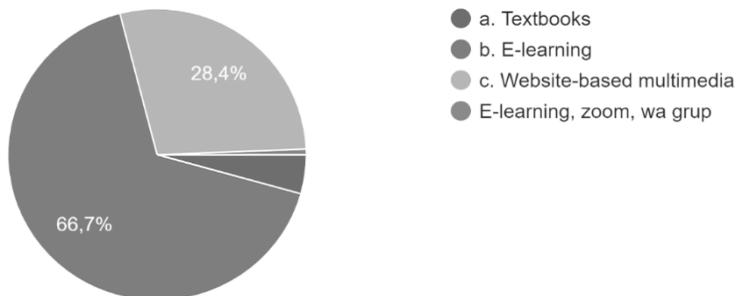
67% of students said their lecturers use e-learning to carry out technopreneurship courses while 28.4% said theirs use website-based multimedia.

10. In your opinion, what kind of learning resources are appropriate for Technopreneurship Courses?

162 jawaban

- a. Textbooks
- b. MOOC
- c. Instructional Media
- Don't know
- Textbooks, mooc, instructional media
- Textbooks, MOOC, Insructi…
- Textbooks, instructional me…
- I Think MOOC, but i dont re…
- MOOC and Intructional Media

27,2%

63%
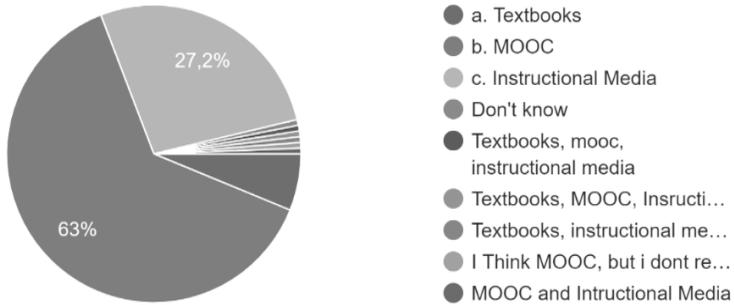
63% of students believe that MOOCs are most appropriate for learning technopreneurship, while 27% believe instructional media to be the most appropriate.

11. In your opinion, what benefits do you expect from using the MOOC-based learning media for Technopreneurship Courses?

162 jawaban

- a. It can foster learning motivation
- b. It improves designated skills
- c. It makes learning more exciting

33,3%

43,2%

23,5%
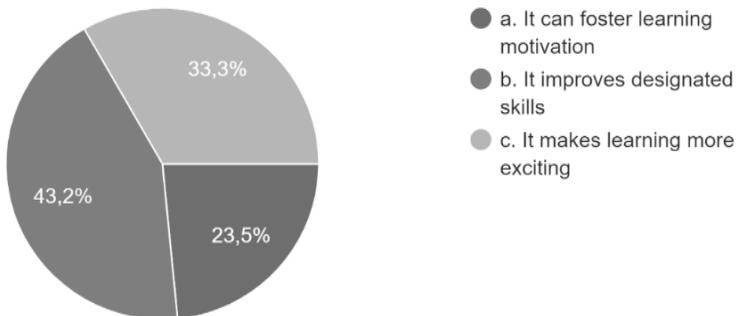
Students hope they can reap the benefits of learning via MOOCs such as the increase in motivation to learn, skills, and a more interesting learning experience in general.

114

Product Design of Technopreneurship MOOCs

MOOCs are designed in line with the System Development Life Cycle (SDLC) procedure. SDLC is a process of creating and altering a system or the model and methodologies used to develop a system (Rhodes, as cited in Inggi et al., 2018). SDLC organizes the stages of developing a framework into five: planning, analysis, design, implementation, and maintenance.

The planning stage is used to identify and prioritize which systems need to be developed and the objectives of the development. In this research, the planning stage covers the identification of the content in technopreneurship courses based on the semester lesson plan; the identification of the type of system on which the MOOC is to be developed; and the forming of the team of developers. This stage also includes the setting of objectives and the scope of the development by identifying potential problems that could be solved by the development of an adequate system, determining strategies to be used in the development, and prioritizing the type of tech and application.

The analysis stage includes identifying stages of the framework to be developed through literature studies to determine the lesson materials that will be included in the technopreneurship MOOC; classifying problems, opportunities, and solutions that could appear and be applied in the development; and creating a needs analysis on the development and limitations of the system.

The design stage is where we determine the techniques and processes to implement the new system. It also requires an analysis of the function of each technique and process by analyzing the interaction of objects and functions in the system and designing a user interface.

The outcomes produced in the design stage are then implemented and tested in the implementation stage. This stage covers the creation of a database in line with the design scheme; the creation of an app based on the design of the system; and the testing and debugging of the app.

Finally, the maintenance stage includes the maintenance of the system to ensure optimal operation and stability of the system.

The results of the needs analysis are the basis on which the development of the technopreneurship MOOC is built. The final product can be accessed via http://kelastechnopreneur.com/. Below are the features of the web app.
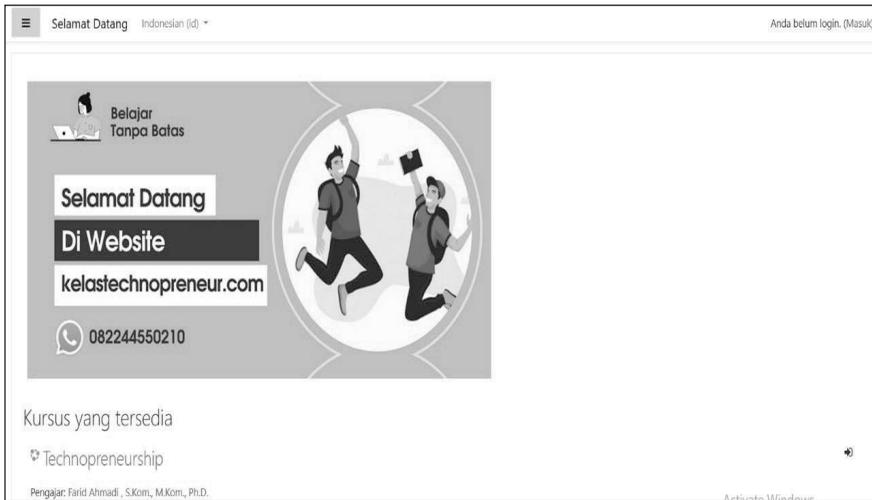
Figure 1. Start-Up Page of the Technopreneurship MOOC

Figure 2. Login Page of the Technopreneurship MOOC
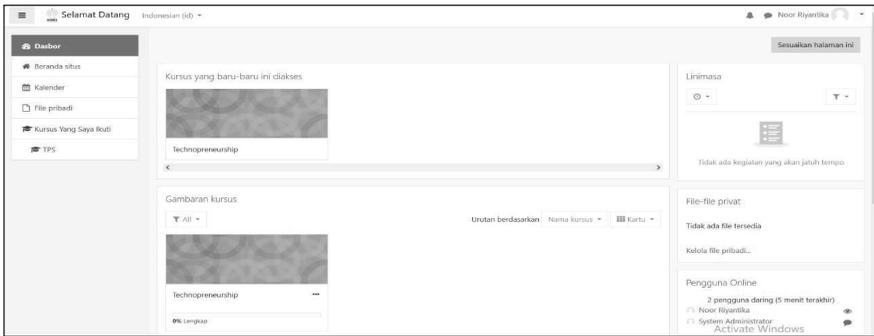
Figure 3. Student Dashboard Page of the Technopreneurship MOOC.
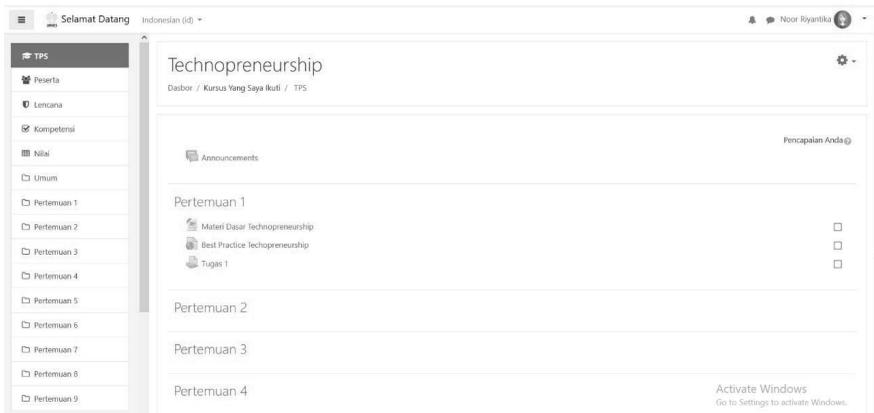
Figure 4. Lesson Materials Page of the Technopreneurship MOOC

A feasibility test by a media expert is done to evaluate the feasibility of the techonpreneurship MOOC. The result of the test shows that it is feasible to use as a learning medium. The test is done using the criteria below:

- ❖ The MOOC is suitable for/in line with the needs of the user
- ❖ The visual used in the MOOC is displayed with adequate clarity
- ❖ All programs in the MOOC are working smoothly
- ❖ The MOOC is easy to operate/navigate
- ❖ The MOOC is organized and presented in such a way that guarantees good ease of access

❖ The usage instruction of the MOOC are adequate, clear, and concise
❖ The navigation elements of the MOOC are arranged and shaped consistently
❖ The overall design of the MOOC is made in a way that presents clarity
❖ Control buttons are easy to access
❖ Logging into the MOOC is easy and simple.

MOOCs have been proven to increase students' desire to learn. The research titled "The use of MOOCs in social enterprise education: an evaluation of a North-South collaborative FutureLearn program" found that the education system has been significantly affected by the development of information technology, the introduction of online web-based knowledge management, and new learning media that allow learning to be done effectively and punctually. Most especially, MOOCs have changed the way people access knowledge digitally, creating new opportunities for learning and the development of skills. This finding demonstrated positive students' reactions, behavior, and attitude to learning. With the global, multi-dimensional scope that MOOCs offer, they are becoming an effective way to develop learning in multi-dimensional contexts.

With MOOCs being able to hold a large number of participants from all around the world simultaneously – plus their free access to everyone regardless of age and academic background – more traditional forms of learning are looking more and more closed-off and expensive. MOOCs emphasize the importance of learning that is free, participative, and evenly distributed. This proves that MOOCs are more effective and efficient in terms of cost and ease of access. Therefore, more MOOCs need to be developed especially for courses that incorporate techology in them or are tech-based.

Closing

This chapter illustrates how MOOCs have a significant role in the increase in technopreneurship learning. Students show interest to participate in MOOCs as they have features that are interesting and attractive, as well as encouraging students to interact both with their teachers and their learning

more intensively. In the future, MOOCs will become the main media for learning as the trend in education seem to be moving away from traditional classroom learning to online/virtual learning.

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CHAPTER 9

Development of Digital Augmented Reality Media in Distance Learning in the Era of Industrial Revolution 4.0 for Junior High School Students

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Abstract

The rapid advancement in tech has opened opportunities for learning via smartphones. Virtual technology has become the trend in today's society thanks in part to tech companies. Now, even smartphones can deliver an immersive virtual learning experience if used with the correct intensity by the user (Bider, 2015). The growth in the digital world is driving changes in the world of education – one example is the rise of the distance learning model. The emergence of new learning models also drives innovations in the field of learning media. We offer digital augmented reality media as one of the innovations in learning media to increase junior high school students' comprehension. It is in the form of an APK file that is downloadable on Android devices. We expect this more interactive learning media can increase the quality of education, especially that of junior high schools.

Keywords: Development, learning media, augmented reality.

Introduction

Developments in the digital world in our society have occupied the highest point in consumerization. Hamidi (2018) states that smartphones are the

main subject of internet use in society. Opportunities that smartphones offer in the world of education have also been considered by researchers. Gonçalves (2018) stated that the internet can increase interaction between users through friendship networks with fellow users. Thus we can conclude that a smartphone with an internet connection can focus on flourishing a particular community.

According to *Databoks*, the number of Smartphone users in Indonesia reached 92 million people in 2019 – which translates to around 46% of the total 200 million. It is very much possible and undoubtedly wise to utilize smartphones to assist in the implementation of education.

The rapid advancement in tech has opened opportunities for learning via smartphones. Virtual technology has become the trend in today's society thanks in part to tech companies. Now, even smartphones can deliver an immersive virtual learning experience if used with the correct intensity by the user (Bider, 2015). Research conducted by Hamidi (2018) increasingly strengthens the statement that smartphones are a means for learning, and so can be utilized in various learning methods from self-learning to distance learning.

Augmented Reality Media

Augmented reality is one of the virtual experiences in learning, as stated in various past studies. Klopfer (2008) stated that augmented reality has been used in higher education settings as an interesting way of learning. Other researchers also stated that the use of augmented reality in simulation games by placing objects in various places can deliver a direct experience to users. (Hsu et al., 2018). It can be concluded that augmented reality has spread into the field of education. Undoubtedly, the incorporation of augmented reality in learning would open new doors in the world of online learning.

There is still a lack of analysis on the use of novel technology in Indonesia. Data from various sources demonstrated how augmented learning is still yet to be utilized to its fullest potential in educational settings. Policymakers have yet to even touch on augmented reality and

its uses in the field of education. Institutions where online learning is the primary method of learning like *Universitas Terbuka* (The Indonesian Open University) would benefit substantially from the incorporation of augmented reality in learning.

Augmented Reality and The Distance Learning Model

Universitas Terbuka had chosen the distance learning model to test out augmented reality-assisted learning in higher education settings (HEIs). This is relevant because distance learning allows students to self-regulate their learning i.e. students can learn at their own pace. The motivation involved here is intrinsic and so the process is expected to succeed at being a new effective way of learning.

Perraton and Lentell (2004) reported that distance learning can thrive if supported adequately by policymakers and organized well. A report from Bervell (2018) also stated that distance education that implements the system of adopting structured questions with the help of online learning media is favored by a lot of people. This is reinforced by Silverman (2018) who revealed that math learning can be done with the distance learning model with a systematic approach that encourages independent learning for higher-level students.

Augmented Reality as a Learning Media

Augmented reality as a learning media for junior high school Indonesian (i.e. the study of the language of Indonesia or the Indonesian subject) comprises nine main parts. The following list explains what each of them is and its respective development phases.

Designing the Product

1. Competency Map
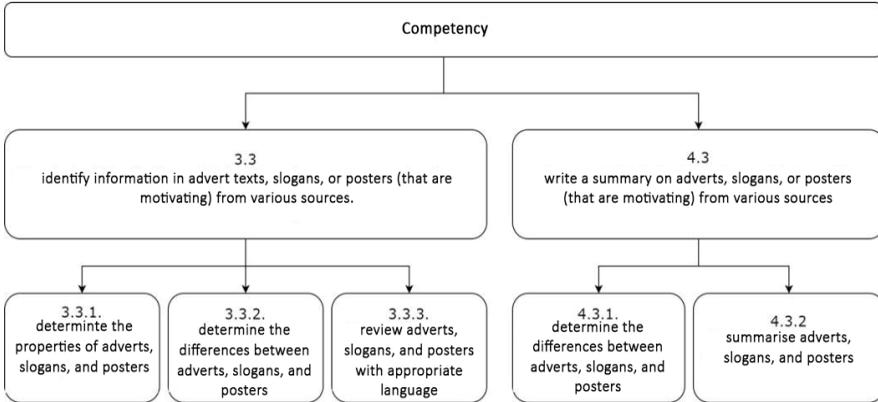
Figure 1. Competency Map

2. Map of Lesson Materials
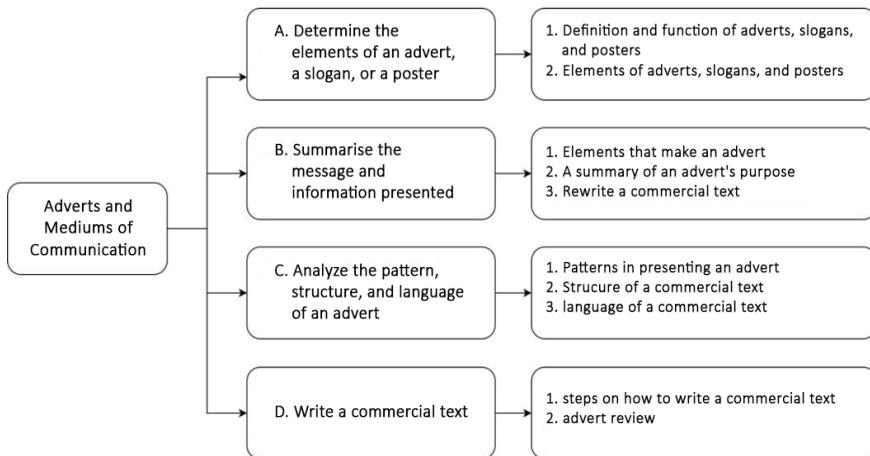
Figure 2. Map of Lesson Materials

3.   Flowchart
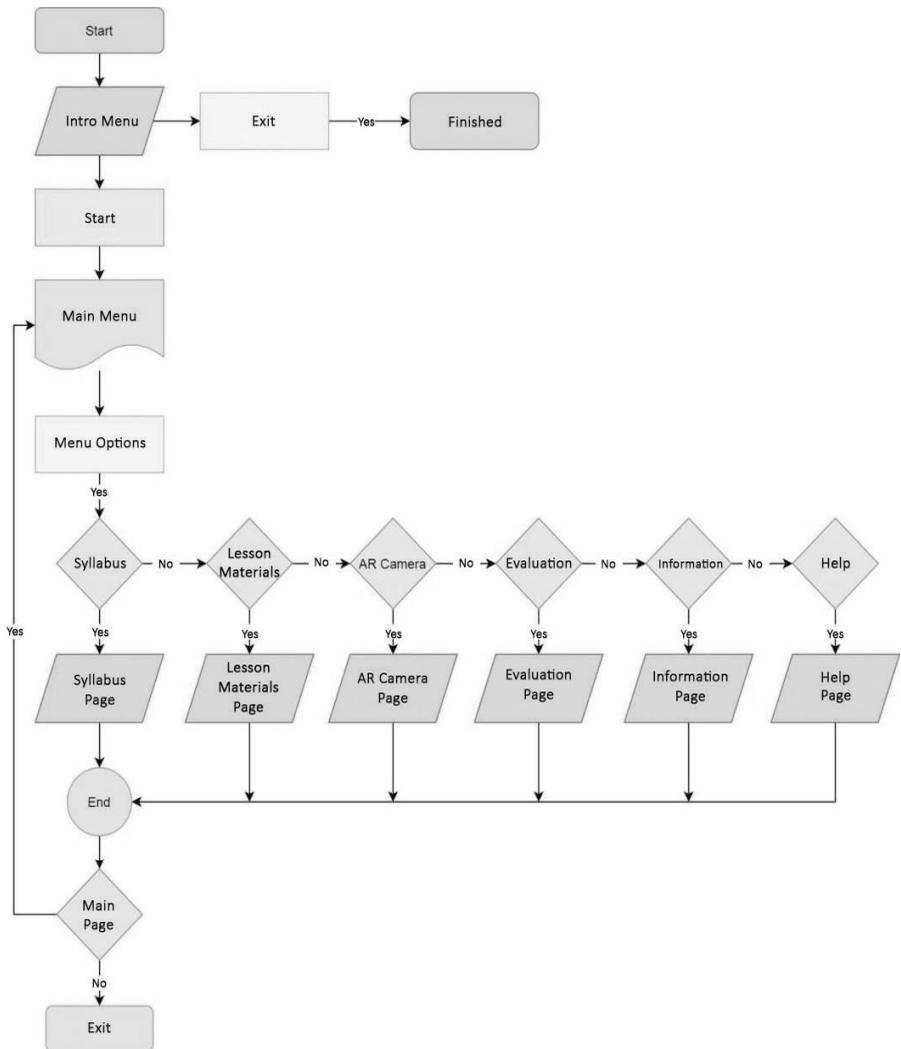
Figure 3. Flowchart Media

4. Designing The Navigation

Designing good navigation is crucial in that the positioning of menus, pages, and other elements plays a big role in determining the usability of the app. It also serves as a global outline for the app that can be used as a reference. The following is a flow chart illustrating what the navigation will look like.
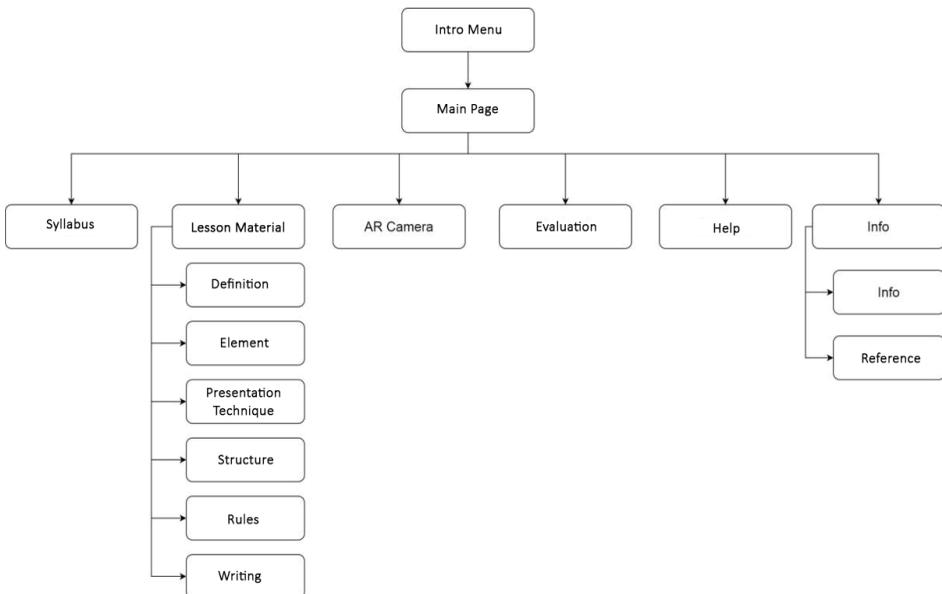
Figure 4. Designing the Navigation

The Development of the Learning Media

The development of this app made use of Unity 2019, Android Studio, Visual Studio, and Adobe Animate 2017. The output of this development is an APK file that can be installed on Android devices with Android version 4.0 or above. The following are elements of the upcoming learning app.

1. Icon

The design of the icon here focuses on the theme of adverts and the medium of communication. The icon is as follows:

Figure 5. Icon

2. Start-up Interface

The start-up page is displayed when the app is first opened. The page comprises the app title and an animated loading bar.

Figure 6. Start-up interface

3. Main Menu

The main menu acts as a central hub of the app to other menus such as syllabus, materials, AR Camera, evaluation, developer info, etc.

Figure 7. Main Menu

4. Syllabus Page

This page displays a brief overview of the syllabus (or the lesson objectives) on the topic of adverts and the medium of communication.
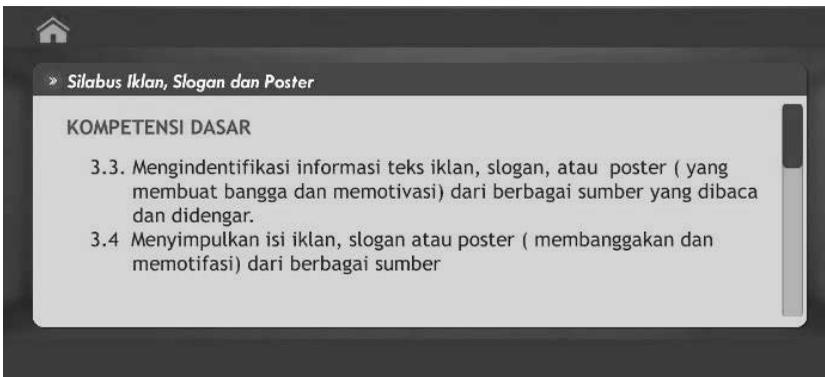
Figure 8. Syllabus Page

5. Lesson Materials Page

This page consists of the main content of the topic of adverts and the medium of communication. Definition, elements, presentation methods, structure, rules, writing, etc. are included here.
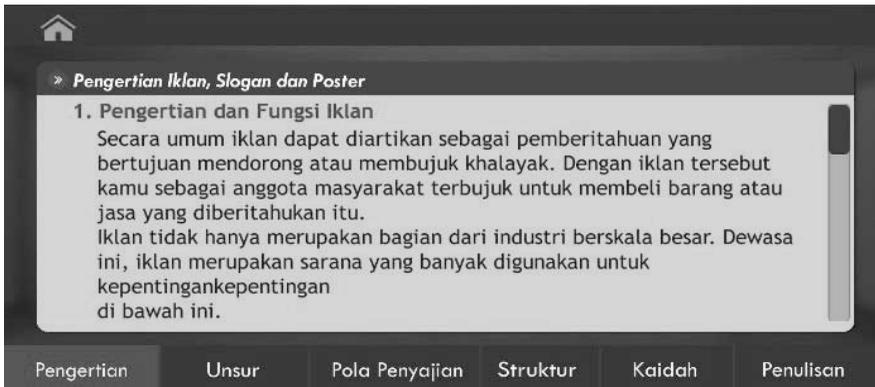
Figure 9. Lesson Materials Page

6. AR Camera Interface

To use the AR Camera one needs to download the marker image to produce a 3D rendering of the desired object. Below is an example of a marker image and the result of the AR Camera.

Figure 10. AR Camera Interface

7. Help Page

The following shows the Help Page.
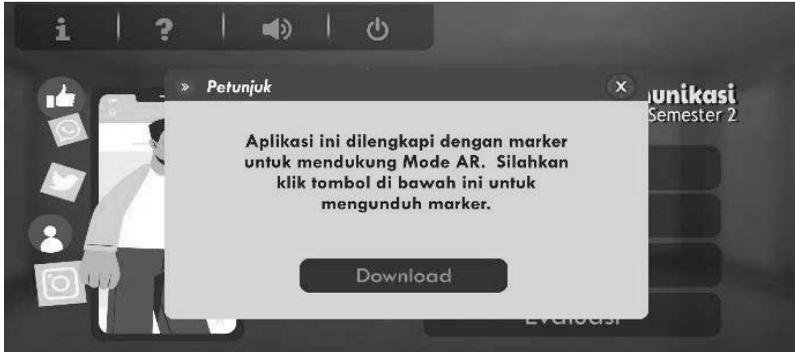
Figure 11. Help Page

8. Evaluation Page

This page consists of an evaluation in the form of 20 multiple-choice questions. After the evaluation is finished, the score would be displayed.
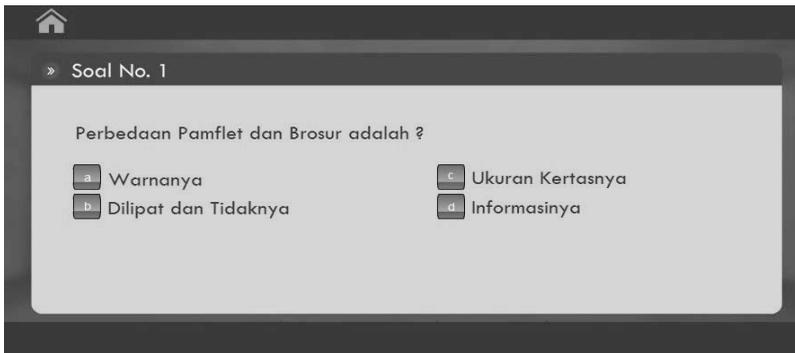
Figure 12. Evaluation Page

9. Developer Info Page

This page consists of the name of the developers and the institutions they work in. This is here for users to contact them should they have feedback or new ideas for the app.

Figure 13. Developer Info Page Interface

10. Reference Page

The reference page comprises the source from which the materials are taken. This is to demonstrate that the source used is credible.

Figure 14. Reference Page

Closing

The development of augmented reality as a learning media for the junior high school Indonesian subject consists of nine main parts: 1) start-up page, 2) main menu, 3) syllabus page, 4) materials page, 5) AR Camera page, 6) help page, 7) evaluation page, 8) developer info page, and (9) reference page. After the initial design of the app is finished, we are going to run the app through a series of tests to ensure its reliability and usability with the help of experts.

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CHAPTER 10

Innovation of Science Learning in Elementary Schools Through the Application of Edmodo-based Virtual Science Laboratory Learning Media

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Abstract

The 21st century is an indication that human life is starting to shift from things done manually to done digitally. The survey results of the Program for International Student Assessment (PISA), especially in the field of science 2018, show that the achievement of Indonesian students is still relatively low and has decreased in the previous survey, i.e., 2015. In these situations and conditions, it is necessary to have learning innovations, especially in the field of science. The learning innovations need to be promoted massively and sustainably, starting from the school to the national scope. One alternative to science learning innovation in elementary schools is developing Edmodo-based Virtual Science Laboratory (VSL) learning media. VSL is a miniature laboratory packed in the form of interactive multimedia based on computer software that operates with computer hardware and can simulate activities in the laboratory as if the user is in a real laboratory. This paper offers VSL as one of the elementary school science learning innovations that effectively increase students' understanding of concepts. Edmodo-based VSL media is proven to improve elementary school students' conceptual understanding of science learning. Edmodo-based VSL media has a positive influence on science learning in elementary schools. Learning media consists of audiovisual components that facilitate students in the thinking process and ease students to understand a certain concept in science learning. Practicum-based activities allow students to construct their

understanding of a concept independently through activities. The quiz provided on the media becomes a tool to measure students' understanding of the concepts being studied.

Keywords: Science learning, elementary school, virtual science laboratory, Edmodo.

Introduction

The rapid development of technology and communication impact all lines of life, including the education field. Education is considered the basis for human civilization development which continues to experience adjustments along with the progress of the times. The 21st century indicates that human life is beginning to shift from things done manually to being done digitally (Tangahu et al., 2021). This is also applied in the field of education, starting from the elementary level to higher education. The results of the 2018 Program for International Student Assessment (PISA) survey show that the achievement of Indonesian students is still relatively low and has decreased in the previous survey, i.e., 2015. The 2018 survey then placed Indonesian students in the lowest ranks on reading, math, and science measurements. Regarding reading ability, Indonesia was ranked 6th from the bottom (74) with an average score of 371, down from 64th in 2015. In the mathematics category, Indonesia was ranked 7th from the bottom (73), scoring an average of 379, down from rank 63 in 2015. Meanwhile, regarding science performance, Indonesia was ranked 9th from the bottom (71) with an average score of 396, down from ranking 62 in 2015 (Endah et al., 2018). In addition, based on data on science achievement in TIMMS (Trend in International Mathematics and Science Study) Indonesia in 2003, Indonesia was ranked 36 and in 2007 ranked 41 (Alifah et al., 2017). Therefore, it is necessary to have learning innovations, especially in the science field, which must be promoted massively and sustainably, starting from individual schools to the nation's education as a whole.

In addition to the rapid influence of globalization, the post-Covid-19 pandemic has also changed the face of education in Indonesia. Adjustments to learning policies during the pandemic provided a portrait of the application of learning at the basic education level, which has started to make optimal use of technology in the learning process. Since the implementation of

home learning and hybrid learning in schools, many challenges have been encountered. Among them, students easily feel uninterested because they are unable to adapt to new situations and conditions (Makhin, 2021). Students tend to have difficulty understanding their learning because it has not yet been developed into innovative and meaningful learning. This affects students' understanding in participating in learning, especially in learning science subjects in elementary schools. Thus, there is a need for innovation in science learning in elementary schools, one of which is by developing innovative, meaningful learning media that follow the needs of teachers and students today. This chapter is divided into four parts. The first part presents the concept of science learning in elementary schools. The second part presents the concept of elementary students' ability to understand scientific concepts. The third part, the core of this chapter, is extracted from a previous study by Isdaryanti (2021), discussing the application of Edmodo-based Virtual Science Laboratory Learning Media.

Science Learning in Elementary School

Why do students in elementary school need to study science? Everyone is born with an insatiable curiosity (Bobbi & Mike, 1992). When observing a baby attempting to recognize his/her new toy, the baby tries to observe, put the toy in his/her mouth to discover the taste, twist it, hold it, and swing it. It is the baby's way of understanding a new object he/she encounters. This is what is called global learning or comprehensive learning. Comprehensive learning becomes an effective and natural way for someone to learn. Thus, it is no surprise that from elementary school age, students need to be facilitated to develop their ability to learn globally in support of the scientist's potential possessed by students.

A professional educator needs to optimally develop the potential of scientists brought by students since childhood amid the increasingly complex and rapid development of information and technology that demands higher life skills (Setiaji et al., 2020). Science learning in primary schools can be a platform that equips students with the knowledge, skills, and attitudes needed to face life's evolving and competitive challenges. Involving students in science learning from an early age can form a scientific generation that can solve all problems in the world by participating in selecting and processing information to be used in constructing a policy.

Science learning is generally understood as learning about natural and universal phenomena (Melinda & Syaefudin, 2022.) Another opinion states that science learning is learning by systematically finding out about natural phenomena. It is more fully explained that science is related to a systematic way of discovering the universe; thus, science is not only limited to mastering a collection of knowledge in the form of facts, concepts, or principles but a process of discovery (Sulistyorini, 2007). Learning science involves finding an in-depth understanding of the surrounding natural events. Hence it can be understood that science learning generally studies events in the universe through systematic stages such as observing, experimenting, inferring, and understanding concepts; thus, students have the knowledge, skills, and attitudes to understand the natural surroundings.

Science learning in elementary schools aims to equip students with organized knowledge, ideas, and concepts about the natural surroundings, which are obtained from experience through a series of scientific processes, including investigation, compilation, and presentation of ideas (Fitzgerald & Smith, 2016). The scope of science learning materials in elementary schools includes 1) living things and life processes, i.e., humans, animals, plants, and their interactions with the environment, as well as health; 2) objects/materials, their characteristics and uses (such as liquid, solid, and gas); 3) energy and its changes include force, sound, heat, magnetism, electricity, light, and simple machines; and 4) earth and the universe including land, earth, solar system, and other celestial bodies (Fasha, 2020). These materials are introduced as a basis for students to learn more complex material at the next level of education.

Implementing science learning in elementary schools is carried out with certain principles (Sulthon, 2017). Students' understanding of the environment commences with sensory and non-sensory experiences; thus, students need to be allowed to gain this experience independently while still being accompanied by the teacher. The knowledge obtained by students is not seen directly; therefore, it needs to be revealed during the learning process. Sometimes there are misconceptions faced by students in understanding a concept. Supposedly, teachers should be able to design activities that can straighten misconceptions during learning. Teachers need to invite students to group facts, data, concepts, symbols, and relations with other concepts in their learning. Science learning consists of products, processes, and procedures; thus, teachers must introduce

these three aspects to students. Skills in finding knowledge in scientific processes and procedures need to be made a habit in their application in learning. This is in line with the currently applied approach, i.e., the scientific approach, which consists of observing, questioning, gathering information, associating, and communicating (Firman et al., 2018).

Elementary Students' Ability in Understanding Scientific Concepts.

Understanding can be interpreted as a person's ability to describe the material being studied in detail. Individuals can be said to understand something if the individual can correctly and in detail explain a material. The ability to understand something can provide new knowledge for someone. Based on Bloom's revised taxonomy, understanding is a C2 cognitive level. Comprehension is the process of understanding the meaning and paraphrasing a concept. Berns and Erickson (2001) revealed that, in a learning domain, understanding is an absolute prerequisite for higher levels of cognitive abilities, application, analysis, synthesis, and evaluation. This is especially relevant to the current situation and portrait of science learning which has begun to steer towards higher-order thinking skills (HOTS) based learning.

As previously discussed, understanding is a level in thinking prerequisite for increasing more complex thinking. Good understanding is expected to support students in understanding a concept in science learning. This is in line with the opinion of Dewi et al. (2019). They stated that understanding is a person's ability to interpret, decipher, translate or state something in his/her way about the knowledge received. Understanding-based cognitive abilities involve higher-order thinking skills, such as problem-solving, critical thinking, creativity, and decision making. Thus, it can be understood that learning related to understanding is closely related to other cognitive abilities.

A concept is an agreement in labeling or naming something and is an intellectual tool that supports thinking and problem-solving activities. Susanto further explained that a concept is a combination of related facts. Furthermore, a concept is an idea that exists through examples. Samlawi and Bunyamin (2001) mentioned that a concept's general characteristics are: 1) it is an abstract idea about objects, events, or activities; 2) reflects on grouping/classifying objects (activities, events, or ideas) with common

characteristics; 3) personal – personal background and experience may vary somewhat from person to person; 4) learned through experience, and 5) not merely a word. Thus, concepts in science learning can be interpreted as studies in science learning in the form of facts that are interrelated with the object in the form of universal events that can be studied through examples. These concepts become the materials studied in science learning at all levels of education. The existence of concepts in science learning aims to ease students to recognize, understand, and comprehend the knowledge in science learning.

Understanding concepts in science learning in elementary schools can be interpreted as students' ability to understand a concept by answering it in their own sentences without changing the meaning of the intended concept. Another opinion states that conceptual understanding is also interpreted as students' understanding of the qualitative basis where facts are interrelated with their ability to use that knowledge in new situations (Trianto, 2013). Thus, it can be understood that conceptual understanding is a process of re-explaining ideas in detail that can be used in new situations. Explaining a scientific concept in detail can be done through observation and experimentation, which can also be interpreted as understanding the concept of learning science in elementary schools. Students will be presented with examples of the teaching material being studied to build their thinking processes. The continuous process that occurs when a person encounters new examples of a concept is called the conceptualization thought process. Thus, in learning science at the basic education level, a learning media is needed to accommodate abstract learning concepts to become concrete because elementary school students are at the stage of concrete operational cognitive development.

Concept understanding in the learning process influences attitudes, decisions, and how a person solves problems. In more detail in this discussion, concept understanding in science learning is restricted to the following indicators: students must be able to restate the concepts that have been studied classify objects according to properties according to the concept being studied; provide examples and non-examples of the concepts being studied; understanding the necessary or sufficient conditions for a concept (necessary conditions are conditions that are necessary for a concept, sufficient conditions are conditions that guarantee the existence of a concept); use, utilize, and select the most appropriate procedure to

solve problems related to science; and able to apply the concepts that have been learned to solve problems in daily life.

Edmodo-based Virtual Science Laboratory Learning Media

Virtual Laboratory (VL/Virtual lab) is a set of laboratory tools in the form of interactive multimedia-based computer software that operates with computer hardware and can simulate activities in the laboratory as if the user is in a real laboratory. Interactive multimedia means the device is equipped with a user-operated controller; thus, the user can choose what he/she desires for the next process. A virtual laboratory is an interactive science situation with the assistance of computer applications in the form of simulations of science experiments. This virtual laboratory is used to assist the learning process to improve students' understanding of the material and is also suitable for anticipating a lack of preparedness or incident in real-life laboratories (Hikmah et al., 2017). Soni and Katkar (2014) stated that a virtual laboratory is an interactive experience in which students observe and manipulate system-generated objects, data, or phenomena to fulfill learning objectives.

Edmodo is a web-based platform that provides an easy way in the classroom to connect, collaborate, share, content, access assignments/work, assess, and inform school announcements (Muhajir et al., 2019). Edmodo was developed based on the principles of social media-based classroom management. The Learning Management System (LMS) is the basis for the development of Edmodo in the learning process. Jatupornpoonsub et al. (2019) stated that Edmodo is a platform that provides information that is presented interestingly and motivates a person to study independently, which can also facilitate students to study in groups and with peer tutors. The appearance of Edmodo can attract students' attention because it is extremely familiar with the appearance of social media; thus, it can motivate students to learn. Edmodo can be accessed either through a PC/computer or a mobile phone; therefore, it can provide practicality for learning. However, it must remain connected to the internet.

Edmodo-based Virtual Science Laboratory is one of the innovations in science learning in elementary schools in the form of learning media that combines the concept of a virtual science laboratory with the Edmodo web-based platform. Edmodo-based VSL contains elementary school science materials, specifically about the human digestive system. The

media comprises three main parts which are the beginning, the content, and the closing. This virtual laboratory was developed to resemble a virtual classroom; therefore, the features contained in this media are similar to those we usually understand in the virtual classroom. In the beginning, there is a login page. Students can enter and use VSL as a learning medium if the teacher has added students to participate in the visual laboratory. Then the content section consists of learning materials. As the name implies, i.e. a laboratory, there is a video guide to carrying out simple science practicums that students can do independently at school and at home. In addition to the simple science practicum videos, students are initially provided with teaching materials prepared as an introduction before students enter practical learning. Practicum activities aim to provide basic knowledge before students construct new concepts. At the end of this media, a quiz is provided to test students' conceptual understanding after learning to use Edmodo-based VSL. Quizzes are made in the form of multiple-choice; thereby, providing feedback on student work is easier. The following is a display of the Edmodo-based Virtual Science Laboratory learning media.
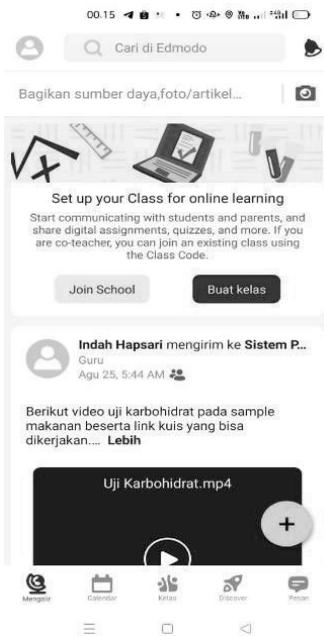
Figure 1. Initial View of VSL   **Figure 2.** Practicum Video in VSL

Figure 3. Quiz on VSL

Figure 4. Display of Material on VSL

The implementation of the Edmodo-based Virtual Science Laboratory in science learning begins with the teacher inviting students to enter the virtual laboratory using the username and password provided and distributed by the teacher. Then students are instructed to read the instruction manual on how to operate the program. Furthermore, students are directed to master the teaching materials prepared on the learning media. Next, students are offered the freedom to observe and do practicum according to their interests. At the end of each practicum, students take a quiz related to the practicum studied, which is carried out online. The results of the quiz will immediately be seen as feedback from the learning process carried out by students. Students are directed to attempt several types of practicums available in the virtual laboratory. The learning activity is ended by doing a learning evaluation to test students' understanding of scientific concepts in general. At the same time, the data is used to test the effectiveness of the Edmodo-based Virtual Science Laboratory learning media in supporting science learning in elementary schools.

As for this virtual laboratory, according to Hikmah et al. (2017), it has the advantage that it can be done regardless of time and place, and it does not require complex tools and materials. This makes learning more practical because it does not require a large physical space and is cost- efficient. This can provide opportunities for students to study independently; thus, it positively impacts students' cognitive, psychomotor, and affective development, especially in the post-pandemic period. Hermansyah and Herayanti Lovy (2015) strengthened this opinion by mentioning several advantages obtained from the teaching and learning process that has been carried out using virtual laboratories, including (1) it is more economical because it does not require lab buildings, tools, and materials as in conventional laboratories, (2) increase motivation in the teaching and learning process, (3) students have problem-solving skills and higher-order thinking skills in learning or everyday problems. However, in addition to having advantages in the form of practicality in learning, virtual laboratories also have weaknesses. One of the weaknesses is the potential loss of students' motor skills because they do not do practical work, such as pouring solutions or measuring solutions using measuring cups and assembling tools.

Media Virtual Science Laboratory in Improving Understanding of Concepts of Elementary School Students

This section presents data about the application of Virtual Science Laboratory media. The discussion in this section covers the effectiveness of VSL and the achievement of students' conceptual understanding after the implementation of VSL (Isdaryanti et al., 2021)

The results of the application of Edmodo-based VSL media in the classroom obtained data on the ability to understand scientific concepts of fifth-grade students. The data was then analyzed using the relevant statistical tests.

The following is an average difference in students' understanding of scientific concepts before and after using Edmodo-based Virtual Science Laboratory media on the digestive system material, which is presented in table 1.

Table 1. The Effectiveness of VSL Media on Students' Concept Understanding Ability

No.	Description	
1	N	20
2	*Mean Pretest*	46.50
3	*Mean Posttest*	69.50
4	*N-Gain*	0.43
5	Category	Moderate

Table 1 shows significant differences in the ability of fifth-grade students to understand concepts before and after using VSL media in the learning process. The average result of the pretest of students' understanding ability is 46.50, and the students' post-test result is 69.50. There is a significant difference in the ability to understand scientific concepts, which is 23.00 with a dependent t-test of 0.000 <0.05. In addition, the N-gain test to measure the increase in the ability to understand concepts obtained a score of 0.43 with a moderate improvement category. Below is a diagram of improving students' understanding of scientific concepts after using Edmodo-based VSL.
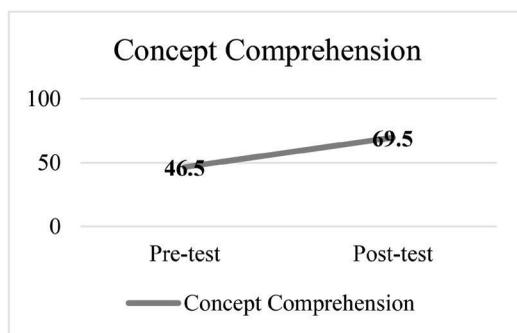
Figure 5. N-Gain Test of Students' Concept Understanding Ability

Several components influence the success of increasing students' understanding of scientific concepts using Edmodo-based VSL learning media. Felinda stated that there are several components in learning, such

as learning objectives, learning materials, methods, models, learning strategies, learning media, and learning evaluations. Some of these components are interrelated with one another and support the success of science learning. The teacher's role is very important in managing all the learning components; therefore, the teacher needs to consider the characteristics of the students being taught because this impacts student success in the learning process.

One of the components that have been discussed previously is learning media. The tools used in learning to stimulate students' thoughts, feelings, attention, and skills that encourage the learning process are called learning media (Tafonao, 2018). Learning media is a means to effectively and efficiently achieve learning objectives (Pane & Dasopang, 2017). It is understood that teachers do not arbitrarily determine and select learning media to be applied in the classroom. Considerations in choosing learning media, i.e., the media must be able to construct reality, and the form of media supports the teaching material students study (Lee, 2016). Learning media selection is also adjusted to the needs of students and teachers, which can be interpreted as dynamic. Most importantly, learning media selection must accommodate all student needs in learning, either from learning objectives, student characteristics, or teaching materials (Abidin et al., 2017).

Edmodo-based VSL is a technology-based learning media applied in elementary school science learning. The media comprises several components that ultimately support the improvement of the ability of fifth-grade elementary school students to understand scientific concepts . Several components that construct Edmodo-based VSL media include: 1) audiovisual elements, 2) practicum activities, and 3) learning quizzes. The following will profoundly explain each of these components to improve fifth-grade students' understanding of scientific concepts in science learning in elementary schools.

The first Edmodo-based VSL media component is the audiovisual component. Audiovisual media are media in the form of software and hardware that can encourage students in the learning process in the form of instructions (Ashaver & Igyuve, 2013). Audiovisual media has two elements in the form of sound and display (Hughes et al., 2019). Sound and display elements on Edmodo-based VSL media can accommodate students in obtaining information; thus, it eases students to understand the

knowledge being studied. Learning media that contains visual elements influence the learning process (Verhallen & Bus, 2011). Visual elements in learning media attract attention and foster student motivation in learning (Yang et al., 2016). Using visual elements in learning media can help students to memorize the material and facilitate students understanding of teaching materials (Amit et al., 2019; Dallacqua & Peralta, 2019). As for the audio element in Edmodo-based VSL learning media, it can improve students' listening skills which in turn affects students' understanding abilities in learning (Widyaningrum, 2015). Curran and Seo (2018) also mentioned that elements of learning media positively affect student learning outcomes because the information provided can be accepted.

The next component contained in Edmodo-based VSL media is the existence of practicum activities or activities that are instructional. According to Adekola (2010), instructional media is a learning medium that provides information in the learning process through instructions and activities. Practicum activities that are packed and presented in videos on VSL media provide a different learning experience for students. Students can independently develop their knowledge and understanding. Examples of practicum available in the learning media provide direct learning experiences for students. This will construct students' understanding of scientific concepts because it becomes meaningful learning. This is in line with the opinion of Capuno et al. (2019), which states that learning media that facilitate practicum activities are closely related to student learning motivation; thus, they can provide meaningful learning. Meaningful learning can encourage students to build knowledge and concepts; therefore, it can assist students in understanding teaching materials more easily. Setyorini and Churiyah (2016) stated that instructional media could also increase student activity and learning outcomes. This can occur because, through practicum activities, students do not become passive in listening to teaching materials but also play an active role in engaging in the activities contained in the learning media.

A quiz at the end of each practicum is the final component that can support increased understanding of scientific concepts after using Edmodo-based VSL media. Citra and Rosy (2020) stated that the advantages of learning carried out by applying quizzes are that it can encourage student initiative, increase interest, and improve learning outcomes. Through quizzes, students become more challenged in learning because they have

to really listen and understand the teaching materials and information conveyed in the learning media. Learning equipped with quizzes will direct students through a series of exercises designed to re-stimulate the understanding gained in previous lessons. Students indirectly carry out reflection activities on the teaching materials that have been studied; thus, students can independently measure their ability to understand concepts in science learning. Arikunto (2015) argued that the function of providing quizzes in learning could be divided into two, i.e., for students and teachers. For students, quizzes can be used to determine the overall mastery of student material, as reinforcement related to learning motivation, to discover their weaknesses during the learning process, and to diagnose which materials or concepts have not been understood. As for the teacher, it is possible to know the extent to which the material provided can be understood by students and to know which parts have not been mastered by students. Thus, it can be concluded that providing quizzes on learning media has a positive effect on measuring the extent to which students understand concepts in science learning. Therefore, combining the three components of the Edmodo-based Virtual Science Laboratory learning media can improve the ability to understand scientific concepts in fifth-grade elementary school students according to the statistical test results that have been reviewed previously.

Closing

The learning process, especially science learning in elementary schools, has been modified to suit the needs and characteristics of the times. The 21st century and the industrial revolution 4.0 are markers that science learning in elementary schools must collaborate with technology. This can be done by applying technology-based media in the learning process, one of which is an Edmodo-based Virtual Science Laboratory innovation. Edmodo-based VSL learning media is a science learning innovation in the form of learning media. This media attempts to facilitate simple practicum activities at the elementary school level that have not been accommodated properly. Edmodo-based VSL attempts to present a virtual laboratory to improve understanding of scientific concepts for fifth-grade students in the post-pandemic era. Combining three main components consisting of audiovisual elements, practicum activities, and learning

quizzes, the Edmodo-based Virtual Science Laboratory has increased students' understanding of scientific concepts. In the future, other technology-based science learning media can be developed to improve the quality of science learning at the elementary school level.

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CHAPTER 11

Exploring Single Session Online Counseling at School Counselors: Reflections on Best Practice Experiences

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Abstract

The rapid development of digital technology and communication impacts the development of guidance and counseling services, especially through online digital tools. By utilizing synchronous and asynchronous digital technology, counselors can provide counseling services remotely, effectively, and efficiently. Specifically, school counselors can apply the online single-session counseling strategy with a solution-focused approach. In practice, they can find best practices in implementing online single-session solution-focused counseling strategies in schools. This chapter presents the best practice experiences of school counselors in implementing online single-session counseling focused on solutions based on the results of empirical studies. The best practice experience of school counselors in implementing the counseling strategy is mainly seen from the therapeutic relationship built between the counselor and the counselee, the basic forms of online counseling skills used, and time management in implementing online counseling.

Keywords: Best practice, online counseling, solution-focused single-session counseling

Introduction

The development of increasingly advanced technology and information, trends in the global economy, and evolutions in the structure of the

working world, collectively with the growth of knowledge-based global competition, demand an increase in the quality and productivity of educated human beings to compete in life. Not to mention the development of guidance and counseling services, especially individual counseling services. Presently, counseling services can be done with digital-based services or online counseling. Bloom and Walz (2004) described online counseling as a professional counseling service between counselors and counselees who are separated by distance and time by utilizing internet technology, both interactive and non-interactive, either directly or indirectly, by using a secure site containing information that is always updated, where counseling services can be provided via email, chat, or secure video conferencing. Online counseling can be used via email, web-based counseling, telephone, instant messaging, and video conferencing (Bloom & Walz, 2004; Goss & Anthony, 2003; Kraus et al., 2011).

As time goes by, technological developments will bring changes from face-to-face services to services that are carried out online. The need for online counseling services in the next few years will increase (Mallen et al., 2005). However, in Indonesia, as explained by Mansyur et al. (2020), the presence of online counseling is still relatively not well known. Ifdil and Ardi (2013) revealed several field findings regarding the condition of school counselors who are still unfamiliar with the internet, do not have an email address, do not take advantage of the information technology facilities provided by the school, and do not even use computers at all to support services. It was revealed in the study results that only 20 percent of counselors in Indonesia were able to carry out online counseling (Munawaroh et al., 2021). This shows that counselors in Indonesia are not yet fully prepared to use online counseling services.

The survey conducted by Mulawarman et al. (2021) regarding the implementation of online counseling revealed that 98.4% of counselors knew about online counseling services, which shows that they are familiar with online counseling services. Other data shows that 57.4% of respondents said they were satisfied with implementing online counseling services (Mulawarman et al., 2021). Based on these data, the number is likely to increase if online counseling services can run effectively, ethically, and professionally. Therefore, it is still very possible to improve online counseling services carried out by counselors.

In the implementation of online counseling, counselors are required to have qualifications and skills that support the implementation of effective and efficient online counseling. The 21st century currently demands knowledge and technology in carrying out the profession. A professional counselor must meet the standards of academic qualifications and counselor competence (Lestari et al., 2013). Counselors must master science and technology; thus, the application of the basics of science and technology accompanied by aspects of professional values and attitudes is truly carried out. Counseling services are directed, guided, and maintained by a code of ethics specifically prepared for the counselor profession. In other words, counselors must always develop their skills and knowledge in counseling.

In the current digital era, the characteristics of psychological assistance include treatment or brief intervention; solution-focused; quick assessment and the integration of assessments in the intervention process; specifications and time limits; and flexible and practical in the use of intervention techniques. There are several motives for people to do counseling, including the motive for alleviating problems, meaning the desire to be assisted in finding solutions to the problems they are experiencing (Pasmawati, 2016). According to Barak et al. (2009), Murphy and Mitchell (1998), and Hidayati (2012), online psychological assistance can be utilized synchronously or asynchronously. Asynchronous is a data communication process that does not depend on a fixed time; the speed of the data transformation process is relative and not fixed (e.g., fax machine, email). Meanwhile, synchronous is the process of sending and receiving arranged in such a way that they have the same settings; thus, they can be received and sent properly. Generally, this setting is based on the signal's time (example: chat).

As a professional helper, the counselor has a role in aiding in alleviating problems, developing self-potential, and maintaining the client's mental health (counselee). The counseling profession requires a strong desire to help others and a positive attitude towards the client (the counselee) as a human being who has values. Wibowo (2019) described that the knowledge of the counselor profession must continue to develop in line with the development of science. Counselors must develop and enforce science and technology, which are the basis and mainstay for counselors in providing counseling services.

Several studies have examined online counseling in Indonesia, such as Prabawa's (2015) research which developed a cyber counseling website with a realistic approach. Hidayah (2015) developed a cyber counseling website with a Cognitive Behavior Therapy (CBT) approach, and in 2017 Prabawa re-studied Android-based online counseling with a realistic approach. In implementing individual counseling services that are carried out online, an approach is required that allows the counseling process to transpire effectively and efficiently. This is also supported by Charlesworth et al. (2004) and Taathadi and Mulawarman (2014), which revealed that counselors should look for more efficient and effective approaches to conduct individual counseling. One approach that can be used in online counseling services is brief counseling. One strategy that can be applied is single-session solution-focused counseling.

Bloom (1981) and Talmon (1990) described single-session counseling as a therapeutic approach or model, usually with established principles and semi-structured questions to address the client's existing problem, with the understanding that a single session may be the only process. Single session counseling is conducted by professionals who use their expertise and knowledge base to address client presentation problems, understanding that a single session may be the only counseling process. Single session counseling is unsuitable for treating psychological first aid and severe psychological problems. However, it can be used as additional support for clients/counselees who live with severe mental disorders or are at risk of suicide. These clients would then require more extensive care (Paul & van Ommeren, 2013).

Talmon (1990) explained that single-session counseling is a face-to-face meeting between the therapist/counselor and counselee by not using the previous or subsequent sessions in one year of the counseling process. Paul and van Ommeren (2013) defined single-session counseling as a specific form of therapy carried out by professionals who seek to use their existing expertise and knowledge base to deal with client presentation problems in one session with the understanding that the session may be the only session. This approach attempts to influence and empower individuals in a therapy session by advancing their ability to access resources and act on their behalf (Jevne et al., 1995). This approach allows the counseling process to solve problems immediately by taking advantage of the existing potential and opportunities to achieve the desired solution (Corey, 2016).

In other words, single-session counseling is a counseling approach carried out by professionals to influence and empower individuals in one counseling session based on the abilities possessed by the individual.

The author combines single-session counseling with a solution-focused brief counseling approach in the online counseling process. Solution-focused brief counseling developed by Steve de Shazer, and Insoo Kim Berg, has been used in various contexts, including school institutions and private practice with various clients, including children, youth, couples, and families (Lightfoot, 2014). Solution-focused brief counseling is an approach to psychotherapy based more on solution-building than problem-solving (Iveson, 2002). Brief counseling is not a sufficient approach with one session or meeting. In other words, brief counseling can also be done in the long term. Counseling histories note that early forms of psychodynamic counseling were brief and could last 15 sessions or more (Bloom, 1992). Then, counselors at The Brief Therapy Center (a mental research institute in Palo Alto, California) used a problem-solving approach in which sessions were limited to 10 sessions (Fisch et al., 1982). de Shazer (1988) revealed that The Brief Family Therapy Center in Milwaukee averaged 5 to 7 sessions. This has turned into a brief series in recent decades; some authors have proposed a one-session counseling model.

The brief counseling model has many advantages, including quick problem handling by the counselor and the comfort of the counselor's emotional environment (Bambling, 2008). For developing countries, this model can support reducing the cost of mental health care and prevent its relapse (Reddy et al., 2015). Small randomized studies have demonstrated effectiveness in other populations (Cockburn et al., 1997; Viner et al., 2003). Solution-focused single-session counseling has been reported beneficial even in a single session.

The use of online counseling has advantages and disadvantages. The advantages are that it can be accessed regardless of time and place, allowing users to meet in real-time, cost-effective, and time-saving (Asrowi, 2012; Hidayah, 2015b; Prabawa, 2015). Wells (2021) revealed that online counseling could reduce costs for mobility and saves time. However, the primary disadvantage is that users must have stable internet access (Prabawa, 2015, 2017). Meanwhile, the biggest challenge in the implementation of online counseling presently is the mastery of technology and the availability of facilities and infrastructure (Mulawarman et al.,

2021). Online counseling is also related to therapeutic relationship issues, security confidentiality (Situmorang, 2020), and non-verbal (Wells, 2021). Corey (2016) noted that the main limitation in conducting online counseling is the obstacle in capturing the non-verbal language of the counselee, which is needed by the counselor to have a picture between what is being spoken and the non-verbal language. Thus, a repertoire of counselor skills is needed, including forming an understanding as well as interventions focused on aiding clients to change certain aspects of their feelings, thinking, and acting (Brown, 2012).

In this chapter, we will discuss the best practice experiences of school counselors in implementing single-session online counseling focusing on solutions in three main parts, i.e. (1) the therapeutic relationship that is built between counselors and counselees in online counseling, (2) forms of basic skills in online counseling and (3) online counseling service time management. This best practice experience is extracted from the research results by Mulawarman et al. (2020), which have been compiled in manuscript form. In more detail, this chapter will observe the counselor's experience in exploring the counselee's emotional state, several communication problems that arise in online therapeutic interactions, and how the counselor's strategy is to overcome some of these obstacles.

Counselor Best Practices in Implementing Online Single-Session Solution-Focused Counseling

In supporting the practice of single-session solution-focused online counseling, a counselor must pay attention to and apply several aspects of his/her counseling. These aspects are the key to achieving the best counseling results. The following is a description of the best practices that counselors can do to implement this counseling model.

Creating Therapeutic Relationships in Online Single-Session Solution-focused Counseling

A therapeutic relationship is a relationship that aids in achieving counseling goals, especially in online counseling (Williams et al., as cited in Mallen & Chard, 2011; Suitt et al., 2016). Some experts call it rapport which is a safe and comfortable relationship for counselors and counselees in online

counseling (Bambling et al., 2008; Dowling & Rickwood, 2014; Reddy, 2015). Therefore, in practice, counselors perform various skills to create this therapeutic relationship.

Research by Bambling et al., 2008 and Dowling & Rickwood, 2014 revealed that to create a good relationship in online counseling, counselors must face challenges in building it because of difficulties in achieving engagement. Engagement is an important aspect for counselors in building a therapeutic relationship with their clients. This is relevant to Petrus and Sudibyo's (2017) research results. This research stated that one of the weaknesses of online counseling is the dynamic growth in the counseling process, even though online counseling is an alternative means for counselees who may not have the courage to speak up and open themselves in face-to-face counseling (Amos, 2022).

Various practical strategies can be used, and each counselor can have his/her particular strategy. However, the implementation of this strategy is certainly different from the strategy in face-to-face counseling. In online counseling, Mallen (2011) discovered that counselors perform much implicit self-disclosure about counselors and counseling activities to indicate to counselees that they can open themselves and trust counselors. In practice, counselors use modalities – as outlined in written language – that show the presence of the counselor, the rights of the counselee, the professionalism and limitations of the counselor, and the principles upheld in counseling to convince the counselee to trust the counselor and be sincere. Counselors can also use communication skills in existing counseling.

Strategies to apply communication skills are also aimed at showing full presence for the counselees to make them feel welcomed and thus be open to discussing their problems (Dowling, 2014; Bumbling, 2008; Reddy, 2015). Dowling (2014) stated these activities are broadly referred to as non-directive techniques and have been deemed effective in developing a therapeutic relationship with the counselees. Moreover, the use of informed consent could help support effective and efficient online counseling practices (Novella, 2020). In practice, before the counseling session commences, the counselor asks the counselee to fill out an agreement form to carry out the session. The form requires the counselees to fill out the name and credentials of their counselors, time, place, cost, counseling methods, terms and conditions, counselee's rights,

advantages and disadvantages of counseling, and agreement to cooperate in counseling sessions.

The following is a verbatim example of a counselor aiding the counselee to become sincere and trust the counselor

"I honestly do not know what you will tell me, but I am ready to read and understand your story. Please, you can tell me anything you need to tell. I assure you that what you will tell me remains confidential.".

Another sentence quote that can be used is as follows

"To be honest, I need to know about your condition first. When I do not know your condition and your worries, and your story, I cannot analyze it, or we cannot find the best way for you. So, can you tell me more regarding your condition?"

In this sentence, the counselor reveals that he/she does not know anything about the counselee. The counselor needs cooperation from the counselee and his/her limitations as a counselor to expressly state his/her readiness to assist and keep the counselee's secret. These words can be a modality to be trusted by the counselee.

Table 1. Best Practices in Creating Therapeutic Relationships in Online Counseling

Aspect	Best Practice
Creating a therapeutic relationship in the implementation of online solution-focused single-session counseling	Counselors do self-disclosure to counselees
	Demonstrate the presence of the counselor in full
	Using informed consent before counseling

Types of Basic Skills in Online Solution-focused Single-session Counseling

Every counselor needs these skills to do counseling. In online counseling practice with the SFBC approach, the basic counseling skills are generally

the same as in face-to-face counseling services, only that the communication is in written language (Mallen, 2011). This means that the counselor needs to use words in written form that can be read and understood by the counselee properly and correctly. Furthermore, Dowling (2014) added that these activities differ significantly in terms of communication style, timing, and risk. Differences pose challenges for counselors in communicating online. These challenges include using written language, which requires skills to convey intent and purpose. Online communication is also considered to inhibit counselors from seeing and receiving nonverbal reactions from counselees. These limitations can lead to misunderstandings to the point of missing the opportunity to identify serious problems/performances for the counselee such as suicide (Amos, 2022; Dowling, 2014).

The best practice to overcome this is to clarify the counselee's statement or feelings (Bambling 2008). The choice of words that can be conveyed by the counselor, such as

> *"I read from your writing that you feel annoyed with this situation, huh?"* or *"In other words, you want to convey that you are having problems with your parents because you cannot follow your parents' decisions?"*

In this case, the counselor can freely use his/her language skills to obtain explanations and common perceptions regarding various things the counselee conveys.

In addition, counselors can ask questions and provide reassurance (support) to minimize the consequences of a lack of non-verbal feedback (Mallen, 2011). The questions asked can be open-ended – such as using the words how, what, and why – or closed-ended, using the words who, where, and when. For example: *"how can this interfere with your daily activities?"* followed by *"who was present at the incident that made you insecure?"* The counselor can also provide support to the counselee for positive plans that have been planned or have been carried out, as well as small encouragement that strengthens the counselee, such as *"very good,"* *"I support you,"* and others.

The latest practice that can be done is to use media in online communication. Calls via telephone or video are a way for counselors if

communication in online counseling using text does not work effectively. The counselor makes the call to immediately confirm, confront, etc. what the counselee does during the counseling session. A new, more creative way is to use emoticons/symbols/phrases/virtual whiteboards/screen sharing as a way to communicate feelings (Bambling, 2008; Finlayson, 2021). The counselor uses the features/media the communication device provided to ease conveying and receiving messages from the counselee. One of them is using emoticons such as sad (☹), angry (😠), laughing (😂), smiling (😊), embarrassed (😳), likes/hearts (😍), and others to express the feelings of the counselee or counselor. The use of symbols such as "@" to mark the name of another person or place, "&" to replace the word "and," "#" to express important words in text/messages, et cetera., can also be used.

Based on these strategies, Petrus and Sudibyo (2017) said that high imagination skills and the ability to interpret written words as well as the forms of motion and animations used in the communication process are required by counselors. Counselors need to understand every word the counselee conveys in written language combined with various emoticons, symbols, or abbreviations to gain fluency in online counseling. Dowling (2014) also added that counselors must adjust the client's literacy level. The counselor must consider the choice of words, the use of sentences/phrases, and even punctuation marks. This is to prevent the counselee from exiting the session due to the counselor's language being too complex or incomprehensible to the counselee.

Furthermore, various types of basic counseling skills such as accepting, attending, restating, paraphrasing, interpreting, summarizing, and terminating are also used during the online counseling process. Furthermore, Reddy (2015) added that in providing services, counselors must be experienced in listening attentively and empathizing with the stories conveyed by the counselee. Dowling (2014) mentioned this as emotional support that can calm, reassure, and create a sense of security to express complex and emotionally charged things, which is in line with Bambling's (2008) research. It is obvious that communication skills in counseling are not merely about language skills but also listening, empathizing, and analyzing, which are aimed at maintaining a therapeutic relationship and achieving counseling goals.

More specifically, single-session solution-focused counseling techniques applied in counseling services generally are scaling questions, miracle questions, and exception questions (de Jong & Berg, as cited in Finlayson, 2021; Reddy, 2015). The application of this technique is in line with Mulawarman and Suharso (2018). They stated that the principle of brief counseling could aid adolescents through the process of exploring problems, formulating goals and desired outcomes, and taking action plans according to goals. Furthermore, de Jong and Berg (in Finlayson, 2021) conceptualized the SFBC technique as a collaborative listening, selecting, and building process with future choices.

In online counseling, this approach directs the counselee to be able to set goals and perform certain tasks to achieve changes that are in line with goals. However, because the SFBC technique uses many languages, collaborative language skills are needed to build meaningful conversations with clients (Franklin, 2016). Finlayson (2021) wrote that counselors who use this technique must be skilled in using and selecting constructive language over the counselee's language.

Online counseling techniques with magic questions allow the counselee to observe possible solutions that can be done (Reddy, 2015). A verbatim example of a magic question is

"I have a question. If someone can grant 1 of your wishes, what is the most important thing you want to happen right now?"

Furthermore, scaled questions can assist the counselee in measuring progress during the session (Reddy, 2015). Here is an example verbatim

"In the current situation, if you score a number from 1 to 10, where 1 is sad, and 10 is not sad, what score would you give to represent your level of sadness?".

This question can be asked before and after the core activity in counseling, i.e., seeking and planning possible solutions; thus, the counselor can compare the differences before and after counseling.

Table 2. Best Practice in Types of Application of Basic Online Counseling Skills

Aspect	*Best Practice*
Basic skills of single-session solution-focused online counseling	Clarifying the counselee's statement or feelings
	Asking questions and providing reassuring (support)
	Using media in online communication
	Listening, empathizing, and analyzing
	Scaling questions, miracle questions, and exception questions

Time Management of Online Single-session Solution-focused Counseling

The use of time in counseling services is another important aspect for counselors, especially in online counseling practices (Bambling, 2008). Amos (2022) added that time and cost influence counselees in selecting online counseling services. However, time in online counseling is more independent, conditional, and adjusts to the presence of counselors and counselees. Time is a major challenge for counselors in online counseling (Bambling, 2008; Dowling, 2014).

In some practices, time is a constraint because the implementation of counseling tends to be slower than face-to-face counseling. This incident resulted in the interruption of the counseling flow (Dowling, 2014). Along with this statement, Bambling (2008) revealed that time problems could be a factor in the counselee's frustration and feelings of rejection.

Other problems experienced include a pause in the implementation of counseling which was considered to hamper the counseling process and caused the counseling process to be discontinued (Bambling, 2004; Dowling, 2014). In this case, the counselor and the counselee, at the time of the online counseling session, were not present; thus, communication was not continued. Dowling (2014) explained that this situation could occur because the counselee performs other activities apart from counseling. However, the counselor is also inseparable from that situation, or, as Finlayson (2021) mentioned, the counselor lacks control over the counselee.

Bambling (2008) came up with a strategy that counselors can perform to improve time management in counseling: to display photo evidence or the last conversation before the resumption of the session after a pause. The evidence aims to remind the objective of the counseling conversation; therefore, the subsequent counseling session feels the same or natural. Counselors can also use a summary technique or provide a conclusion before a session break, followed by other skills such as clarifying or asking questions. Counselors can do a summary by conveying

> "So far, we have discussed the problem you are facing, that is, the problem of adjustment and the factors that cause difficulties in adjusting to a new environment. Is it true? Or is there something else you want to say?"

In addition, counselors and counselees need to manage time by using what is called 'structuring' in communication terms so as not to maintain the therapeutic relationship from disconnecting. In this technique, the counselor and the counselee make a mutual agreement regarding the implementation time of online counseling (time limit), problems in counseling (problem limit), and other agreements that can be made to manage the counseling session. As a reminder for counselors and counselees, counselors can use a timer on their cellphone or other reminder features/media to identify the elapsed time during the session for online counseling session management. Here are verbatim examples that counselors can use

> "Okay, in this meeting, we can agree on several things first. The first is regarding time; namely, this counseling process lasts 45 minutes as stated in the informed consent. During the counseling session, both the counselor and the counselee are expected to be fully present during counseling and not do or attend to other things. Then, the counselee is expected to be active during the session to increase the success of the counseling session. So what do you think? Is there anything you want to add or get rid of so that you agree?"

Table 3. Counselors' Best Practices in Time Management of Online Single-session Solution-focused Counseling

Aspect	Best Practice
Counselor's time management in the implementation of online single-session solution-focused counseling	Have proof of the last conversation
	Using the summary technique
	Performing the structuring technique
	Using time reminder media

Following what has been conveyed by Koutsonika (2009), online counseling is a complex process. This leads to different and challenging problems with their characteristics as counselors who perform online counseling. The challenge is not only on the counselor's side but also on the counselee's and the media used in counseling. Nevertheless, more specifically, the application of online counseling with the SFBC technique requires the counselor's language skills which are a tool in SFBC counseling. However, it is very challenging for counselors to apply it online because of limitations in counseling.

Closing

The increasingly rapid technological advancements impact counseling services that are carried out face-to-face, which can now be done online. This has an impact on the increasing need for online counseling. Therefore, we need professional counselors with qualified skills to carry out the online counseling process. School counselors who do not have the skills to carry out online counseling and do not know an effective approach strategy in the online counseling process will make the counseling process ineffective and inefficient. Therefore, counseling strategies and approaches are needed to carry out effective and efficient online counseling.

One counseling approach that can be applied is brief solution-focused counseling with a single-session counseling strategy. The counseling process that is carried out online, either asynchronously or synchronously, can use a single-session solution-focused counseling strategy. Online counseling is a professional counseling service carried out online where

the counselor and counselee are separated by distance and time by utilizing technology. Single-session solution-focused counseling is a counseling approach taken by professionals to influence and empower individuals in one counseling session based on the individual's abilities by focusing on solutions or problem-solving.

The counselor's experience in conducting online single-session solution-focused counseling can formulate several conclusions. The process of building rapport requires specific strategies and the use of informed consent. The counselor's self-disclosure is also very influential in the counseling relationship. The counselor must show full acceptance (attending) to encourage the counselee to be sincere. The assistance process can also run well when the counselor applies basic counseling skills and specific techniques in brief counseling. The brief counseling techniques applied in implementing online counseling services are scaling questions, miracle questions, and exception questions. Online counseling challenges the counselors in time management. Time needs to be managed properly and flexibly; thus, it does not obstruct the implementation of online counseling services. Therefore, to further improve school counselors' ability sustainably, it is necessary for counselors to constantly develop various skills for professional online counseling services. This is intended to enable school counselors to assist the counselee's problem alleviation optimally regardless of distance or time and can be accounted for professionally.

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CHAPTER 12

Multimedia Edutainment: How to Make Social Science Learning in the New Normal Era More Attractive?

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Abstract

Social science learning during the new normal has faced various challenges. One of these challenges is related to a hybrid learning system that requires media to facilitate material delivery. Learning media is becoming increasingly important in the new normal not only as a tool for delivering material but also as the content of learning activities. Therefore, it requires interesting and entertaining media to make students enjoy learning and effortlessly receive the material presented. Another challenge in social science learning is the amount of material that must be taught to students within a short learning time, making learning suboptimal. Therefore a media that can accommodate the problems in learning is required. Among the interesting and fun media is the use of multimedia edutainment. Specifically, this chapter discusses multimedia edutainment in social science learning in the new normal era.

Keywords: multimedia edutainment, social science, new normal

Introduction

Learning in the era of the new normal is currently experiencing extraordinary challenges. The COVID-19 pandemic has caused a global shift in learning systems, establishing a hybrid learning system – a combination of face-to-face and non-face-to-face learning systems. With such a learning system, educators must ensure that learning activities continue even though students are in their respective homes. The solution requires educators to be innovative: to be able to design a learning media by utilizing online

media. The pandemic has become a challenge in developing creativity in using technology, not only in transmitting knowledge but also in ensuring learning is still conveyed properly. However, it also provides an opportunity for all to discover how technology can enable students to become more competent in learning during the new normal. One of the important skills in the new normal learning is self-directed learning or independent learning as an outcome of education. This pandemic period can train students to become independent learners through various online classes. In addition, it can also create cooperation between students to solve problems in learning and face real-world problems.

The application of hybrid learning certainly requires the readiness of various parties, be it teachers, schools, office holders, or students. Hybrid learning can be implemented using an internet-based interactive model and a Learning Management System (LMS), such as by using WhatsApp, Google, Zoom, and other applications. In this new normal era, online or hybrid learning certainly impacts those who run it. One of the positive impacts is that teachers and students become more capable of using learning applications, and the implementation of learning becomes more flexible as it can be carried out at home or anywhere. However, this online learning has many obstacles, including (1) inadequate internet access; (2) limited access to electronic devices; (3) difficulty in understanding the material (due to laziness and difficulty in concentrating); (4) educators' lack of ability in operating digital devices; and (5) students' lack of focus during online learning. These obstacles occur in almost all online classes; thus, the learning objectives cannot be achieved optimally. Therefore, a powerful strategy to overcome these obstacles is required. There are several alternative solutions to overcome these obstacles, one of which is to maximize the use of learning media. This media is expected to bridge the delivery of material from educators to students; thus, messages and materials can be conveyed to their full extent and in an interesting manner.

One of the media that can be used for an interesting non-face-to-face learning system is Microsoft Sway-based edutainment media. Edutainment is a methodical process that is designed in such a way that the content of education and entertainment can be combined harmoniously to make learning fun. Meanwhile, Microsoft sway is an application from Microsoft Office that assists in creating reports, personal stories, interactive presentations, etc. Sway is described as a canvas and built

for the web and devices. It allows users to submit content from all their applications and generate media-rich presentations. The purpose of Sway is to provide an alternative for users to create online content that can work on any screen so that online learning could be fun and run to its maximum potential. Edutainment media is expected to make learning more interesting and kindle students' interest and motivation in learning social science. Combined with the use of the Microsoft Sway platform, edutainment media is expected to help educators combine various types of different media applications into easy and attractive media.

There are three parts to this chapter. The first part discusses the concept of learning media. The second part discusses multimedia edutainment. And the third chapter discusses the application of multimedia edutainment in social science learning during the new normal.

The Concept of Learning Media

Arsyad (2014, p. 3) stated that media is derived from Arabic, which means liaison. In this context, liaison is the message to be conveyed to the message recipient. In learning, the media is defined as a tool that facilitates information delivery from educators to students. The existence of the media is also intended to facilitate and clarify material delivery to students in teaching and learning activities. According to Hamdani (2011, p. 72), the media is an introduction or tool that teachers can utilize in distributing messages or information to students in an effective way to make it easy to understand. The definition of media from several experts is the introduction of ideas, concepts, materials, and thoughts to be conveyed to the recipient. In this case, the recipient is a student. Media can make teaching and learning activities more effective because learning tools support educators – and students can easily understand the material.

Arsyad (2014, p. 19) argued that media supports teaching and learning activities because teachers will find it easier to create a conducive and more effective teaching and learning atmosphere when using learning media.

Arsyad (2014, p. 15) also argued that three media characteristics exist in teaching and learning activities. The first is fixative, where the learning media can construct and store an object or event at any time. The second is manipulative, which is a deviation from a possible course of an event. This particular characteristic requires serious attention. This is because if there

is an incorrect sequence, the results of the subsequent interpretation will also be wrong. The third is distributive which focuses on the experience delivered to students through video and audio.

Sanaky (as cited in Suryani et al., 2018, pp. 8-9) conveyed that media as learning aids are 1) to facilitate the learning process in class; 2) to improve the efficiency of the learning process; 3) to maintain relevance between learning materials and learning objectives, and 4) to support students' focus in the learning process.

Brets (as cited in Sundayana, 2015, p. 14) classified media into seven types: 1) motion audio-visual media, such as sound films, video tapes, films on television, and animation; 2. silent audio-visual media, such as sound series films, sound pages, and sound slides; 3) semi-motion audio such as far collective writing; 4) moving visual media, such as silent films; 5) silent visual media, such as printed pages, photos, and microphones; 6) audio media, such as radio, telephone, audiotape; and 7) print media, such as books, models, and independent teaching materials.

Multimedia Edutainment

Edutainment is derived from two words, i.e., education and entertainment. Education refers to teaching and entertainment has the meaning of amusement. Thus edutainment is education that is entertaining and/or amusing. Meanwhile, in terms of terminology, edutainment can be interpreted as a learning process designed with educational and entertainment content combined harmoniously to create a pleasant learning atmosphere (Darmadi, 2014). From these terms, it can be understood that fun learning can help students (learners) to understand and capture the essence of learning without them feeling that they are learning/studying. This can be done through games, role play, or demonstrations, as Edgar Dale's theory refers to what is called "the cone of human experience." It should be noted that edutainment emphasizes the order of methods, strategies, and tactics. Strategy is usually related to tactics, while tactic itself in the Indonesian dictionary is defined as the implementation of strategy or, in other words, a systematic plan carried out to achieve a goal.

Several principles characterize the concept of edutainment (Hamruni, 2014, pp. 199-201): 1) the concept of edutainment is a series of approaches in learning to bridge the gap that separates the teaching and learning processes;

thus, it is expected to improve learning outcomes; 2) it seeks to make learning more conducive and pleasant; 3) it offers a learning system designed with one efficient link involving students, teachers, the learning process, and the learning environment, 4). In edutainment, the learning process no longer appears daunting but an open and fun educative interaction.

Edutainment in its journey manifests in various forms, such as humanizing the classroom, active learning, accelerated Learning, quantum teaching, quantum learning, etc. Each concept is described as follows (Al Khalili 2005, p. 206):

❖ Humanizing the classroom – the teacher's learning process should treat his/her students according to their respective conditions. Humanizing the classroom was initiated by John P. Miller and focuses on developing the "Effective Education" model, or, in Indonesian vocabulary, "personality education" or "Education of Values." Miller's offer is based on encouraging students to: a) be conscious of the fact that self-awareness is a process that is always and will always be ongoing; b) explore their identity and concept, and c) combine the harmony of the heart and mind.

❖ Active learning – According to Melvin I. Silberman, learning is an automatic consequence of information to students. Learning requires involvement and action simultaneously. When learning activities are active, students do most of the learning work. They use their brains, learn ideas, solve problems and apply what they learn.

Microsoft Sway

In 2014 Microsoft introduced a new application called Sway. Sway is a digital storytelling application for business people, schools, and individuals to create interesting presentations, reports, resumes, and lessons. Users can pull content locally from their device or internet sources such as Bing, Facebook, OneDrive, and YouTube. With Sway, presentations are no longer limited to choosing ready-made templates which make the presentation look similar to anyone else's, nor do they have to possess special design skills to transform and display information in a modern, interactive, and attractive way.

Sway works in all mobile browsers on all platforms. It is good for capturing travel moments, documenting research for schools or business conferences, and can also be used as learning media in education. Microsoft sway can be operated using mobile devices and computers. The steps to use Microsoft Sway are as follows (Hadi, 2018):

- ❖ visit www.sway.com in any browser, then click Sign in on the top menu bar;
- ❖ enter the email address you desire to use with Sway; you can use a free Microsoft Account (Hotmail, Outlook.com) or an organizational account provided by work or school. You can visit www.microsoft.com/account to register for free if you do not have an account;
- ❖ on the Sway page that opens after logging in, click or tap Create New to start creating a Sway;
- ❖ click the placeholder text titled Sway that appears on the first card in the Storyline, then type a short, meaningful description of the Sway you created. This title will be the first thing others see;
- ❖ to add content to your Sway, such as text, images, or videos, click or tap the + icon at the bottom of an existing card. You can also drag and drop text and images directly into the Storyline (fusers can change the order of content and create each card as they wish);
- ❖ easily add additional content to Sway, such as images stored on your computer or mobile device. Sway can also load content from the web, such as videos. On the menu bar, click Insert, select the desired content source from the menu, and then enter any keywords or search phrases into the Search sources box;
- ❖ to preview the work in progress at any time, click the Design tab. By previewing, you can see how the Sway will look for others when shared later. To fully enjoy the Sway experience, click the Play button on the top menu bar;
- ❖ when you are previewing the Sway, click the Storyline tab to return to the Storyline;
- ❖ to select a Sway style, click Design on the menu bar, then select Style. To choose a random Sway look and feel, click the Remix! button until you find the design and layout you desire. You can

       customize certain parts of the currently applied style, such as colors, fonts, and textures, by clicking the Customize button in the Styles panel;

❖ if you wish to control how others view and navigate your Sway, choose whether the content should be scrolled vertically, horizontally, or displayed like a presentation;

❖ to share the Sway, click the Share button on the top menu bar, then select the desired way to share the Sway. Your choices in this menu depend on the type of account used to sign in to Sway;

❖ For a more detailed look at all available sharing options.

Microsoft Sway has its advantages, including (Cahya, 2017): 1) easily accessible – users can work on something on Sway, then share the link via WhatsApp, BBM, Email, Facebook, etc. Sway can be accessed via a web browser, such as Firefox or Chrome; 2) the mechanics of Sway is significantly different – it is designed for touch screens but is also compatible with non-touch screens. If PowerPoint uses a fixed slide concept, Sway uses a card concept that can be selected between the desired card types; and 3) the Sway layout allows content to be displayed horizontally or vertically. These advantages make it easier to create and use sways and make the appearance of learning media more attractive and fun.

Implementation of Multimedia Edutainment Based on Microsoft Sway as an Alternative to Social Science Learning in the Era of the New Normal

Social Science is a field of study that examines various disciplines of social sciences and humanities as well as basic human activities that are studied scientifically to provide deep insight to students, especially elementary and middle levels. Social science covers various aspects of life, including social relations, economics, psychology, culture, history, and politics (Susanto, 2016, p. 137). Social science is hoped to foster people to become rational and responsible social individuals. Hence why values are created (Zuraik, as cited in Susanto, 2016, pp. 137-138). The wide range of social science makes the learning materials taught to students more comprehensive. Meanwhile, the allocated time is limited.

The purpose of studying social science is to support the competence of citizens in terms of knowledge, intellectual processes, and democratic characteristics needed by students to be useful in society and actively involved in public life (Wahidpure, 2017, p. 18). Nur Hadi (as cited in Susanto, 2016, p. 146) stated that social science education has four objectives: knowledge, skill, attitude, and values. Knowledge assists students in understanding themselves and their environment, including geography, history, politics, economics, and psychology sociology; skill is related to skills in thinking; attitude is related to thinking behavior. And values are the norm that exists in society. Based on this opinion, the main objective of social science is to understand oneself and the environment. The main purpose of social science education is to support and develop the ability to make decisions as citizens for the public interest (Siska, 2016, p. 5).

From this explanation, it can be concluded that social science is a science that studies human life and is packed scientifically to provide students insight and understanding.

Susanto (2016, p. 160) explained that the scope of Social Science (IPS) materials in elementary schools have the following characteristics:

- ❖ Social Science is a combination of various elements, i.e., geography, history, economics, law and politics, citizenship, sociology, and even the fields of humanities, education, and religion.
- ❖ Social science competency standards and basic competencies are sourced from the scientific order of geography, history, economics, and sociology, which are combined into one material.
- ❖ Social science competency standards and basic competencies involve various social issues formulated with interdisciplinary and multidisciplinary approaches.
- ❖ Competency standards and basic competencies involve events and changes in people's lives with the principles of cause and effect, territoriality, environmental adjustment and management, composition, processes, and social issues, and efforts to survive, such as meeting basic needs, power, justice, and assurance.
- ❖ Social science competency standards and basic competencies use three dimensions in discussing and understanding social facts and human life as a whole.

In connection with the broad scope of Social science education, it is necessary to have a media that can accommodate learning to be effective and maximal. One of them is with Microsoft sway-based multimedia edutainment.

Figure 1. Presentation of Social Science Material with Multimedia Edutainment

Figure 2. Video Presentation with Multimedia Edutainment
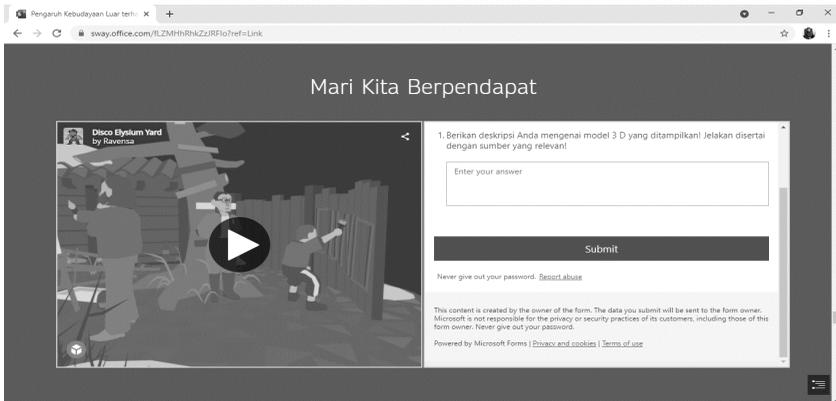
Figure 3. Quiz Presentation with Multimedia Edutainment
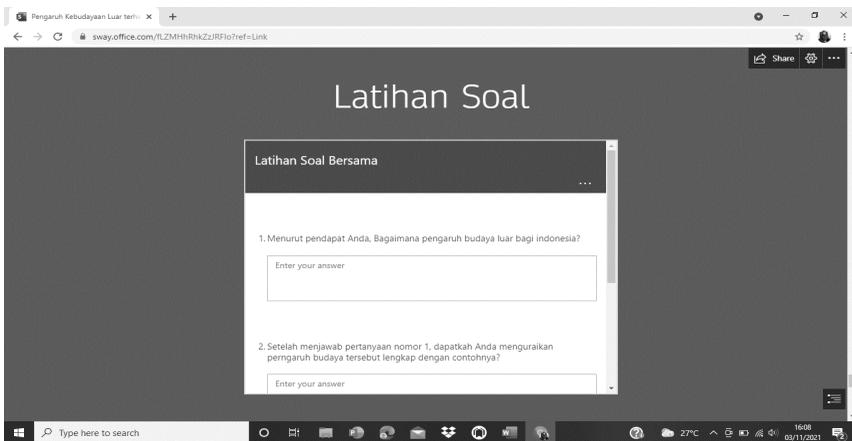
Figure 4. Presentation of Social Science Evaluation with Multimedia Edutainment

The multimedia edutainment developed in this paper presents the material in the form of concepts about culture through material descriptions and learning videos equipped with quizzes and a post-lesson evaluation. Quiz and practice questions are needed to determine the mastery of the material that has been presented.

Closing

The rapid and highly competitive development of the world in the new normal era is inevitable. This development also urges the education world to prepare good quality human resources. Therefore, the education world must catch up by producing reliable, productive, creative, innovative, and effective human resources through strengthening balanced attitudes, knowledge, and skills. This chapter has revealed the importance of teacher mastery to innovate learning, one of which is the skill of making learning media that is interesting and fun for students. Microsoft-Sway-based multimedia edutainment can be an alternative used in social science learning.

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CHAPTER 13

Innovative E-Learning: The Contribution of An Artistic Innovation Involving Conceptual Spaces

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Abstract

The idea of pedagogy as a component of art that can change depending on the preferences of art lovers was first put out by education observer Paulo Freire. Teachers in different parts of the world have become artists when they apply the conceptualized design of pedagogy to adapt to the needs of the learning classroom environment. Nowadays, online literacy is a space to develop innovations in various aspects of education, as is the case with the development of industry 5.0, where a distance education innovation must follow the needs of students. Nowadays, online literacy is a space to develop innovations in various aspects of education, as is the case with the development of industry 5.0, where a distance education innovation must follow the needs of students. Nowadays, online literacy is a space to develop innovations in various aspects of education, as is the case with the development of industry 5,.0, where a distance education innovation must follow the needs of students. Nowadays, online literacy is a space to develop innovations in various aspects of education, as is the case with the development of industry 5.0, where a distance education innovation must follow the needs of students. This article discusses innovation through e-learning is built with the synergy of pedagogical art and an empirical scientific approach.

Keywords: pedagogy concept, educational innovation, industry 5.0, e-learning, scientific approach.

Introduction

The art of pedagogy is a learning idea that combines the administration of material sub-material with the capacity to bring the function of an educator into the classroom. Teachers in different parts of the world have become artists with conceptual pedagogy conceptualizations that adapt to each learning class's needs (Freire, 2000). In developed nations like Indonesia, several inspirers introduce pedagogy arts as ki Hajar Dewantoro (Indonesian education figure). Other features become artists with pedagogy conceptualizations that adapt to each learning class's needs (Roffe, 2002). Each type's learning needs are different; everyone can have a different learning style depending on their respective abilities.

Innovations in education are very diverse (Liu et al., 2013). Various areas of education can be innovated in the here and now. Still, much as with industry 5.0, a distant education innovation must consider the demands of students. The industry 5.0 narrative makes it very simple for educators to fall behind (Obe, 1999). Distance education is finally in order by the public for a more flexible learning process. The need for distance education has been scented with the development of e-learning. However, pedagogy still plays a critical role in sharing expertise and knowledge. The need for distance education has been perceived with the development of e-learning. However, pedagogy still plays an essential role in transferring knowledge (Alzubaidi et al., 2021). Pedagogy art allows one to bring an interactive classroom atmosphere to the Learning Management System (LMS) according to the needs of the substance of the material taught to students. The transfer of knowledge through electronic learning requires the ability to convert the material to digital (Chen, 2017).

Learning and Social Interconnection

The ability to build formulas for learning techniques (Loh et al., 2016) should also serve as a guide when adopting e-learning to satisfy the needs of learning and social engagement. This competence is a pedagogy where an educator manages a virtual class using traditional management patterns (face-to-face) to optimally obtain the essence of learning (Furió Ferri, D.; Juan, M.; Segui, I.; Vivó Hernando, 2015). Through this virtual class, conducted with meticulous planning, e-learning becomes a place for

educators and students to interact. Planning for virtual classrooms (Daniela et al., 2018) to promote social interaction must be done with maturity and direction to successfully meet the learning goals. The principle of electronic learning is to convey learning scenarios on a platform agreed upon by both parties (educators and learners) (Subramanian, 2006). Learning with the moodle platform is one of the most frequent examples we hear about; many schools and colleges that use it make this platform the most in demand for developing virtual classes.

E-learning Using Applied Traditional and Scientific Classroom Structures

Logically, a scientific approach should be able to solve various kinds of learning needs (Chambers et al., 2017) in traditional classes. However, with e-learning, we can theoretically design this pattern to be more structured and more substantial. Learning patterns using e-learning can be created automatically, lasting from beginning to end. Providing learning instructions when someone registers in the e-learning system (Ahmed, 2010) can reduce time to be more efficient in independent learning.

Applied classes with traditional management structures have been widely discussed in scientific journals. Still, conventional styles have encountered many difficulties in keeping up with technological developments. Traditional classes still have an essential part at certain times because they have gone through various educational experiments fundamentally (Darling-Aduana & Heinrich, 2018). In this conventional class, it can practice multiple learning approaches, one of which is the scientific approach. A learning approach involving active types is today's best formula to improve learners' numeracy and computational competencies (Yuliana et al., 2020). Developing conventional classrooms into virtual classrooms brings new problems for educators, such as a new technology that must be learned by people unfamiliar with technology. Virtual classes (Barnes et al., 2020) through the learning management system (LMS) are most in demand by educators to deliver learning content because LMS is easier to manage.

LMS was created to support online learning, but as modern learning methodologies have evolved, this program has become increasingly important in education. Scientific methods and various virtual teaching

philosophies can be combined in LMS-based e-learning to generate scenarios for managing the classroom (Jahn et al., 2012). Virtual learning can be accomplished through multiple techniques, such as demonstration. The learning strategy that shows a video clip of a scientific experiment in action calls for an integrated storage area and a mutually acceptable learning framework (Cai, 2013). This LMS platform (Kampa, 2017) may meet this necessity in addition to offering online storage with many files upload options. This benefit makes it very simple for educators to manage various file kinds for the requirements of virtual classroom teaching techniques. Virtual classes also require a supportive learning environment, namely supporting equipment, to facilitate the operation of courses for educators and learners.

The LMS can help students comprehend the complete course material in a single activity. E-learning is a platform that can replace conventional scientific techniques because of the variety of learning scenarios (Yoon & Kang, 2021). Success in online education is frequently measured against carefully designed e-learning platforms. Additionally, because e-learning uses system-provided automated situations, it can function without active moderation from instructors.

The Synergy of Pedagogical Art, Scientific Approach, and Online Learning

E-learning has always been associated with technological innovation (Liu et al., 2013), so every built learning system must contain various current technologies. These articles agree that this is a motivation in the development of e-learning across the concept of virtual education, so technology is a significant factor if one wants to start innovation. This article explains how pedagogical art and an empirical scientific method are synergized to build innovation through e-learning.

Through e-learning, there is synergy in the process of achieving the objectives of the learning program. The electronic learning process comprises a scenario representing a process of attaining curriculum goals. Learning objectives in virtual classroom scenarios can be obtained precisely through evaluation at the end of the learning process. The final assessment (Widhanarto et al., 2018a) usually includes access rights to an online exam that can reveal learning outcomes in each stage or semester.

The scientific approach is an integral part of learning in k-12, so various ways are sought to use this scientific e-learning easily. The data and information in this chapter are from research by Widhanarto (2019). The development of scientific e-learning was also researched by Widhanarto et al. from 2020 to 2021. The thematic findings in Widhanarto's study show that e-learning management can be given a scientific approach using adaptative scenarios. This scenario allows adapting to online classes, namely by providing a scientific practicum room in a virtual class. Several ways can be used to build a science practicum room; the easiest is to use virtual laboratories (Jara et al., 2009).

Online learning combines the art of pedagogy with e-learning (Alnusairat et al., 2020). The combination of these two elements is carried out as a form of the responsibility of educators in conveying pedagogical knowledge through an online platform. Educators who have mastered traditional classes will actively manage virtual courses as they do at their best.

This learning uses internet-connected communication devices (Klobas et al., 2006). A learning system today almost entirely uses an internet connection. If we look at some cases in online classes, we know this online learning is in great demand. The growth of learning applications in 2020 reached 13 million per month worldwide. Writers think all teaching that uses the Internet as a global channel is learning. Everyone in the world can use that. This conclusion is also written based on several studies that discuss online learning; even people in remote parts of the world can also use it easily.

In addition, it also utilizes social media applications to manage two-way communication easily. The use of social media applications is in great demand by teachers and students because the appearance of social media is easy to understand and very flexible (Sarwar et al., 2018). The tools in social media applications allow someone to learn without difficulty to be more efficient when combined with learning content.

The concept of understanding the character of students must be mastered by the teacher if using technology. Learners have various learning styles (Zapalska & Brozik, 2007), so it needs to be understood individually; this learning style makes it an instrument for teaching strategies. Online learning styles are quite difficult to accommodate because various learning styles of students make the material presented must be multi-strategy based.

Some materials that allow collaboration with learning styles will be more accessible for students to understand, just as material that requires analysis is presented using narrative video scenarios and ends with a discussion. Auditory learning styles using audio-based materials are more accessible for students to understand acoustic learning styles (Chacin et al., 2018). Visual learning styles (Zapalska & Brozik, 2007) are more appropriate for learning using visual content, which is one of the challenges for educators in teaching using technology. Kinesthetic learning styles (Brier & Lebbin, 2015) are more suitable for learning on mixed content that is a mixture of audio, video, images, text, and instruction.

Mastering the principles of learning theory in understanding teaching strategies in e-learning is essential for a teacher. Learning theory allows us to examine various learning models of a system. The system in question is the learning system of the school unit, all learning management in schools in an integrated manner is managed through careful planning based on a learning management system (Bervell & Umar, 2018). Constructionism learning theory is most in demand for managing learning because this theory allows teachers and students to collaborate to achieve learning goals quickly. Learning online and offline still uses learning theory to uncover problem-solving.

The concept of curriculum development (Lohr & Gall, 2006) in online learning management is multi-dimensional. This concept allows us, learning managers, to find the most appropriate planning for a particular condition. In online learning, the curriculum development process begins with analyzing situations (Özdağoğlu et al., 2018). Through detailed condition analysis, one can find problems to solutions to solve them. Curriculum development can be done independently in each school; it can even be studied together with all schools that use online learning patterns; yes, they are incorporated on one platform. The learning platform commonly used are moodle platform, which is used to develop massive open online courses (Stackhouse et al., 2020).

The concept of learning activities in online learning is an integrated concept that starts from an analysis of learning plans from educators. Online learning activities (Plump & LaRosa, 2017) begin with an introduction to the application used so that all users of this application have the same perception when using it for the learning process. In a selected learning application, it is necessary to compile exciting content. Videos are used

to explain the material, but the text is also prepared for the repository (MACDONALD, 2008) in the application used. Furthermore, virtual introductions can be done using a synchronous pattern, namely immediate openings by uploading recordings of the teacher's introductions, to provide a blended e-learning experience.

The concept of developing students' potential can be started using environment analysis learning. This analysis can use an online form like the one provided by Google or bring respondents directly into a virtual space (Crisp, 2014). With the concept of focus group discussion, the needs of each student will be found objectively and in detail. The needs of these learners are further analyzed and mapped according to the aspects of their respective potentials. The elements that have been discovered are subsequently given stimulus regularly to improve the disclosure of the presence of learners in the class.

The need for e-learning allows us to uncover various learning achievements by applying online evaluations. The concept of evaluation in e-learning is summative evaluation, which is a form of extracting students' understanding from different meeting materials that have been carried out. This evaluation can be used in a variety of conditions, as well as situations in online learning. All the evaluation results can be managed in Microsoft Excel format and even automatically downloaded through plugins provided in the e-learning management system (Spannaus et al., 2017). This evaluation can use various innovations and an evaluation model that adjusts the material, namely pretest and posttest evaluations for specific materials. Teachers often use the demonstration evaluation model to uncover the understanding and performance of online learners.

Today's innovative e-learning framework

The preparation of learning materials in virtual classes must be digital because the digital format facilitates technical uploading and downloading through the LMS (Dwivedi et al., 2019). Materials in the form of videos and voice recordings need to be prepared to increase the focus of students' attention. Unique materials should also be used in e-learning, such as presentations by teachers with an interactive approach (Holly et al., 2015) are highly preferred by e-learning users. All students will understand the material using structured learning patterns. This structured learning uses

material scenarios prepared to achieve curriculum goals quickly. Some materials can be accessed with prerequisites, for example, practicum material that requires initial understanding. Some materials are prepared without requirements, that is, material that learners must master with a more significant portion.

The preparation of online classroom administration tools that utilize e-learning platforms has the same format as traditional classroom preparation. This preparatory format includes several tools needed for teaching. Some materials can be developed through an LMS (Baragash & Al-Samarraie, 2018). Still, some other devices are set up manually so educators can use them separately. The instrument used separately from e-learning is a teaching journal containing the learner's character. Administrative tools such as reviewers and attendance reports can be developed in the LMS. This attendance report, in real-time, can be taken from e-learning.

Innovative learning experience planning is provided through the collaborative learning technique; this technique combines the experiences of educators (Liman Kaban & Karadeniz, 2021) and learners in a learning process. Collaboration through specific applications or the form of assignment can be used to uncover various student needs for learning materials. Learning materials prepared through e-learning are modified according to collaborative needs, for example, using workspaces for discussion work.

Choosing a learning strategy (Yamaç et al., 2020) in an innovative classroom must undergo various preliminary analyses according to needs. Research, such as uncovering what material will be delivered and what kind of learners will take the class, is the most basic and essential. Reviewing the material into a strategy can be done simply like what is achieved from the material. Furthermore, learning outcomes can be converted into concrete steps for the application of learning (Ver Milyea et al., 2021). The management step will involve choosing a learning strategy following the form of the material to be presented.

Electronic assignments are inserted in virtual e-learning classes to emphasize learning efficiency. The management of this assignment can also be used as a portfolio. The entire portfolio of students can be used for self-assessment. Self-assessment is needed to reveal the understanding of knowledge and context of students; not only that, but the entire

self-assessment model also becomes very objective in identifying student learning achievements.

Evaluation of innovative e-learning (Widhanarto et al., 2018b) is carried out using digital processes with the help of plugins on the LMS. All assessments and results can be accessed from anywhere because this system is always connected to the Internet. The evaluation results can be seen anywhere and by anyone with an account in the LMS. The evaluation process in innovative e-learning (Shamir-Inbal & Blau, 2017) can be designed technically using private evaluation; this requires that someone who will conduct the assessment must go through a login session.

Learning outcomes can be delivered through innovative e-learning by creating a module prepared only for information pages. This module can also be set up using login so that there is privacy in managing student learning outcomes in innovative e-learning.

Conclusion

The pattern of choosing learning strategies can easily be used to develop innovation through e-learning. This learning strategy will grow into a learning meter delivery technique so that various forms of learning materials can be created. An innovative e-learning innovation is built with the synergy of pedagogical art and a scientific approach, namely the art of teaching in the traditional classroom combined with the ability to uncover logical thinking systems for students. Empirically innovative e-learning application is the art of education today. The teacher's technical knowledge, analysis, and conceptual understanding create the most comfortable conditions when a person learns through the LMS.

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PART 3
EDUCATION AND CHALLENGE

CHAPTER 14

What Are Inspirational Characters Like? Building Inspirational Character Concepts in Conservative Insights

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Abstract

One of the efforts to create various innovations is through character building. To innovate, one is required to be inspirational. Inspiration is one of the conservative character values that has been implemented in the Tri Dharma activities within the Faculty of Education of Universitas Negeri Semarang. The meaning of inspiration can be different for every individual. An act might seem inspirational to one but not to others. So far, the results of various studies regarding the factors of inspiration are not yet clear. There are various titles regarding inspiration variables, but upon closer inspection, they do not explain the definition of the inspiration intended. However, several psychological studies have started developing a scale for inspiration by estimating the validity of its content and its constructs. Therefore, this paper discusses the inspirational concepts in conservative insights.

Keywords: Character, Inspirational, Inspiration

Introduction

This chapter discusses concepts of inspiration from various experts, measurements of inspiration, and an overview of inspiring experiences gained in the field.

Inspirational Character Concepts

The vision of Universitas Negeri Semarang (UNNES) is to become a conservation-oriented university with an international reputation.

Wibowo et al. (2017) suggest that the meaning of having a conservative perspective is to have a perspective and behavioral attitude that is oriented to the principle of conservation (preservation, maintenance, care, and development) of natural resources and socio-cultural values.

One of the pillars of conservation that was formulated as a foothold for members of UNNES is the pillar of values and characters, which is the basis for one's thought process, behavior, and acts. The pillar itself includes 8 aspects as follows: being inspirational, humanist, caring, innovative, creative, sportsmanlike, honest, and fair. It is a reference in the process of education, service, and research and is internalized and manifested in attitudes and behaviors. It is the characteristics of the character inherent in the academic community and graduates.

Therefore, having an inspirational character as one of the pillars of conservation cannot be spared if it becomes the main target in developing and implementing conservation insights. The hope is for UNNES graduates and the rest of the academic community who have inspiring characters to not only play a role but also set an example and become role models, who are not only limited to the internal scope of the campus but also in their respective environments, wherever they are and whenever it may be.

Developing an inspirational character is an important point for the academic community because it induces, which makes it easier to convey ideas, concepts, or opinions to other individuals. It imbues positive energy and enthusiasm to other parties – fellow students, educators, colleagues, or society in general to work, perform, and achieve optimal performance to accomplish at the highest level. An inspirational character is defined by individual mindsets that are directed to share positive enthusiasm and energy with others.

Character is an essential issue to discuss, especially among education activists. This is because through education, a role model should be created as an example of the virtuous behaviors of a nation. This character issue is important, considering the rampant actions and behaviors of people who deviate from the values of a virtuous character. The number of these phenomena emerging in our society signifies the loss of wisdom and high values of the nation, strengthening the importance of a virtuous character.

In general, a character is a series of traits possessed by individuals that lead to character and personality, and are rooted in individual personalities

that encourage someone to act, determine their attitudes, and speak or respond to something.

Various definitions of character from experts differ in their explanations. Deal Savage and Armstrong (1996) state that character is a unique set of values, beliefs, and customs that are owned by a group of people. On the other hand, inspiration is a message conveyed by an individual addressed to other individuals who have the urge to stimulate and generate enthusiasm and positive energy to take various valuable actions.

Schein (1997) argues that character is a pattern of basic assumptions of life that is believed collectively, which is created, discovered, or developed by a group of people and can be used in overcoming their life problems. Therefore, characters are taught and passed down from one generation to the next as a guide for behavior, thought processes, and a sense of togetherness.

Zubaedi (2011) explains that character is built by three interrelated components that are integrated, namely moral knowledge, moral feelings, and moral behavior. He also added that a good positive character is shown by the ability to know good things, want good things, and do good things.

In the end, individuals with positive characters are individuals who try to do the best things as a whole, namely towards themselves, God, others, the environment, the nation, or the world in general.

On the other hand, inspiration is a message by an individual delivered to other individuals who have the urge to stimulate, act, and generate enthusiasm and positive energy to take various valuable actions.

Inspiration is one of the conservative character values of Universitas Negeri Semarang. This value represents the Faculty of Education, but the value is also applied to all faculties to support the vision of UNNES as a campus with a conservative perspective and with an international reputation. However, there has been no tool for measuring the value of inspiring conservative character values that have been tested psychometrically so far.

Fakhrudin et al. (2017) further emphasized that inspiration is a value that is reflected in individuals who always have ideas to be ready to act to do something, either intentionally or unintentionally, based on ideas that come to the brain in any situation and condition. An important component in an inspiring action is message which is obtained from an activity, event,

or situation, touching emotions, containing disclosure and awareness. One of the signs that an individual has a positive character is shown by the individual consistently involved in doing inspiring actions in every opportunity he/she has. The implementation of inspirational values can be seen in four stages: not yet visible, beginning to be visible, starting to develop, and becoming a habit.

Fundamentally, inspiration is a message that has the power of stimulation, generating enthusiasm and positive energy to take various valuable actions, conveyed by one individual to another. Wibowo et al. (2017) conclude that the value of an inspirational character has three elements: 1) inspirational values and characters are an awareness in individuals to want to care for others; 2) inspirational values and characters are spread by individuals through messages to others; 3) inspirational values and characters have the effect of stimulating enlightenment, creativity, effective effort, courage, and happiness in others.

The distinct characteristic of the inspirational value is to always have ideas to be ready to act and carry out activities toward the international standard of excellence (Pujiati et al., 2017). Usage of the term "inspiration" has been used in a variety of disciplines (e.g. literary criticism, theology, psychology) and literature in psychology (e.g. comparative socialism, humanism, creative processes; for review, see Thrash & Elliot, 2003). Often the term is neither defined nor used interchangeably with other constructs, or is simply referred to be criticized as mythical, unimportant, or unscientific. Complicating matters further, inspiration has historically been studied in a domain-specific manner, with little communication between researchers across domains.

Thrash and Elliot (2003, 2004) developed a common-domain conceptualization that draws on the core similarities across the various literature after recognizing the need for a coherent and integrated definition of inspiration. This effort has resulted in three complementary frameworks for the conceptualization of inspiration that focuses on various construct definitions and aspects: core characteristics, component processes, and transmission models. In this section, Oleynick et al. (2014) review these general domain conceptualizations and show how they can be applied specifically to cases of inspiration for creativity.

The application of inspiring character values in a conservative insight is expected to be implemented in the Tri Dharma College activities.

Unfortunately, psychometrically validated measuring tools have never been developed. This is the reason for developing a measuring instrument for inspiration through psychometric validation. This paper aims to estimate the psychometric properties of the inspiration scale measuring instrument, both in terms of content and constructs. Therefore, the implementation of inspiring values can be measured objectively.

Inspiration Measurement

Historically, psychology has focused on human problems to find answers and solutions to mental health disorders and other ailments plaguing society. However, in recent years, the field of positive psychology has begun to identify the constructs and strengths of people that promote positive well-being and growth (Seligman, 1998). Many researchers are now starting to focus their attention on positive aspects of humanity by studying positive emotions, prosocial behavior, virtues (such as forgiveness and humility), and constructs that promote optimal development and health (Batson & Shaw, 1991; Davis et al., 2010); Fredrickson, 1998; McCullough et al., 2002; Worthington, 2005).

The study of inspiration is one of the constructs that has received little empirical attention to date from a psychological perspective. Inspiration is associated with positive effects and has been shown to increase well-being and mediate the transmission of creative ideas (Thrash & Elliott, 2003; Thrash et al., 2010). Yet, we know almost nothing about the processes that lead people to act or not act when they have felt inspired. It is assumed that what leads a person to experience inspiration is at least somewhat dependent on individual characteristics and experiences, and inspiration can come from intrapsychic and external sources in various domains (Thrash & Elliot, 2003), meaning what one individual finds inspiring may not inspire another.

In line with the statement above, Oleynick et al. (2014) also stated that it is not surprising that inspiration has received little attention in the scientific community, given the many challenges that the concept of inspiration presents. Among these challenges are (a) a lack of clarity about what inspiration means; (b) operational difficulties; (c) ambiguity about whether inspiration differs from related constructs; (d) prejudice that inspiration is unimportant, and (e) various barriers to a neuroscientific investigation.

Oleynick et al. (2014) also explained that the lack of clarity about whether inspiration is different from other constructs has been another barrier to research activities. If someone thinks that inspiration is the same as, for example, creativity or insight, then he/she has no reason to study it.

This analysis focuses on the psychological literature on inspiration. First, it reviews the early writings on the nature and origins of theorizing. Secondly, it reviews the empirical literature on the inspiration and critique of this study. Finally, it discusses the steps needed to advance the study of inspiration as a different construction considering the current state of the literature, so that it can be used as the basis for theoretical constructs in the development of a measurement tool for conservative characteristics, namely inspiration.

Early psychological investigations into the nature of inspiration shed light on construction from a psychoanalytic perspective. Knowlson (as cited in Jennings, 2012) characterizes inspiration as a positive synthesis of subconscious thoughts and ideas characterized by strong emotions. Likewise, Kris (as cited in Jennings, 2012) views inspiration as something that comes from the subconscious.

Jennings (2012) revealed that initially researching the inspiration variable became difficult because it was associated with inspiration that came from supernatural powers. It is also difficult to examine these variables because their manifestations are similar to the constructs of arts, personal growth, achievement and success, and prosocial behavior. However, in recent years, the field of positive psychology has begun to empirically study virtues, strengths of character, religion or spirituality, and other constructs that advance individual well-being and contribute to the progress of humanity and society (Snyder & Lopez, 2009). Psychological methodology, statistics, and research design have also advanced, enabling us to assess and study phenomenological experiences (such as inspiration) that previously eluded empirical investigation (see Ong & van Dulmen, 2007). Despite these advances, the study of inspiration remains nascent, and many questions about its nature and how, or even why it is experienced remain unanswered.

The first studies that used a psychological research design to investigate the nature of inspiration and its role in healthy functioning were qualitative (Hart, 1993, 1998). Hart (1998) conducted in-depth interviews of 70 participants to explore some of the characteristics and

core components of inspiration. He identified four phenomenological characteristics based on his examination of the data: (a) connection, which involves moving from a sense of separateness to a greater sense of connectedness with oneself, other people, nature, ideas, or some aspect of divinity; (b) openness, availability and acceptance accompanied by a sense of fulfillment; (c) clarity, which may involve higher sensory awareness, better understanding, or both; and (d) energy, which involves mood swings and a strong level of enthusiasm.

The second study that attempts to quantitatively investigate the nature of inspiration is Degaard's (2005) and Fulmer's (2007) dissertation. Degaard (2005) created a measure of inspiration, the Inspiration Questionnaire (InQ), which is based on the conceptualization that inspiration consists of three components: (a) its source, which lies when an individual is in a state of depression; (b) the energy, or what motivates the process of inspiration; and (c) the function of the process. From this conceptualization, which has its roots in psychoanalytic theory, Degaard created a 65-item self-report scale consisting of the Depression, Motivation, and Reparation subscales. Degaard reports that an initial pool of 80 items was piloted with 8 participants, which resulted in a 75-item revised questionnaire. The findings are only somewhat consistent with a hypothesized direction. Degaard's study had many problems, both from an empirical and theoretical point of view. The conceptualization of inspiration is theoretically and empirically unfounded, and the methodology for creating and validating psychometric instruments is weak relative to current standards. Because of these issues, the findings in InQ are dubious, and the study does not advance scientific understanding or measure inspiration as a result.

Despite the inspiring role it may have in motivating behavior across multiple domains that result in great personal, prosocial, and creative achievement, it has been largely ignored in the psychological literature as a distinct construct. Inspiration has important implications for individual well-being (Thrash et al., 2010a) and the transmission of creative ideas (Thrash et al., 2010b), and may play an important role in the process of therapeutic as well as scientific discovery (O'Grady, 2008; O'Grady & Richards, 2010).

The study of inspiration in this review has only just described its nature and mechanism. On the other hand, experimental studies have helped displace it from faint and subtle experiences into distinct constructs

capable of scientific investigation. This study has established some of the core characteristics of inspiration, antecedents, and processes – and they correlate (Thrash & Elliot, 2003, 2004). However, the current state of scientific investigation leaves many questions unanswered. To advance the study of inspiration, three suggestions are proposed: (a) inspiration needs to be contextualized in a unifying, theoretical framework from which theoretically based hypotheses can be generated for future studies; (b) the emotional connection needs to be investigated empirically, and must be meaningfully distinguished from emotions involving similar characteristics (i.e., elevation, admiration, awe); and (c) a theoretical definition of inspiration based on its explanation of the emotional component needs to be established and empirically tested to further validate its unique influence on motivation and human behavior.

Thrash and Elliot (2003) conceptualize inspiration as a motivational state that may have a relevant transcendent emotion (i.e., elevation, awe, admiration). Jones et al. (2014) measured inspiration using the dimensions of self-focus, other-focus, achievement-focus, emotion-focus, and external-focus. More specifically, to be inspirational, one must first be inspired, therefore the psychological variables of inspiration that are studied come from internal and external sources, where their emergence is based on frequency and intensity. In the Tri Dharma of Higher Education, Fakhruddin, et al. (2017) suggest that inspirational values consist of four aspects: teaching, research, service, and relationship.

Furthermore, Fakhruddin et al. (2017) explain the indicators of each aspect: (a) the most prominent implementation of the value of inspiration during college is to treat all students fairly and develop their academic abilities objectively without discriminating against them; (b) the inhibiting elements (i.e. challenges) in research are inevitable and thus have to be faced in publishing articles in reputable journals; (c) The most significant implementation of inspiring values in social services is to provide services to all groups without discrimination, while the lowest implementation is creating new technology that is beneficial to society; (d) the highest implementation in building relationships is communicating politely to the leader, but the worst implementation is thinking positively towards the leader.

The discussion in this paper is about scale construction research and tests. Azwar (2018) explains that in general, in research in the field of

psychology, scales and tests have an instrumental function. In certain research cases, tests and scales do not function instrumentally but instead become the object of research itself, namely in applied psychometric research whose topic is the construction or preparation of scales and tests.

Azwar (2018) adds that construction research differs from research methods in general in that its methodology emphasizes more procedures or work steps taken to obtain the desired instrument. The most important things that must be explained in the method are:

1. The work procedure from start to finish – starting from how to build the construct used until the desired test or scale is obtained. In the inspiration scale that will be developed, the construct used is about the inspiration variable.
2. Data source – both data for item content validation and response data sources for item quality and reliability tests. The status of this data source can be equated with the status of the research subject, but it is also possible for the subject's response data to be obtained from computer simulations (computer-generated data). In this study, content validation was carried out by experts. Judgment from the expert is then computed by Aiken's V as a content-validity coefficient with the following formula:

$V = \sum s / [n(c\text{-}1)]$
$S = r - Lo$
Lo = lowest validity score (e.g. 1)
C = highest validity score (e.g. 5)
R = score given by the examiner

Any V higher than 0.5 can be considered an indication of good content validity. The average number (mean) of all subsection V coefficients is the content validity coefficient of the entire item.

Items that are considered valid are then tested on research subjects. The results of the data tabulation were tested for item quality by looking at the item discrepancy of at least 0.3 and tested for reliability using Cronbach's alpha.
3. Item parameters and test parameters under study, computational methods, and acceptance criteria – in this study, because the referred

theoretical construct is not clear, the first step is to go through the Exploratory Analysis Factor (EFA) then after getting a clear construct, a Confirmatory Analysis Factor (CFA) is carried out to ensure the validity of the construct of the developed instrument.

4. Trial in an online form via Google Forms, using the inspiration scale.
5. Data analysis used Aiken's V for content validation, Cronbach Alpha for reliability, and CFA for testing the scale model.
6. The scale is used to obtain a picture of the inspiration of the research respondents.
7. The results of the study can be used as a reference for optimizing the implementation of inspiring character values.

Inspirational Experience Ideas

Inspirational characters are formed through an inspiring experience. Research conducted by Hendriyani et al. (2021) obtained an idea of an inspiring experience based on the emergence of inspiration that is usually experienced by a person to create an innovation. 125 respondents, consisting of students, alumni, lecturers, and education staff had undergone inspirational experiences in the medium category. The table below shows that the average level of inspirational experience is 141.461 which is in the cutting-off percentile of 40 to 60. Each dimension (self-focus, other-focus, achievement-focus, emotion-focus, and external-focus) also has a mean in the medium category, namely at the 40-60th percentile. Fakhruddin et al. (2017) explain that the sign of an individual having a positive character is shown by the individual consistently doing inspiring actions in every opportunity they have. The implementation of inspirational values can be seen in four stages, from not yet visible, beginning to be visible, starting to develop, and becoming a habit.

Four activities (lectures, research, social services, and relationship building) were carried out by lecturers in implementing inspiring values. One of the main responsibilities of lecturers is to give their knowledge to their students. Lecturers must also master other competencies in building student character as the nation's next generation by being role models during the teaching and learning process. A character can be built starting from the implementation of inspiring values. Lecturers, as role models, have the opportunity to build and develop the inspiring character of students.

Table 1. Overview of Inspiration

	Self-focus	Other-focus	Achievement-focus	Emotion-focus	External-focus	Total Score
Valid	125	125	125	125	125	125
Missing	0	0	0	0	0	0
Mode	51.000	24.000	35.000	21.000	22.000	142.000
Median	51.000	23.000	31.000	18.000	21.000	142.000
Mean	49.744	22.320	30.640	17.520	21.192	141.416
Std. Deviation	8.323	4.184	3.541	3.177	3.877	16.352
Min	19.000	5.000	19.000	8.000	10.000	91.000
Max	63.000	28.000	35.000	21.000	28.000	175.000
20th percentile	43.000	20.000	28.000	15.000	18.000	128.000
40th percentile	48.000	22.000	30.000	17.600	20.000	139.000
60th percentile	53.000	24.000	32.000	19.000	22.000	145.400
80th percentile	57.000	26.000	34.000	21.000	25.000	156.000
Sum	6218.000	2790.000	3830.000	2190.000	2649.000	17677.000

This data indicates that the average implementation of inspirational character values is starting to develop. This is indicated by the experience of inspiration which is in a moderate condition. Inspirational experiences can be sourced from both internal and external sources, the higher the frequency and intensity of its occurrence, the higher the implementation of inspiring behavior will be (Thrash & Elliot, 2003). These sources can be self-focus, others-focus, achievement-focus, emotion-focus, and external-focus (Jones et al., 2014). Digitization, the development of information technology, and inclusive education are challenges that need to be faced through various innovations. Thus, each individual will get a proper education according to their needs. The role of education scientists (i.e. academic community in the field of education) needs to develop through various inspirational experiences, either internal or external. To advance the study of inspiration, Jennings (2012) put forward three suggestions: (a) inspiration needs to be contextualized within a unified, theoretical framework from which theoretically based hypotheses can be generated; (b) concerning emotion-focus – the emotional correlation needs to be investigated empirically, and

it must be meaningfully distinguished from emotions involving similar characteristics (i.e. elevation, awe, admiration); and (c) a theory-based definition of inspiration that explains how the emotional component needs to be established and empirically tested to further validate its uniqueness in influencing human motivation and behavior. In this case, the authors suggest carrying out further studies using the experimental method, by giving treatment in the form of increasing the experience of inspiration to the academic community. Of course, this can be started from research on the validation of the inspirational character development module, then continued with experimental intervention studies for the academic community so that the implementation of inspiring character values can be increased.

Conclusion

This paper shows how important it is to strengthen and develop to maximize the inspirational character values of each individual, especially those in the field of education because inspirational characters are not formed instantly. Internal and external sources of inspiration can be utilized and explored further as a source of direct experience, thus creating a variety of positive inspirational characters that are in line with conservation values. Further studies on inspiration measurement instruments need to be expanded to make it more clear in evaluating the success of the program related to the value of inspiring characters in a conservative insight.

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CHAPTER 15

Collaboration of School Counselors with Conservation Values

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Abstract

Collaborative competence is the main foundation that must be possessed by school counselors to accomplish and increase the effectiveness of the counseling guidance services provided to students. Taking refuge from the effects provided by Era society 5.0, both technologically and ideologically, it is crucial to instill conservation values as the first step that a counselor can perform in partnering with parties who support guidance and counseling activities. Specifically, this chapter discusses conservation values, including being inspirational, humanist, caring, innovative, sportsmanlike, creative, honest, and fair. This paper offers the importance of collaboration that prioritizes the competence of school counselors in partnering with parties without any barriers that prioritize conservation values.

Keywords: collaboration, school counselors, guidance and counseling, conservative

Introduction

This section will present the collaboration of guidance and counseling teachers in schools. This chapter consists of 3 main parts. The first section explores the concept of conveying conservation values; the second part examines the collaboration of school counselors; the third section discusses the internalization of conservation values in school counselor collaboration services.

The collaborative competence of counseling guidance teachers today provides progress and effectiveness in assisting students. The important role of counseling guidance teachers is to promote, facilitate, and advocate for successful collaboration with parents/guardians and ASCA community stakeholders (2010). Guidance and counseling teachers face various layers of society in the collaborative process, which requires extra abilities; thus, they can align themselves with their partners. To minimize obstacles in the collaborative process, counseling guidance teachers must comprehend the value of partnerships to achieve common interests (Rock et al. 2017). The primary task of guidance and counseling teachers is to collaborate with the school climate. This collaboration is the main requirement for students' success in achieving development (Perdana, 2018).

Permendikbud 111 of 2014 explains that collaboration is an important activity to be carried out in guidance and counseling services. Furthermore, the purpose of establishing collaborative relationships is to achieve common interests and for the optimal development of students from personal, social, learning, and career aspects. In establishing collaborative relationships, school counselors require skills and knowledge. Collaborative relationships can be established with the concept of a collaborative school consultant (Hidayat, 2013). Building collaborative relationships requires interpersonal competence, cooperation with all parties, and coordination with all parties (Little, 2020; Awalyaet al., 2019; Ribers et al., 2020; Dahir & Stone, 2012). Furthermore, the ability to convey ideas and accept criticism is also a skill that must be possessed by a counselor/guidance teacher. Complementing this, Awalya et al. (2020) stated that guidance and counseling counselors/teachers must possess effective communication skills to provide understanding to counselees and partners. Therefore, the counseling services provided operate effectively.

Conservation values include being inspirational, humanist, caring, innovative, sportsmanlike, creative, honest, and fair. The cultural shift towards the use of technology is extremely rapid, offering counseling guidance teachers to collaborate seamlessly with various parties. Collaboration requires skills in processing information and communication so as not to break the corridor of counseling guidance. It is important to have a collaboration model that integrates existing partnership approaches, culturally congruent strategies, and equity-focused principles (i.e., democratic collaboration, focus on power, empowerment, and social

justice) to serve students and partners with diverse cultural backgrounds (Yustiana, 2019).

Conservation Values

Strategic Plan 2020-2024. Semarang State University, as a place of knowledge with conservation value and with an international reputation, in the implementation of its education, UNNES develops and implements the following values; 1. Aspirational, 2. Humanist, 3. Caring, 4. Innovative, 5. Creative, 6. Sportsmanlike, 7. Honest and 8. Fair. These values are internalized and become the distinctive character of each community and UNNES graduates. Conservation values have always been a reference in the process of education, research, and service by the UNNES community. The distinctive character of UNNES is attached to the physical figure of UNNES and the activities of the UNNES community on and off-campus.

The Strategic Plan of the Ministry of Education and Culture of the Republic of Indonesia has set educational goals in academic units that must develop the values of (1) global diversity, (2) cooperation, (3) creative, (4) critical reasoning, (5) independent, and (6) faithfulness to God and having a noble character. Meanwhile, the UNNES Strategic Plan, which has conservation values, includes inspirational, humanist, caring, innovative, sportsmanlike, creative, honest, and fair values that are integrated into all aspects of the life of the UNNES academic community.

The first conservation value is inspirational. It is defined as the character displayed and attached to the individual to inspire others. Through this inspiring character value, it is expected that it will be able to provide an example for the wider community to act properly as an academic community with broad ideas and knowledge and is competent in the profession they are engaged in. The value of inspirational character is an individual's awareness to have a sense of caring and willingness to deliver messages, both verbally and in action, that stimulate enlightenment, creativity or effective effort, determination, and happiness to others which are reflected in attitudes and behavior in interacting with their surrounding environment. Inspirational character is manifested in individual mindsets and behavior patterns that are directed to share and instill enthusiasm and positive energy to others around them.

The second conservation value is humanist. As social beings who are inseparable from social relations, individuals are expected to be able to have a humanist character that provides harmony in relationships, respects the point of humanizing humans, and contributes to the development of a prosperous social life. Humanist character values are open to differences, tolerant, and wise in facing differences. Being a humanistic person should be ensured by the academic community. Thus, in their duties, they can collaborate with individuals from various backgrounds.

The third conservation value is caring, defined as individuals who consciously display an attitude of cooperation, are attentive to fellow individuals, and are willing to aid those who are having difficulties in their tasks. Individuals can become more useful to the surrounding environment or the wider community through a caring attitude. A caring attitude provides a way for every human being to lend a hand to anyone who needs assistance. The indicators of caring character values are sympathy, empathy, helpfulness, altruism, giving, initiative, willingness to sacrifice, not prioritizing profit, usefulness for others, and sincerity.

The fourth conservation value is innovative. Innovative character is reflected in the ability of individuals to develop new ideas that are useful for academic or non-academic purposes. Innovativeness is characterized by the discovery of a novelty by an individual to produce actions, behaviors, or even objects that can solve previous problems. The implementation of innovative character development is carried out using an educative, communicative, and exemplary approach. Indicators of innovative character values are resourcefulness, an abundance of ideas, not easily discouraged, always desiring to be the best, working to obtain satisfaction, having the will to produce new findings, able to think quickly and precisely, thinking logically, carefully, and in detail, always taking the initiative, and always willing to contribute.

The fifth conservation value is sportsmanship. Being sportsmanlike delivers the skill to individuals to advance an attitude of upholding the truth. Values and characters contained in being sportsmanlike include excellence, friendship, respect, fair play, and integrity. The indicators of the sportsmanlike value are acknowledging that other people are right, upholding the truth, having tendencies to goodness (that is, what is thought, said, and done is seen by God), believing that what is done will be rewarded, not wanting to do things that can harm others, not taking

advantage every time, able to accept defeat, an aversion to cheating, and willing to admit that one's actions are wrong.

The sixth conservation value is creativity. Creative character is reflected in the form of fluency, flexibility, originality, elaboration, and redefinition. The indicators of the creative character value are bearing much sense, having many ideas, not being easily discouraged, being certain that what is proposed is good and right, thinking from all points of view, paying attention to the process, being able to think quickly and precisely, respecting others views, always taking the initiative, and delivering the best.

The seventh conservation value is honesty, a character that can reflect individual attitudes in every word conveyed, in line with what is done. An honest character can heed and maintain self-integrity in an academic community to uphold honesty, especially in carrying out tasks. The indicators of the honest character value are: to say what is, being sportsmanlike, not hiding any facts, being certain that what is thought, said, and done is witnessed by God, being certain that what is done will be rewarded, intolerance to negative actions, is not two-faced, cares about other people's fate, ashamed when doing bad deeds, and not having the soul of beggars.

The eighth conservative value is fairness; fair character is manifested in the form of non-discriminatory behavior, impartiality, not self-centered, deciding based on provisions, prioritizing obligations, being able to maintain a balance between rights and obligations, being consistent, accepting whatever is decided, accepting any consequences of what has been done, and weigh things before deciding.

The importance of values has become an awareness for academics on the Semarang State University (UNNES) campus because values are a part of the whole that forms the character which will be manifested in the form of behavior (Saddam et al., 2016). Therefore, these values are formed and packed in one vessel, known as the conservation value. Inspirational and humanistic values are part of the conservation values instilled in counseling students as future counselors. This value will later become a provision for them, especially to develop the profession they are involved in (Saddam, 2019). When values have been internalized within and become a character for prospective counselors during their education, the values will allow them to love and develop their profession later to become better professional counselors (Saddam et al., 2016).

Collaboration of School Counselors

Collaboration of guidance and counseling services is a process of interaction between counselors and school principals, teachers, and student guardians to socialize the service program that will be implemented. The purpose of joint activities is to achieve common interests for the optimal development of students from personal, social, educational, and career aspects (Awalya et al., 2020). In building collaborative relationships, school counselors require skills and knowledge. Collaborative relationships can be built with the concept of collaborative school counselors (Hidayat, 2013). Building collaborative relationships requires interpersonal competence, cooperation with all parties, and coordination with all parties (Spandagou et al., 2020; Stone & Dahir, 2015). Ongoing joint activities can facilitate the implementation of guidance and counseling services, i.e., the ability to provide information following the times' needs and objectives.

The era of Society 5.0 is the concept of utilizing human-centered technology. This era brought many modifications to counseling services. These modifications affect the collaboration process with partners. School counselors need competence and interpersonal skills to inform guidance and counseling service programs (Hendrik & Elmansyah, 2018). Many collaboration models have been developed: 1) Community, Administrators, Students, Teachers, and Technology (CASTT) model (Dahir & Stone, 2012); 2) Collaborative Inclusion Model (Clark & Breman, 2009); and 3) Collaborative Culturally Competent Schools (Simcox et al., 2006). Furthermore, the uniqueness of the school culture and technological developments are important to master the appropriate collaboration competencies.

The Community, Administrators, Students, Teachers, and Technology model is a collaboration model that aims to optimize the potential of students (Awalya et al., 2020). School counselors collaborate with administrative officers, students, teachers, and technology experts. In general, the implementation of collaboration is the counselor delivering the guidance and counseling program and requesting support in its implementation. Specific implementation with administrator staff is the administration of student data and the assistance of student data storage. Collaboration with teachers is carried out to share information, transfer cases (referral), implement remedial programs, and create comfortable

learning conditions. Collaboration with the guardians of students is carried out to gain support for school programs. The expected forms of support are financial, tutoring, mentoring, and granting permission to run the program. Collaboration with students and the community is carried out to implement guidance and counseling programs. The student's role is to participate in the implementation of services actively. The role of the community is to support the implementation of the program. For example, the industrial internship program is a motivator for micro, small, and medium enterprises.

The collaborative Inclusion Model is a collaboration model that aims to develop guidance and counseling programs according to the needs of students by implementing specific stages (Awalya et al., 2020). The first stage is planning, the second stage is application, and the third stage is program evaluation. The stages can be described as follows: 1) Informing the guidance and counseling service program to teachers, administrative staff, and students' guardians. 2) Identifying needs by requesting consideration from teachers, administrative staff, students' guardians, and students. 3) Preparation of program designs based on needs and socializing them to earn support. 4) Implementing the program plan into a guidance and counseling services program and modifying it as needed. This step includes infusion through peer tutors/mentors for ongoing care, the final stage ((5) Evaluation), and monitoring of interventions. School counselors conduct audits and write reports on program implementation and recommendations for further activities.

Collaborative Culturally Competent Schools Model is a collaboration model that aims to build cooperative relationships with stakeholders to provide services to students, guardians of students, and the community. The purpose of building relationships focuses on the development of learners (Awalya et al., 2020). The forms of collaborative activities are 1) Student-centered interventions. Guidance and counseling services facilitate students to succeed in mastering learning materials, develop their potential to the fullest, and be able to plan careers and make career choices consciously through individual intervention, small groups, and counseling; 2) Family strengthening. Guidance and counseling services to facilitate students by strengthening the role of the family. Guidance and counseling services provide information regarding school curricula, assessment programs, and channel interests and talents; 3) Consultation with colleagues. Guidance

and counseling services facilitate school counselors, administrative staff, and teachers' professional development—for example, workshops and seminars to create competitive practice and educational strategies; and 4) Utilization of community resources. Guidance and counseling services to establish cooperation with various parties to improve school programs. For example, industrial practices and the procurement of school uniforms. Collaborative competence requires counselors to have interpersonal skills to describe guidance and counseling programs.

Internalization of Conservation Values in Collaborative School Counselors

Counselors are the main subject in the development of the counseling guidance profession. Therefore, in addition to being performance-oriented, the counselor's professionalism is also oriented to the counselor's personality, which is an important value considered to support professionalism in implementing guidance and counseling programs in schools. Humanistic and inspirational values, as explained in the previous sub-chapter, have a positive impact on the skills of professionals in carrying out their duties. School counselors as professionals are highly recommended to develop and prioritize humanist and inspirational values, especially in school guidance and counseling services (Awalya et al., 2021). The results of research findings (Awalya et al., 2021) are the relationship between humanist and inspirational values within the counseling guidance ecosystem (R: $0.534/p<0.005$). These findings can be interpreted that school counselors have a positive relationship between humanist and inspirational values. These findings support and influence school counselors' performance in collaborating with their partners.

Humanist and inspirational values align with the results of experimental research conducted by Kuprina et al. (2015). Regarding the influence of humanist and inspirational values on an environment in higher education, this study explains that these two values have a significant role in developing the character of students and lecturers in higher education. Thus, humanist and inspirational values become better when these two values become part of the character of counselors in the school environment, especially in carrying out collaborative efforts with stakeholders, subject teachers, parents, community leaders, and other professionals.

Collaborative services require school counselors to build relationships with people who support the school's guidance and counseling program. It is explained that counseling services cannot operate optimally if school counselors lack collaboration (Isari, Efendi, & Suhaili, 2017). Collaboration is a basic competency of school counselors, which requires counselors to behave and act following the guidance and counseling code of ethics. What would transpire if the school counselor does not heed the code of ethics clearly stated in the regulations? To implement the collaboration that requires the applicable code of ethics, counselors ought to instill values that can support the counselors' professionalism in schools.

There are eight values that make up the conservation values, as explained in this chapter's first sub-chapter, i.e., inspirational, humanist, caring, innovative, sportsmanlike, creative, honest, and fair. Internalizing the eight conservation values is a way to develop competence for school counselors, especially in displaying attitudes and behavior when establishing relationships with the parties concerned in the collaboration process. The following describes how to internalize conservation values in the collaborative service process carried out by school counselors: 1. The inspirational character value. School counselors display an attitude of action that can deliver an impression in the collaboration process carried out with stakeholders, parents of students, and other professionals. For example, counselors provide ideas that can open partners' thinking during collaboration. Counselors can provide positive energy, which stimulates partners or students through verbal or nonverbal motivation to show knowledge, and an optimistic attitude in achieving collaboration goals either to alleviate, develop, prevent, or maintain implemented collaboration services. 2. The humanist character value. School counselors tolerate all kinds of differences in each individual involved in the collaboration process. Differences that occur can be in the form of differences in ideas, points of view, or believed values. Effective counselors can form cooperation within existing differences for the sake of mutual interest in achieving the goals of collaboration services. Counselors display realistic, logical, ethical, and aesthetic behavior, which is defined as being able to realistically apply the goals of collaboration services; not presenting excessive expectations to the individuals involved; as well as being able to realize one's own ability to not force oneself to be involved in alleviating student problems that are beyond their skill set and/or ability

By mastering the two values of conservation character (inspirational and humanist), counselors can create collaborative services full of care, think innovatively, behave with sportsmanship, have righteousness, promote honesty, and behave fairly, both verbally and non-verbally in each individual involved in the collaboration. Inspirational and humanistic characteristics are the basic skills of school counselors that must be mastered to support the success of the collaboration services implemented, which will then embody other character values that can increase the effectiveness of the services provided. To facilitate understanding of the previous description, here is a picture of the collaborative process of school counselors by internalizing conservation values.

Figure 1. Collaboration of School counselors based on conservation values. (Awalya et al., 2021)

School counselors are professionals who possess character values qualified for success in achieving the goals of guidance and counseling in schools. The counselor's character positively impacts every aspect of guidance and counseling. Substantially, a counselor empowers students to be oriented towards individual development and moralistic character. According to The American School Counseling Association (1998), the task of a school counselor is to "assist students in becoming positive and self-directed in their lives and education and in striving toward future goals." Facilitating

students in achieving goals is the task of counselors. Counselors have a crucial role in student development and carry many student expectations to optimize self-potential. Counselors with character and value can ensure the expectations of students and significant others through planned and implemented guidance and counseling programs.

Counselors are expected to be able to heed the values of conservation character that have been described previously. If they are unable to heed the values, it will potentially hinder the process of guidance and counseling services – in this case, collaboration. It is said that because, in collaboration, counselors collaborate with other individuals. It does not rule out the possibility of encountering different backgrounds. Professionalism and personality competence are important things to consider as the determining factors for the success of the collaboration process. Khaldun (2016) stated that understanding the space and professional responsibility will have significant implications for the quality of the implementation of guidance and counseling services.

This chapter exhibits the potential for the importance of the conservation character values of UNNES to be internalized in the guidance and counseling program in schools as a manifestation of the professionalism and competence of school counselors. Counselors who consciously internalize the values of the conservation character into themselves and are realized in responding to others provide outputs that follow collaborative services' expectations and goals. Therefore, it is essential for school counselors, especially in collaboration services, to behave and act according to the conservation values of UNNES, i.e., inspirational, humanist, caring, innovative, sportsmanlike, creative, honest, and fair.

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CHAPTER 16

Inclusive Education: Expectations and Challenges in Early Childhood Education Institutions

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Abstract

The success of inclusive education is affected by the perceptions and attitudes of teachers towards children's diversity, including children with special needs, as well as the extent to which teachers can create an adaptation process to accommodate the differences that each individual possesses. If teachers have high or very good knowledge and understanding of inclusive education, they can plan and manage learning according to the child's needs. Professional development for teachers in inclusive classrooms requires an educational process in the form of training. Inclusive education in early childhood education institutions is one part of educational services in providing early intervention for the growth and development of children with special needs. However, many things hinder the implementation of inclusive education, especially in early childhood education institutions, including teachers' lack of knowledge and skills in dealing with children with special needs during the learning process and lack of support from professionals as collaborative partners in the implementation of inclusive education. This chapter will provide an overview of the implementation of inclusive education (its expectations and challenges) in early childhood education.

Keywords: Inclusive Education, Expectations and Challenges, Early Childhood Education.

Introduction

As one of the countries with active involvement in the world of education, Indonesia has made a statement of support for inclusive education in the form of the Bandung Declaration, which was compiled at the National

Workshop on August 11, 2004. One of the points is to ensure that children with special needs have access to education to shape them into a reliable future generation and create a supportive environment; thus, children's potential and uniqueness can develop optimally (National Workshop, 2004). The implementation of inclusive education is inseparable from policies related to inclusive education itself, which until now is still a matter of controversy in school institutions. In general, many school institutions still feel unprepared to accept the diversity amongst children and children with special needs. The school proposes various reasons for "rejecting" children with diverse backgrounds from cultural, racial, religious, socioeconomic backgrounds, and special needs, which should still be performed in regular schools.

The government's efforts to provide opportunities for children with diversity and special needs to obtain an education in traditional schools do not stop there. The implementation of inclusive education in Indonesia is ensured through Permendiknas RI No. 70 of 2009 Article 3 paragraph 1, which states that every student with physical, emotional, mental, and social disorders or has the potential for intelligence, or special talents has the right to participate in inclusive education in certain educational units according to their needs and abilities (Menpen, 2009). The legal basis for inclusive education in Indonesia is exceptionally strong and adequate. However, there are still many obstacles and barriers faced by educational institutions in its implementation.

Through the Directorate of Early Childhood Education Development, the Directorate General of Non-formal, and Informal Early Childhood Education, the government announced that early childhood education would be conducted nationally. 'Education for all' has become part of implementing early childhood education programs. Education services for early childhood are expected to provide opportunities for all children regardless of their condition. Therefore, they can acquire equal rights in the education and learning process. Early childhood education institutions, which are the foundation of children's education, should also be able to provide opportunities for every child to receive learning services according to the needs of children, especially those with special needs.

Inclusive education in early childhood education is part of educational services for every child, especially in early childhood. Although formally, early childhood education has not yet become the basis for inclusive education, the

idea that every child also has the right to receive early education has become the basis for providing services for every child from various backgrounds and different aspects. As with primary and secondary education, early childhood education is part of implementing inclusive education. The research results by Sunardi et al. (2011) show that in terms of institutional management, most schools have developed strategic plans (for inclusive programs), legally appointed coordinators, involved several related groups, and held a series of regular coordination meetings. However, there are still many schools that have not restructured their organizations in the process of managing the inclusion system (Sunardi et al., 2011). Management of inclusive education at the level of early childhood education (PAUD) is still not the main focus of implementing inclusive education in Indonesia.

This chapter is divided into two parts. The first part presents the concept of early childhood education. The second part is a review of the concept of inclusive education. The third part, the core of this chapter, discusses the expectations and challenges of implementing inclusive education at the early childhood level. The data in this section were extracted from research reports conducted by Diana (2021).

Early Childhood Education

Improving the quality of human resources through education has become the main subject for the Indonesian people. This has been stated in the Amendment to the 1945 Constitution, written in Article 28 B paragraph 2, stating that every child has the right to survive, grow, and develop and has the right to protection from violence and discrimination. Article 28 C Paragraph 2 states that everyone (including children) has the right to develop themselves through fulfilling their basic needs, has the right to education and benefits from science and technology, art and culture to improve the quality of their life and for the welfare of mankind. The next article explains that every person (child) has the right to develop through fulfilling their basic needs and that every child has the right to receive education and benefits from science and technology, art, and culture to improve the quality of life and for the welfare of mankind. This shows that every citizen is guaranteed to acquire educational services; thus, they can have and actualize the abilities they obtain for self-development, their welfare, and the welfare of the nation and state.

The National Association for the Education of Young Children (NAEYC), as an organization of educators, defines early childhood education as a program provided for children aged 0-8 years who have the potential to grow and develop according to their individual needs (Suryana, 2014). According to Law no. 20 of 2003 Article 1 paragraph 14, early childhood education is a coaching effort aimed at children from birth to the age of 6 years, which is carried out through the provision of educational stimuli to assist physical and spiritual growth and development for children to have the readiness to enter further higher education.

Fundamentally, early childhood education must include scientific aspects that can support life and are related to child development. The scientific concept of early childhood education is isomorphic, which means that the scientific framework of early childhood education is built from interdisciplinary science, including psychology, physiology, sociology, children's education, anthropology, humanities, health and nutrition, and neuroscience (the science of the development of the human brain) (Sujiono, 2009). In addition, early childhood education programs must be arranged systematically, meaning that sequential development materials are classified according to the program for developing children's potential (Diana, 2017).

While the law above states early childhood education institutions should provide educational services for children aged six years and younger, the reality is not all early childhood education institutions can accept children with special needs. Early Childhood Education has an important role in shaping children's character who is moral/noble, creative, innovative, and competitive. Early childhood education is not only about increasing knowledge and skills related to scientific fields but more profoundly preparing children to be able to master various challenges in the future. This applies to all children who have the opportunity to obtain an education, including children with special needs.

Inclusive Education

Education for children with special needs is inseparable from other general education. The concept of thinking for children with special needs is broadly divided into two groups, i.e., medical thinking and social thinking

(Yusuf et al., 2018). It is expressed that the concept of medical thinking holds that education for children with special needs must be separated from general education to facilitate the provision of interventions, be it medical, social, psychological, or educational. Meanwhile, the concept of social thinking is that education for children with special needs is inseparable from general education.

The history of special education, the concept of inclusion, and the inclusion movement mostly originated from Western countries, which were then exported to Eastern countries. Missionaries first recognized the need to educate children with disabilities by establishing many schools for disabled children. Conversely, several scholars argue that eastern countries had started educating children with disabilities before Western countries made such efforts (Miles, 1997; Eleweke & Rodda, 2002; Johnstone & Chapman, 2009). This indicates that the opportunity and involvement of children with special needs in education are not new. The community's concern and acknowledgment, which originally stemmed from the religious sphere, can be widely accepted by other educators.

The concept of inclusion was developed in Western countries with democratic systems. Montessori, one of the early childhood education leaders who lived in the 19th and 20th centuries, initiated an educational process with an inclusive system. The learning developed by Montessori places children with special needs jointly with other children. Montessori developed the first inclusive education model in early childhood education. Various debates regarding inclusion in education have become a very important issue. The diversity and presence of children with special needs have not been a top priority. Discrimination against certain groups, especially for children with special needs, becomes a separate education model from children's education in general. However, over time, the evolutionary process in the inclusive education model provides an overview of the current implementation of education.

Oswald (as cited in Vislie, 2003) stated that inclusion is a process in which schools seek to accommodate all students as individuals in an inclusive and supportive community. It is also argued that inclusion is a process of addressing and responding to the diverse needs of all children, youth, and adults through increasing participation in learning, culture, and community, reducing and eliminating exclusion within and from education (UNESCO, 2009).

The statement above shows that inclusion is a process of accepting the diversity that every individual holds without exception to be able to be involved in an institutional, educational community. Furthermore, Braunsteiner et al. define inclusion as the fundamental right of all children to participate and contribute fully, no longer a matter of student placement but a matter of the school culture dedicated to the participation of all learners (Braunsteiner et al., 2002). Another thing about inclusive education is that there is a form of full participation and involvement of children with various diversity in the same class as other children.

Expectations of Implementing Inclusive Education in Early Childhood Education

Inclusive early childhood education is a form of education that unites children with special needs with regular children to learn for children under the age of 6 years. Education programs at inclusive schools must be modified to meet the special needs of children (individual teaching programs) alongside general programs in which other regular children can participate. It is not merely about placing children with special needs in regular classes and allowing them to swim or drown on their own, but how they obtain educational services as early as possible and gain stimulation; thus, their development can be more optimal. Early childhood education institutions can be a means to detect early barriers or disturbances that occur in early childhood, which parents may not be able to do at home.

In addition, early childhood education is a means of play for children with special needs, a means for socializing and learning to respect one another. Education is the basis for tolerance in children, where they learn about differences and strengthen each other against their weaknesses and strengths. Every inclusive education, including early childhood education, is not only limited to accommodating children in the classroom but also providing the best quality education for all children, including participation, attendance, acceptance, and achievements of each child (Windiarti & Adderley, 2015). For this reason, a common understanding is needed regarding implementing inclusive education, especially in early childhood education, which requires special assistance in providing education and learning services for children to grow and develop optimally according to their needs. This chapter participates in the framework of

early childhood education institutions in realizing the quantity and quality of inclusive education implementation; thus, all early childhood education institutions are open and able to provide the best service programs for every child. In addition, this chapter also contributes to the development of professionalism for teachers in early childhood education institutions in safe, comfortable, and enjoyable education and learning process through play activities for children with special needs at an early age.

The importance of professional development is nowadays a necessity for every teacher who teaches inclusive classes. In their research, (Rabi & Zulkefli, 2018) confirmed that teaching children with special needs requires the competence of a teacher who can teach in inclusive classes. A paradigm shift by teachers is particularly much needed in implementing inclusive education; thus, the needs of children can be fulfilled optimally. Teachers are expected to have the knowledge and skills to modify learning tools specifically according to the identification of children with special needs to ensure optimal growth and development for the children. Knowledge and skills of teachers in managing an inclusive learning process will have an impact on the teacher's positive attitude towards success in the learning process in inclusive classes, where each child has their own respective diversity and specificity The increasing professionalism of a teacher will affect how a teacher can take action in the learning process (Zulfija et al., 2013).

Apart from developing teacher professionalism, another key element in implementing inclusive education is the communication process between parents and teachers. Communication plays an important role in any changes that occur in the inclusive education process. Effective communication involves conveying information in a way that parents can understand. Collaboration in implementing inclusive education involves many parties, including parents, special assistant teachers, teacher assistants, principals, and ancillary professionals (professionals for complementary services), including physical therapists, speech and language pathologists, mobility and behavior management specialists (Friend & Cook, 1993). From several existing collaboration teams, peers significantly influence the collaboration process in the classroom. The existence of tutors or mentors from peers not only provides support for children's skills but also fosters a tolerant attitude of children in inclusive classes.

For the implementation of inclusive education to be more effective, the government must be able to allocate funds for the procurement of teaching and learning resources or materials for children with special needs (Okongo et al., 2015). This means that financial support is extremely necessary and supports the process of providing education because the need for supporting facilities and infrastructure is distinct from education in general, which adapts to the needs of each child with special needs.

Challenges of Implementing Inclusive Education in Early Childhood Education

Essentially, the learning process for children with special needs in early childhood education does not emphasize the academic aspect. Instead, it emphasizes how children can interact socially with their peers and have life skills in the form of independence in carrying out their daily activities. Several studies have described that the lack of adequate teacher preparation for inclusive practices causes teachers to become powerless and unable to provide a curriculum that meets the learning needs of children with special needs (Agbenyega & Klibthong, 2015). It is challenging for teachers of Early Childhood Education to design a learning process that meets the needs of every child, including children with special needs. Inadequate curriculum support for the needs of early childhood has also not been standardized (Dhamayanti, 2015). It is not only about placing students with special needs in the main classroom but also about how a teacher plans the quality of education for all children, including their attendance, participation, acceptance, and achievements that have been made by children with special needs (Windiarti & Adderley, 2015).

Current programs in early childhood education have not been able to provide maximum facilitation, which can support children with special needs in the learning process in inclusive classes. As a form of educational service at the preschool level, early childhood education lays the foundation for optimizing growth and development. Education delivered in early childhood will provide experience and greatly influence children's physical and mental development. Early childhood intervention is widely accepted as an effective way to prevent learning difficulties and promote the healthy development of children with special needs (Baglama & Demirok, 2016).

The results of the author's interview with teachers who teach in inclusive classes stated that teachers have minimal understanding of the concept of inclusion, where the view of inclusion is only limited to the fact that there are children with special needs in the classroom. The teachers stated they did not have enough experience dealing with children in inclusive classes. Children involved in learning have different specificities and levels; thus, the teachers are yet to be able to prepare for the appropriate needs. Learning activity programs for children with special needs are similar to children in general. Teachers' attitudes and skills in dealing with children with special needs in inclusive classes also influence teachers' perceptions of implementing inclusive education in their institutions.

The data above is reinforced by the results of a survey conducted by the author. It shows that educators in some early childhood education institutions, 83% (n=88) of teachers stated that they were open to inclusive education, while other institutions (or 17% (n=15) of institutions) stated that they did not accept inclusive education. Institutions that claim to be open to inclusive education are institutions that are ready to accept children with a wide variety of children from various cultural backgrounds, economic statuses, and children with special needs. The survey results also show that 54.37% (n=56) of teachers lack skills in handling and providing interventions for children with special needs. It can be stated that new teachers are only within the limits of accepting and accommodating children with special needs. Teachers teach with minimal knowledge in dealing with these children. Teachers who teach in inclusive classes also do not understand what is needed for children with special needs they encounter (Diana, 2021).

Facts from research results in several countries that have implemented inclusive education found that concepts about inclusion comprehended by teachers, the knowledge and skills of teachers in supporting children in inclusive classes, and teachers' expertise in the inclusive learning process are still lacking (Barbara & Joyline, 2014; Fleig et al., 2015; Sylod, 2016). Research related to the implementation of inclusion in elementary to high school or equivalent institutions in Indonesia by referring to 9 dimensions found that in the learning dimension, only 15% (n=12) from 82 institutions had their learning quality in the very good category (Yusuf et al., 2017). This proves that many teachers still cannot provide maximum learning services in the learning process.

In addition, teachers who are placed in inclusive classes lack professional development in the form of training or teaching training in dealing with children with special needs in their classes. At the same time, one of the successes of implementing inclusive education is determined by teacher resources to participate in various training. Therefore, teachers are expected to handle children better and support their development (Ajodhia et al., 2010; Obeg, 2012; Mukhopadhyay et al., 2012). The results of the SWOT analysis on the implementation of inclusive education in Indonesia itself have weaknesses, including that the implementation of inclusion for children with special needs still requires attention in terms of curriculum, learning planning, and the existing facilities in each school institution are not yet maximized (Anshory, 2018).

The professional development of teachers is at the center of all plans for improving the existing learning system in school institutions. The results of a survey presented in the "Report for UNICEF Rights, Education and Protection Project" (REAP) in professional learning in 2012 show that nearly all teachers support the need to improve training systems to advance inclusive education in their context. There is a strong agreement to promote inclusive education for individuals with disabilities. However, most responses indicate that inclusive education does not include adequate teacher training (Pinnock, 2012).

Professional development support for early childhood education teachers in inclusive education in Indonesia is very much needed. One of the recommendations of previous research is conducted by Sunardi et al. (2011) titled "The Implementation of Inclusive Education for Students with Special Needs in Indonesia." He stated that the reason schools had not made modifications in the learning process for children with special needs is because of personnel who do not have sufficient competence to enact such changes. Therefore, training is needed for principals, teachers, and other school personnel involved in the school's education system. The teacher component is the main part of implementing the education and learning process in inclusive classrooms.

The basic problems faced by teachers in early childhood education institutions who have admitted children with special needs based on the results of interviews and observations made by researchers include: (1) When children are first admitted to institutions, teachers did not receive information about the children's growth and development from parents.

New teachers find children experiencing developmental barriers after a long learning process. This shows that parents' openness to their child's condition is still very lacking because some parents are embarrassed to communicate the condition of their child's development. In addition, many teachers have not carried out early developmental assessments and early detection of growth and development in their students and do not understand how to accomplish it. (2) The problem in the first point has an impact on the management of learning in the classroom, where some of the teachers interviewed stated that they were confused about providing materials/activities for children with special needs in their class. There were no particular activities or programs and even special times for children to maximize the development that has not been achieved. For example, physical exercise activities are limited to movements and songs, not providing children the opportunity to practice repeatedly. In addition, teachers rarely even take a personal approach and provide treatment assistance to train communication skills for children with special needs in class. (3) The process of assessing and reporting growth and development is the same for all children; thus, children with special needs often gain undeveloped results in all aspects. In their research, Klibthong & Agbenyega (2018) reinforced their findings that the practice of implementing inclusive education in preschools has various obstacles and barriers, including lack of learning time, lack of knowledge, and lack of teacher resources who can provide services for children with special needs.

An important part of the implementation of inclusive education which is currently still a challenge and has not been well established is the collaboration with related parties. Collaboration must be inclusive, where relationships are established between classroom teachers, special education teachers, principals, administrators, parents, professionals, and supporting professionals (Stanovich, 1996). Several studies have discovered enormous benefits from the collaborative process in inclusive education, where teachers can learn to observe each other. They have involvement in collective problem-solving and sharing experiences. Partner support that is integrated with early childhood education services for special needs becomes a system that is integral in providing intervention services in early childhood education institutions (Florian, 2017; Adams et al., 2013; Billingsley et al., 2009).

In addition, for the implementation of inclusive education to be more effective, the government must be able to allocate funds for the procurement of teaching and learning resources or materials for children with special needs (Okongo et al., 2015). This means that financial support is extremely necessary and supports the education process because the need for supporting facilities and infrastructure is different from education in general. Therefore, a needs analysis is needed, and additional policies related to operational funding and infrastructure facilities are needed to design the expenditure budget at both the central and local government levels.

Closing

Inclusive education is an education that is intended for all children, without exception for those who have obstacles and other developmental disorders. It is important to change the view of the educational process that is prepared to accept every diversity of children. Acceptance and involvement of all parties to implement inclusive education must go hand in hand. The components that support the success of inclusive education are not only the presence of a teacher, but the involvement of parents in the inclusive education process is the main and most important part of the success of this program. In addition to children with special needs who require attention and assistance, parents are also the first to need attention and support with their child's situation and condition. The implementation of inclusive education in early childhood education as part of education policy is a concern, where early childhood education is the initial foundation and provides early intervention for children with special needs. The limited knowledge and skills in teaching children with special needs in inclusive classes complicate teachers' plans and activities for children with special needs. They require much support to improve their professional skills. Ideally, a teacher should be able to meet the learning needs of every child in the class, including children with special needs. The study results prove that children in the inclusive class have not received full service. A teacher's learning services are outlined in lesson plans that facilitate the needs of children with special needs. Financial support from the central and local governments is especially necessary. It supports the process of providing education because the need for supporting facilities and infrastructure is distinct from education in general.

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CHAPTER 17

Single Session Brief Counseling: What are the Prospects for Its Implementation for School Counselors in Indonesia?

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Abstract

In realizing professional guidance and counseling services in schools, school counselors are expected to have mastery and implement certain intervention strategies effectively and efficiently. Empirical studies show that school counselors in Indonesia in implementing counseling services often experience time constraints and the complexity of the counseling process procedures. Thus, the services provided are considered less professional. Single-session brief counseling is one of the more efficient strategies in terms of time and relies on the counselees' internal resources and strengths (strength-based) when facing several life problems. The results showed that the Single-session brief counseling strategy was effective in aiding in solving problems in educational settings such as academic, career, study, and social problems. This chapter will conceptually present the paradigm of strength-based intervention and single-session brief counseling as alternative counseling strategies that school counselors in Indonesia can use.

Keywords: Single-Session Brief Counseling, Strength-Based Intervention, School Counselor

Introduction

In the educational setting of schools, to assist the problem-solving process encountered by students, one of the activities carried out by school counselors is to provide counseling services to students. In realizing professional counseling services in schools, counselors are expected to be skilled in mastering and applying certain strategies effectively and

efficiently, focusing on students' context and personality. In other words, the counselor must use the available time effectively and efficiently, especially when carrying out special counseling interventions with certain approaches (Mulawarman, 2014). However, it is common that the time on a counseling approach to assist students in solving problems feels insufficient (Taathadi, 2014). The impact of insufficient time and several procedures on a particular counseling approach gives the impression that the counseling carried out is unprofessional.

Therefore, to conduct individual counseling for students, counselors should examine more efficient and effective approaches (Charlesworth & Jackson, 2004; Taathadi, 2014; Mulawarman, 2014; Nugroho et al., 2018). One approach to effective counseling in terms of time is using brief counseling through a strength-based paradigm. As we know, the counseling approach with a power-based paradigm is distinct from other traditional counseling approaches. This can be seen from the approach framework for solving problems. Counseling service using the traditional approach tend to be time-consuming because it has to explore the causes of the counselee's problems. In other words, it's problem-centered (Saputra & Widiasari, 2017). This follows the opinion of Yeung (1999), who explained that the basic premise of this strength-based approach is that the counselor does not need to discover the cause of the client's problem to build a solution.

Intermediate counselors have a percentage of time providing responsive services (including counseling) of 15-25%. The time provided is limited compared to the other two services, i.e., basic services and individual planning (Diknas, 2007). In addition, school counselors in Indonesia are responsible for providing guidance and counseling services to students with a ratio of 1:150. This means that one counselor is responsible for 150 students in the school. The guidelines for implementing guidance and counseling (*bimbingan dan konseling* in Indonesian) through formal education state that counseling services are not specifically scheduled because of their incidental nature or reports from class teachers and homeroom teachers and are curative.

According to Sexton (as cited in Akos, 2004), not much empirical evidence supports the practice of counseling using one type (model) with another. Several meta-analytic analyzes reviewed the research results and showed that the implementation of counseling in schools generally had positive results. In other words, the results of counseling carried out for

individuals and groups can support students improve achievement, self- and social adjustment, self-esteem, self-concept, improve social skills, and increase student attendance at school, career adaptability, and some positive behaviors in school (Whiston & Sexton, 1998; Borders & Drury, 1992 in Akos, 2004; Mulawarman, 2016).

In the current development of counseling approaches, a brief intervention approach or strategy is known (brief counseling). In essence, brief counseling emerged as an answer to the demands of the need for assistance services that prioritized practicality, effectiveness, and efficiency, especially in terms of limited intervention time, and centered on specific things to achieve the solution desired by the counselee (Gladding, 2009; Gross & Capuzzi, 2011; Taathadi, 2014; Mulawarman, 2014). Brief counseling is not a specific approach or a different/special model from other theories and practices but rather describes time-limited therapy or counseling by using or basing on the strengths of the counselee (strength-based), understanding the context of the present and future problem (Lines, 2006). Another thing is that the strength-based approach recognizes the unique strengths of the counselee and focuses on solving problems toward creating the desired positive future. Furthermore, this approach also offers the counselee a reason to move forward and look at the brighter aspects of the situation, focusing on a brighter future. This approach integrates counselees and counselors into the form of the management team, utilizing and combining internal resources (skills, strengths, qualities, and beliefs of the counselee) and external resources (supporting relationships, partners, family, friends, religion), which are important for the counselee's transformation process (Walter & Peller, 2013).

In this chapter, the strength-based intervention conceptual framework will be discussed successively through single-session brief counseling strategies, empirical studies related to the strategy, and the advantages and limitations of its use in schools.

Strength-Based Intervention Through Single Session Brief Counseling Strategy for School Counselors in Indonesia

What is a Strength-Based Intervention?

The strength-based approach focuses on self-determination and individual strength (Smith, 2006). This approach relies on the counselee's strengths,

especially seeing them as resilient and a resource when they are in unfavorable situations. Gelso and Woodhouse (2003) distinguished the positive process in strength-based therapy and defined the positive therapeutic relationship process as concern for the counselee's assets and strengths. Specifically, the counselee's power is divided into the conceptualization process and the therapist's determination. Another unique characteristic of this approach is that the counselee leads the change process and is outcome-centered in the individual's future set of strengths.

The strength-based approach has four stages (Scheel et al., 2013). (a) The identification process focuses on finding strengths in the counselee, building the counselee's perception and awareness of their strengths. This can be accomplished by inviting the counselee to revisit good memories to gain strength and solutions and providing reinforcements and motivation in the interview process. (b) The therapeutic relationship is the basis that must be built in the therapeutic process. Building a relationship with the counselee is based on the trust between the counselor and the counselee. Strength-oriented therapeutic relationships are carried out through an interpersonal approach to convey the counselee's strength and self-esteem by communicating the counselee's values. (c) As an agent of change, the therapist and the counselor must have faith that the counselee can change towards independence. The counselor is like a mirror that reflects the counselee's perception of his/her strength. (d) Every positive change is a constructive force for the counselee's participation in identifying strengths. The counselee's response outside the counseling session, such as the response to homework, and learning new skills and perspectives, is constructive.

In other words, there are three general stages in a strength-based intervention that counselors can use, i.e. the initial stage starts with forming a therapeutic relationship with the counselee and starting to use questions that raise strength in the counselee; the middle stage, where the counselor initiates to build change within the counselee and build a solution; and the final stage where the counselor starts to consider whether the counseling goals have been achieved and prepares to complete the counseling

Single Session Brief Counseling

Single-session counseling is not a specific intervention. The concept of single-session counseling was first articulated by Talmon (1990) and defined

as one face-to-face meeting between counselor and counselee without previous or subsequent sessions in a year. Single-session counseling also reflects a subset of brief, intensive, and concentrated interventions to address common problems in adolescents. Since it represents a brief intervention, single-session counseling is included in the brief counseling area. The term "brief" here does not refer to the short-term of the counseling session but rather focuses on the counselor's pace to achieve specific and positive counseling goals in a single session (Corey, 2013; Mulawarman, 2019). In addition, the single-session counseling detailed by Hoyt et al. (2018) includes a problem-solving, behavioral, and narrative-focused approach to realizing the single-session counseling process. Schleider & Weisz (2017) stated that the online version of single-session brief counseling showed a similar level of effectiveness to face-to-face single-session counseling.

Various models or therapeutic approaches studied by counselors, ranging from humanistic, behavioral, and psychodynamic, assume that counselors have sufficient time to assist individuals (Corey, 2013). However, this assumption does not fully reflect the reality of implementing counseling in schools. A counseling model that accommodates the demands of a limited time is needed. As an alternative to general therapy models, several models of counseling and therapy have been developed based on the limited availability of service time in schools (Amatea, 1989; de Shazer, 1985, 1988, 1991; Fisch et al., 1982; Molnar & Lindquist, 1989; Watzlawick et al., 1974). Some experts propose single-session counseling developed from some of the main approaches in psychotherapy above (Bloom, 1981; Littrell et al., 1995; O'Hanlon & Weiner-Davis, 1989).

Brief counseling views student problems as a form of continuous pattern that is maintained in a particular context. Counselors and students interact jointly in the problem-solving process. In addition, counselors and students also focus on achievable goals and successfully empower students to take control and responsibility (Bruce & Hopper, 1997). In addition, a simple intervention allows the development of individual creativity. A sense of hope and optimism must be felt in the counseling session because the use of a brief counseling context is to glance to the future, focus on solutions, and use the strengths and abilities of each student in the potential for greater support from parenting systems of family, school, and community (O Hanlon & Weiner-Davis, 1989).

The Brief Therapy Center in Palo Alto, California, uses a four-step exercise limited to ten sessions (Fisch et al., 1982; Watzlawick et al., 1974). In a study on the application of single-session brief counseling with students, counselors radically modified the counseling model by reducing the number of sessions from ten to only one session, i.e., to answer the question: 'How successful are students in achieving their goals if they (only) have one counseling session and two follow-up evaluation sessions?' The counselors believe that the single-session brief counseling approach is appropriate in a junior high school setting because it is relatively easy to learn, emphasizes problem-solving, and focuses on solving student-generated problems.

Historically, brief counseling was not a completely straightforward approach; in other words, not always short-term. In the early days, several forms of brief psychodynamic counseling could last 15 sessions or more (Bloom, 1992). In medieval times, counselors at The Brief Therapy Center (a mental research institute in Palo Alto, California) used a problem-solving approach in which sessions were limited to 10 sessions (Fisch et al., 1982). Milwaukee's Brief Family Therapy Center averages 5 to 7 sessions (de Shazer, 1988). In recent decades, this has turned into a very short series; some authors have proposed a one-session counseling model.

When using brief counseling during one session, there are four steps of implementation. The counselor: (1) assists students in determining the problem, (2) describes the solutions made by students, (3) assists students in setting certain goals, and (4) provides students tasks designed to assist them in achieving the goals that have been formulated. In this fourth step, the counselor is involved in designing interventions for the counselee (Watzlawick et al., 1974). According to de Shazer (1988), an intervention that can be done simply is to demand students to do something different, even if it is something that has never been done, foreign, strange, etc. – as long as it is not illegal, immoral, endangering themselves and others.

Capuzi and Gross (2011) suggested that brief counseling has special characteristics, which include: (1) focusing on specific and clear interventions (treatments), (2) effective use of time, (3) limitation of goals and therapeutic outcomes are clearly defined, (4) orientation to the present, (5) rapid assessment and integrating assessment in the intervention process, (6) hastening to review the frequency of therapy progress and rejecting ineffective forms of intervention strategies, (7) collaboration between

therapists and counselees is highly important, (8) is flexible and practical in the use of intervention techniques.

One of the framework models for assisting students in solving problems is through school counseling and is widely used by school counselors to deal with students, as shown by Egan (2014).
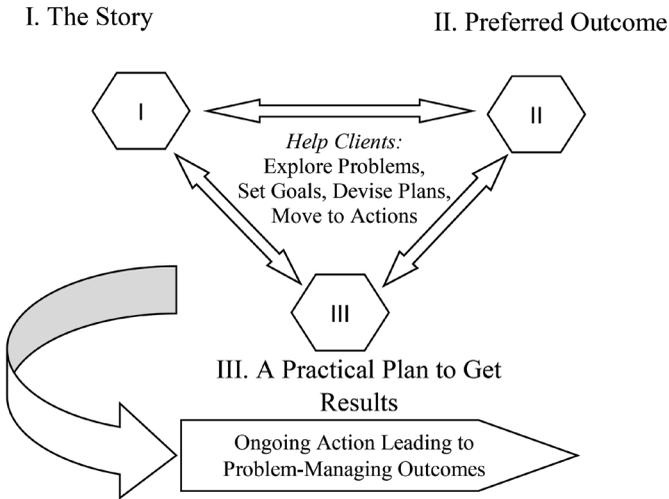
I. The Story

II. Preferred Outcome

III. A Practical Plan to Get Results

Figure 1. 3-Stage Problem Management Framework (Egan, 2014)

In its application, the framework above is a short-term method that focuses on problem-solving. In structure, the framework uses a 3-stage model by building core counseling skills: congruence, unconditional positive regard, and empathy. In this case, the three brief stages include: (1) assisting the counselee in exploring the problem, (2) assisting the counselee in formulating the desired goals and results, and (3) assisting the counselee in taking an action plan following the goals he/she has created. This approach directs the counselee to set goals and perform certain tasks to achieve change.

Meeting Counselors' Needs in Single-Session Brief Counseling Training

Research efforts on single-session brief counseling discuss the needs of counselors in providing counseling services in schools in several ways.

First, the need for school counselors regarding additional training was fulfilled with the introduction of a new model of single-session brief counseling and the techniques needed to implement it (Littrell et al., 1992). After the researchers demonstrated the single-session brief counseling model and the four steps involved, counselors practice with their students. Periodic feedback is provided by the researchers after the counselors practice applying the model. Overall, counselors are eager for opportunities to practice interesting, challenging, and innovative counseling models.

Second, the counselor's need for a short-term counseling approach is fulfilled by introducing the single-session model. Due to limited working time, counselors simply accept the practicality of the single-session brief counseling model with the assumption that a school counselor can provide services to counselees but are faced with limited time.

Third, learning about single-session brief counseling requires attention to location. In this case, school counselors are certainly more comfortable if the training is held in the school environment where they work than in other locations to keep them from experiencing anxiety. This is because it contained many aspects of counseling practicum, tests, and assessments during training. Counselors are instructed to learn new techniques and practice, record data through information sheets and audio tapes, and gain feedback from fellow counselors and trainers. These activities will certainly be more comfortable if accomplished in the setting where they work daily.

Fourth, the single-session brief counseling training activities provide a systematic instrument to assess the effectiveness of their counseling. This training provides a way for counselors to assess their counseling strengths and weaknesses. Because of student feedback, counselors quickly become aware of their student's success in achieving goals.

Professional and Personal Development of School Counselors

In various studies on the application of single-session brief counseling, counselors generally consider their participation in research projects on brief counseling as an opportunity for professional and personality development (Franklin et al., 2008). When research was conducted, counselors indicated that they noticed professional and personal development in three areas: changes in counseling styles, increased functioning as counseling teams, and positive implications for school counseling programs.

Counselors' personality changes occur since they begin to think in a new framework of brief counseling and understand their goals. School counselors did not find a difficult single-session brief counseling, but they pointed out that altering the way or pattern of counseling took time. Studying a more action-oriented approach challenged counselors to conceptualize counseling. At first, the brief counseling approach seemed a bit "less human." This means that it relatively minimizes the existence of adequate problem excavation (Gutterman, 2013). When school counselors practice setting goals and assigning assignments to clients, they find that they can maintain their counseling style. Counselors who usually focus on the counselee's feelings will find that they can still do that even when counseling is structured. The implication is that counselors become more organized and can do better follow-ups (Taathadi, 2014).

The change in counselor counseling style occurred because the single-session brief counseling training introduced new counseling techniques that did not need to collect as much background information as possible from students and because counselors learned to do a better follow-up. Counselors discovered that they counseled in a more action-oriented manner. Counselors develop a more active focus on identifying student concerns and defining positive and measurable goals chosen by students, not on the background of the problem. In addition, they argued that brief counseling has many advantages other than being more effective in using time, simpler in process, applicable, and progress can be observed (Littrell & Carlson, 2009).

While individual counseling styles were affected, counselors noted that they also increased their functioning as a counseling team. During the training, the counselors were divided into small groups, and the researcher monitored their progress. Training provides opportunities for counselors to share and solve common problems and share perceptions when discussing problems in school counseling practice (Littrell et al., 1992).

Empirical Study of the Application of Single-Session Brief Counseling

Several facts emerged following the training of the Single-Session Brief Counseling, such as counselors experiencing considerable professional development. Counselors have increased their self-knowledge with a

willingness to learn new counseling approaches. As a result, they have found themselves more productive by assisting students to become more empowered. Some recommendations can be drawn after empirical evidence based on the observations of researchers from the Brief Therapy Center (Littrell et al., 1992) during one year of training. First, meeting as a team is a useful strategy for receiving feedback while learning new models and the accompanying set of skills. The school used as the training location in this project has four counselors; thus, meetings are always held there. While other schools only have one counselor, the researcher suggests holding monthly meetings with counselors from schools that also only have one counselor. This becomes very important because the practice of brief counseling with an individual, especially someone with whom the counselor is already familiar, can support the counselor receive good feedback.

Second, brief counseling seems suitable for students in high school. It is also appropriate for primary and secondary school students, as illustrated by the many cases reported in Amatea (1989) and Molnar and Lindquist (1989). Third, the brief counseling model is very flexible. Counselors use the model to apply to groups and individuals and parents, teachers, administrators, and students.

Several studies were conducted to test the efficacy of the strength-based intervention in schools, including research from Littrell et al. (1995). This research showed that brief counseling provides a platform for students to reduce their worries and feelings of discomfort about problem situations and drive them closer to their goals. The brief counseling approach was successful in aiding students to move toward their goal of reducing uncomfortable feelings associated with their problems. The success was particularly striking when this effect was associated with one counseling session and two follow-up sessions.

Schleider and Weiz's (2017) research showed that single-session interventions (SSIs) significantly reduced anxiety in adolescents compared to control programs for anxiety and depression tendencies given to 96 adolescents aged 12-15 years. This strategy became effective when the group of adolescents assigned the SSIs intervention strategy experienced faster recovery based on reports from parents, the adolescents themselves, and behavior control programs. Although the empirical test records show that this strategy is promising for adolescent groups, using SSIs to treat

depression has had limited success. In other words, this strategy is not necessarily effective for all problems, with successive recovery periods observed every 3 months.

In Indonesia, few studies have been conducted to test the efficacy of brief counseling in educational settings. However, a study conducted by Mulawarman et al. (2016) on student career adaptability discovered that the intervention process impacted the subject's career adaptability. This change in speech or action goes directly to the problem-solving of career adaptability. In addition, research by Suargani et al. (2022) also showed that single-session counseling with expressive art integration effectively increases students' altruistic behavior on the internet. Based on the results of the researcher's counseling process, what happened in the intervention process and the results achieved when associated with the general factors that marked the success of the counseling intervention were theoretically correct.

Advantages and Limitations of Single-Session Brief Counseling

For several reasons, brief counseling is an appropriate alternative for students with developmental problems (e.g., academic problems, peer conflict, stress, and procrastination). First, given the large number of students assigned to each counselor, in this case, the single-session brief counseling approach allows counselors to use their time efficiently when meeting students for individual counseling.

Second, brief counseling is an ideal model for counselors. Counselors have used several other counseling models with multiple sessions. However, in the end, most students quit visiting the counselor after one counseling session, before students even set objectives. Counselors recognize that the brief counseling model is not limited to one session. If necessary for the student, the counselor can increase the number of sessions while maintaining the structure of the brief counseling model.

Third, time-limited counseling offers students what they truly desire. For example, a single session is sufficient for half the counseling students. However, the other half may desire additional counseling sessions regarding their problem. A brief single-session counseling session is sufficient for some but maybe just the beginning for others.

Furthermore, there are some limitations to using brief counseling in schools. First, counselors must ensure that they do not focus on one problem prematurely to exclude other, more serious problems, such as physical abuse. Therefore, students will need more time to talk about it. One of the pitfalls of using brief counseling, as in all types of counseling, is too quickly focusing on the initial problem presented by the counselee and cutting off the topic of the counselee's discussion, which could lead to more serious problems.

Second, the stages of a problem-focused and solution-focused approach are relatively different. Thus, counselors should not assume that brief counseling is easier to perform. Sufficient counseling skills will be needed to assist students in setting small and meaningful goals. In addition, supporting students to move toward their goals also requires skill and sensitivity on the part of the counselor. Ethically, counselors need to be aware of their strengths and weaknesses, understand their counselee, and have the skills to assist them in achieving their goals (Pedersen, 1988).

Third, brief counseling is only one alternative approach that counselors can take. Thus, this approach may not be suitable for some problem types (e.g., suicidal potential, child abuse, and severe eating disorders, Talmon, 1990). Counselors must know when brief counseling is appropriate and when it is not. The counselor must be able to assess whether the problem experienced by the counselee is appropriate if it is treated with a single session of brief counseling because SSBC is not a treatment method that is a "quick fix." However, it is designed to focus more specifically on a brief session intervention plan (short-term intervention) which aims not to completely "cure" but to assist the counselee in focusing on what he/she is doing. This is based on the consideration that time constraints in the application of counseling in schools can be solved by focusing on providing services on solutions and collaborative processes that are built between counselors and counselees. Thus, brief counseling is expected to be an innovative method for counselors that can be applied to improve their professional abilities in counseling services in schools.

Closing

Guidance and Counseling services in schools, especially counseling services, are still running less effectively and efficiently. This is caused

by the lack of time and several procedures in a counseling approach. Therefore, to accomplish effective and efficient counseling services in schools, counselors are expected to be skilled in mastering and applying certain strategies effectively and efficiently, which also pay attention to the context and personality of students. One approach to counseling that is effective in terms of time is the use of single-session brief counseling through a strength-based paradigm.

Brief counseling is not a specific approach or a different/special model from other theories and practices but rather describes time-limited counseling by using or basing on the strengths of the counselee (strength-based), understanding the context of the present and future problems of the counselee (Lines, 2006). Strength-based intervention is defined as the strength of the counselee, especially regarding them as a resource and tough when they are in uncomfortable conditions. One of the hallmarks of this approach is that it is the counselee who leads the change process and is outcome-centered in the individual's future set of strengths.

School counselors can learn this approach through training consisting of four steps. School counselors see this as an opportunity for professional and personal development. This has impacted professional and personal development in three areas: changes in counseling styles, increased functioning as a counseling team, and positive implications for school counseling programs.

Single-session brief counseling as a strength-based intervention can be used by school counselors to support effective and efficient counseling services. Brief counseling is an appropriate alternative for students with developmental problems (e.g., academic problems, peer conflict, stress, and procrastination). However, single-session brief counseling also has disadvantages. Such disadvantages are that counselors need to ensure that they are not too prematurely focused on one problem to the exclusion of other more potentially serious problems, the stages of a problem-focused and solution-focused approach are relatively different, and brief counseling is only one alternative approach that counselors can take.

Apart from some of the strategy limitations, there needs to be an opportunity in the future to include a single-session brief counseling strategy in the education curriculum of prospective school counselors. In addition, its effective and efficient aspects can be applied practically when certain emergency conditions require psychological assistance to

individuals quickly yet responsibly. Thus, it is appropriate for the single-session brief counseling strategy to be a practical and adequate choice for school counselors to apply in their professional field. Another thing is that this strategy is expected to be an innovative and effective method to improve counseling services in schools that are following the demands of an increasingly competitive global era and full of the fulfillment of individual psychological well-being needs.

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CHAPTER 18

Intimate Partner Violence in the Context of Indonesian Society: Local Research and Implications

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Abstract

Violence is common in human relationships – and violence between intimate partners is no exception. The prevalence rates of intimate partner violence in both women and men further point out that the phenomenon of abusive behavior in intimate relationships between two people is a global problem that needs to be addressed. Intimate partner violence causes survivors many biological, sexual, and even psychological health consequences. Unfortunately, Indonesia, too, suffers from this problem. Considering the various impacts and consequences on the survivors, intimate partner violence is a problem requiring the attention of healthcare practitioners. Since 2017, our research team has focused on conducting basic and applied research on the association of intimate partner violence with several psychological variables such as self-esteem and psychological distress and its treatment. This book chapter describes ideas and thoughts based on our previous studies. Hence, we describe our studies on intimate partner violence within the Indonesian context.

Keywords: Intimate Partner Violence; Psychological Intervention

Introduction

> "I'm afraid that the bad things I've experienced while dating will happen again in the future. I feel that no one would accept me and that I am worthless."
>
> – Study Participant

"Violence is a dark contrast to what so many of us still believe in – love."

– Dr. Robi Ludwig

According to the sustainable development goals report with data from 2000 to 2018 (United Nations, 2021), from 736 million women, 1 in 3 experienced physical or sexual violence at least once since the age of 15. Nearly 24% of women aged between 15 and 19 and 26% between 20 and 24 experienced intimate partner violence (Sardinha et al., 2022). Furthermore, it was reported that low- and lower-middle-income regions showed a higher prevalence than high-income regions. Additionally, the current pandemic has heightened the challenges of women in abusive relationships. However, it is also interesting to note that not only do women experience intimate partner violence but men too. Unfortunately, the topic of the prevalence of violence against men is understudied. Kolbe and Büttner (2020) reviewed past studies on this topic and found that the prevalence rates were around 3.4% to 20.3%. Data from the Centers for Disease Control and Prevention (CDC, 2020) showed that 1 in 3 men in the US experience abusive relationships in their lifetime. Additionally, about 56% of them experienced abusive relationships before the age of 25 years. Men tend to underreport the abuse they are experiencing due to the fear of not being trusted, fear of being laughed at, and fear of false counter-allegations (Bates, 2017). The prevalence rates of intimate partner violence in both women and men further point out that this is a global problem that needs to be addressed. Violence is a major health problem as it is a widely prevalent health risk with consequences on human suffering (Mitchell & James, 2009).

Indonesia also suffers from this problem. According to Indonesia's Ministry of Women Empowerment and Child Protection (2018), the prevalence rate of violence against women aged 15 to 64 in 2016 amounted to 33.4%. Meanwhile, 42.7% of the victims were unmarried women. Of this population, 34.4% experienced sexual violence, whereas 19.6% experienced physical violence. Further investigation found that among 10,847 cases, 2,090 perpetrators (approximately 19.3%) were the dating partner of the victim. Unfortunately, we have not yet found reliable data sources on the prevalence of male intimate partner violence survivors in Indonesia.

Many studies exist on the health consequences of intimate partner violence, including 1) physical health, 2) sexual health, and 3) psychological health consequences. For example, Plichta (2004) reported that intimate partner violence increases mortality, injury, chronic pain, substance abuse, and reproductive disorders. Studies focusing on the sexual health impact of abusive relationships found that intimate partner violence is associated with an unwanted pregnancy and pregnancy loss (Tenkorang, 2019) and the transmission of a lifetime sexually transmitted disease (Laanpere et al., 2013). Besides physical and sexual health, intimate partner violence also impacts survivors' psychological health. A study conducted by Karakurt et al. (2014) showed the presence of various consequences, such as symptoms of stress, difficulty concentrating, depression, suicidal ideation, and sleep disturbances in intimate partner violence survivors. The most common forms of mental health issues found in intimate partner violence survivors are depression and post-traumatic stress disorder (Hines & Douglas, 2009; Lovestad et al., 2017; Perangin-angin et al., 2021). Treatment to restore the physical and psychological health of intimate partner violence survivors' is of the utmost importance.

The intimate partner violence phenomenon deserves attention from professionals and practitioners, considering its various impact and consequences on the survivors. The impact of intimate partner violence can occur for a prolonged time and is sometimes permanent even though the survivors managed to escape an abusive relationship. While many intimate partner violence studies report women survivors, in reality, men can and also do experience abuse from their intimate partner.

Since 2017, our research team has focused on conducting basic and applied research on intimate partner violence in dating relationships between young adults. Our research included various cases regarding the type of violence, severity, and responses elicited by each participant. The types of violence we have included in our research were physical, psychological, and sexual violence. One similarity we have found across our studies is that the participants simultaneously experience more than one type of violence. On the other hand, each participant has their subjective interpretation and meaning of the frequency and severity of violence they experience. This affected their response to violent incidents as considered normal; thus, the cycle of violence continues to occur repeatedly.

This book chapter specifically discusses the existing research on intimate partner violence in the Indonesian context. More specifically, it

discusses our five previous projects within the context of intimate partner violence. This chapter is divided into three sections. Firstly, intimate partner violence in the Indonesian context. Secondly, a systematic review of existing studies on intimate partner violence in Indonesia. The last section provides implications and directions for further research.

A Brief Overview of Intimate Partner Violence in Indonesia

This section provides an overview of intimate partner violence in the Indonesian context. It includes definitions of intimate partner violence and clinical diagnosis of intimate partner violence.

Definition

A wide range of terms describes abuse and violence in intimate relationships. Examples include domestic violence, partner abuse, family violence, and others. These terms are commonly applied synonymously with intimate partner violence. Hence we will focus on the term intimate partner violence. To complicate matters, even the definition of intimate partner violence varies depending on different perspectives (for a review, see Nicolaidis & Paranjape, 2009). In its simplicity, intimate partner violence refers to violence toward an intimate partner (Nicolaidis & Paranjape, 2009). Unfortunately, intimate partner violence is a serious issue, and therefore, the simplest form of definition for this construct cannot fully describe it. To further understand the construct, we break down our elaboration based on the name of this construct, namely 1) intimate partner and 2) violence.

What constitutes the term "intimate partner"? While some define intimate partners as spouses or ex-spouses, others include partners from a romantic relationship (Nicolaidis & Paranjape, 2009). Hattery and Smith (2019) succinctly described intimate partners as two people who claim to have feelings of love for each other. This definition implies that these partners are not only limited to spouses – this term also includes people in a romantic relationship.

Different perspectives define abusive behavior differently. The World Health Organization (WHO) defined abusive behaviors –or violence – as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either result

in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (Krug et al., 2002, p. 5).

In intimate relationships, violence may include physical, psychological, or sexual (Hattery & Smith, 2019). Physical violence is the behavior of physically harming (e.g., hitting, kicking, pushing) the partner. Physical violence can result in physical injury to the victim. Psychological violence is defined as the behavior of demeaning a partner, usually with verbal communication in personal and public settings. Sexual violence is the behavior of forcing a partner to engage in unwanted sexual activity.

The act of violence within an intimate relationship is not a random phenomenon. While the length and frequencies of violence vary from each couple, violence usually occurs in a set of patterns that repeat itself. Hence it is termed the cycle of violence. According to Walker's cycle of violence (Wilson, 2019), violence occurs in three stages: 1) *the tension-building phase*, characterized by the build-up of overall tension within the relationship and marks the onset of verbal abuse and may last from short to long-term (days to months and years); 2) *the acute battering incident*, characterized by uncontrollable physical, sexual, or emotional violence and usually last from 2 to 24 hours; and 3) *the honeymoon phase*, characterized by the perpetrator attempting to make up with the survivor by asking for forgiveness and promises of change.
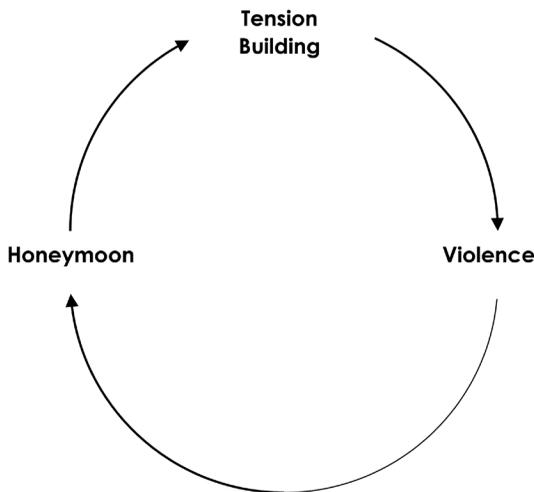

Figure 1. Cycle of Violence

In summary, Hattery and Smith (2019) defined intimate partner violence as physical, psychological, and sexual violence in the context of two people involved in a romantic relationship. This definition also aligns with the World Health Organisation and Pan American Health Organisation (WHO & PAHO, 2012), which describe intimate partner violence as any action in an intimate relationship that causes negative physical, psychological, and sexual consequences. In our paper, we refer to this exact definition. However, we do note that studies on intimate partner violence should describe the context their participants find themselves in, as each interpersonal relationship has its unique dynamics.

Diagnosis of Intimate Partner Violence in Psychology

In psychological practice, specifically in clinical psychology intervention, psychologists or other mental health professionals/practitioners need to diagnose whether or not their clients experience intimate partner violence and how it impacts their mental health. From the given definitions, one may conclude that this is an easy task. Far from that, we should consider various possibilities, such as: can a person experiencing physical violence once without a continuous pattern of violence be said to meet the criteria for the diagnosis of intimate partner violence? Can someone who experiences severe psychological violence that causes distress without the occurrences of physical and sexual violence still be considered to meet the diagnostic criteria for intimate partner violence? These two questions are just a few other questions that can be discussed in developing appropriate screening, diagnosis, and treatment (Nicolaidis & Paranjape, 2009).

Indeed, until now, efforts to establish definite clinical diagnostic criteria for intimate partner violence cases continue to be developed by experts and practitioners. Previous versions of the DSM, namely DSM-IV (American Psychiatric Association [APA], 1994), contained a diagnosis of "problems related to abuse or neglect" for cases of physical abuse and sexual harassment for adults, code V61.12 for perpetrators and 995.81 or 995.83 for victims. In DSM-IV TR (APA, 2000), intimate partner violence is still considered a contextual phenomenon within an individual's clinical condition. Referring to the multiaxial assessment system proposed within DSM-IV TR, intimate partner violence may usually be considered axis IV, meaning that this phenomenon is considered one of the psychosocial

factors contributing to the emergence or persistence of a psychological disorder.

One of the proposals for the inclusion of intimate partner violence-related psychological disorder diagnostic criteria in the DSM-5 was proposed by Heyman et al. (2015). The accepted definition of intimate partner violence is explained in more detail in the DSM-5 (2013), which also includes criteria based on field tests. The definition and criteria for intimate partner violence are also divided specifically based on the type of abuse, namely physical violence, psychological violence, and sexual violence. There is a slight change in the DSM-5 TR, which separates the code for initial and subsequent encounters (APA, 2022).

In many studies focusing on the impact of intimate partner violence, abusive relationships are almost always associated with some trauma. Therefore, mental health professionals usually also consider establishing the diagnostic criteria for post-traumatic stress disorder (PTSD) for cases associated with intimate partner violence. In the most recently published DSM-5 TR, PTSD is categorized as a trauma and stressor-related disorder, with one explicit diagnostic criterion: experience or exposure to a traumatic or stressful event. The diagnosis of PTSD should at least meet five diagnostic criteria from several given criteria that persist for at least one month and the presence of significant distress in social life, work, and other important aspects of life (APA, 2022).

Case Study: Our Research on Intimate Partner Violence in Indonesia

This section will discuss the studies we have conducted on intimate partner violence in the Indonesian context.

First project: Cognitive Behavior Therapy for Enhancing Self-Esteem

We have conducted several studies on intimate partner violence in Indonesia. One study applied research to increase intimate partner violence survivors' self-esteem (Pratiwi, 2017). While the sampling criteria did not exclude male participants, only women agreed to participate in the intervention. One male participant fulfilled the sampling criteria to be included in the

intervention. However, he decided to refuse to participate. Therefore, in this study, three females ($n = 1$, 21 years old; $n = 2$, 24 years old) participated in the psychological intervention to increase their self-esteem with the cognitive behavior therapy (CBT) approach. The interventions were carried out individually. Each participant had the opportunity to undergo six sessions of treatment.

Pratiwi (2017) found that CBT can increase self-esteem in intimate partner violence survivors. This was evaluated through an increase in the Rosenberg Self-Esteem Scale (RSES) post-test score and a qualitative evaluation of each participant. All participants succeeded in changing their false beliefs. This is also related to the readiness of participants to escape the cycle of violence. Two participants entered the contemplative stage, namely realizing that there is violence in their dating relationship and that there was no plan for change. Meanwhile, one participant entered the preparation stage, and she wanted to change her behavior and planned to exit the abusive relationship. The techniques in CBT that participants rated as useful were daily mood logs and cost-benefit analysis. These two self-help tools help them think realistically about the conditions of violent relationships they experience.

Second project: Romantic but Violent Dating

Violence in dating is one of the problems that result in long-term psychological conditions for the survivors. In this second project, we present the results of a correlational analysis between trust in romantic relationships and intimate partner violence in 165 female participants. The data was obtained using a purposive sampling technique (Grace et al., 2018). This study shows that a high trust in their partner is followed by a low level of violence and vice versa. Trust is highly correlated with one of the dating violence dimensions, namely negotiation. Women who have high trust in their partners tend to be tolerant and positive towards their partners. This encourages women to discuss problems with their partners.

An additional finding from this study is that the older the participant is, the more trust they have in their partners. This study also found the conclusion that as women age, the frequency of occurrence of violence in dating decreases. The positive correlation between age and trust is in line with the research results by Poulin and Haase (2015). The study

explained that with age, individuals are increasingly able to interpret and assess situations more positively, tend to be more forgiving, and are wiser in dealing with conflict. There is also a finding that the more frequently women experience violence, the more women tend to commit violence against their partners. The reason usually arises as self-defense from the harsh treatment she has ever received (Kernsmith, 2005). This is based on frustration, jealousy, and intense anger in women against their partners (Pearson, in Straus, 2010).

Third project: IPV and Psychological Distress

This study aims to evaluate the psychological condition of survivors of intimate partner violence compared to those who have not experienced intimate partner violence (Pratiwi & Yasa, 2021). Psychological conditions measured were stress, anxiety, and depression using the Depression Anxiety Stress Scale-42 (DASS-42) and the Beck Depression Inventory-II (BDI-II). This study has 258 male and female participants aged 18-30, obtained through convenience sampling. Through non-parametric statistical tests, it was found that the psychological distress of survivors of intimate partner violence was higher than that of participants who did not experience intimate partner violence. The results of the correlation review of DASS-42 and BDI-II also show similar results. As the depression score in DASS-42 increased, so did the BDI-II increase and vice versa.

In this study, survivors of intimate partner violence had higher scores than participants who did not experience intimate partner violence, be it on the dimensions of stress, anxiety, and depression. Survivors of intimate partner violence tend to experience physically and psychologically unpleasant conditions. This encourages a feeling of insecurity in survivors. When violence continues, survivors also find it difficult to manage conflicts with their partners. Conflicts that continue to occur can trigger the strengthening of the impact of psychological distress in the form of stress, anxiety, and depression (Pratiwi & Yasa, 2021). Characteristics of psychological distress often appear in the form of physical discomfort, emotional discomfort, worry about the future, reduced ability to concentrate, increased sleeping hours and eating disorders, and a tendency to self-blame.

Fourth project: Group Therapy for IPV Victims

We have also studied the intimate partner violence cases during the COVID-19 pandemic. The form of intervention given was online CBT-based group therapy (Pratiwi et al., 2022). Treatment was given to 5 young adults who experienced physical violence, sexual violence, or psychological violence from their intimate partner. The CBT-based group therapy program was held for seven meetings (60-90 minutes each). We have developed our own CBT-based treatment protocol for this study, which was validated prior to the research. The purpose of this treatment is for participants to change their maladaptive thoughts, feelings, and behaviors to become more realistic. In addition, this treatment program aims to provide social support in small groups and analyze aspects of stress, anxiety, and depression experienced by participants due to intimate partner violence as measured by DASS dan BDI-II.

The study result indicates a decrease in the participants' stress, anxiety, and depression level. Stress, anxiety, and depression are three components of the psychological distress experienced by participants due to abusive relationships. Group therapy is a protective factor for intimate partner violence survivors because it provides connection, interpersonal learning, and psychological support. Participants also conveyed the benefits of skills learned during the intervention process: breathing relaxation, safe places, butterfly hugs, I-message, and the A-B-C method (Pratiwi et al., 2022).

Fifth project: A support system for IPV Victims

We are also actively making efforts to prevent the occurrence of intimate partner violence through community service. We call it the "mental health corner" (Pratiwi et al., 2021). To this date, we strive for and have achieved public awareness of the existence of abusive relationships and the importance of psychological well-being for survivors of intimate partner violence. The target community is divided into three contexts: the Batir Community, survivors of violence in the personal realm, and the general public. The Batir Community is a group of youths in Semarang City who care about the community's psychological well-being, especially for survivors of sexual harassment. In addition, we also collaborate with

clinical psychologists with a track record in treating patients in the context of intimate partner violence (Pratiwi et al., 2021).

Collectively with psychologists and Batir Community, we worked on a prevention activity program for intimate partner violence for approximately eight months which was divided into seven packages of sub-activities (both episodic activities and activities that were only carried out at one time). The methods used in this preventive program are psychoeducation, training, and counseling. Psychoeducation is used to explain intimate partner violence, its impact, its prevention, and the need to care for survivors to the general public through webinars and regular Instagram posts as a service to the community. The training method is used to improve the skills of the Batir Community members in providing psychological first aid (PFA) and peer counseling to intimate partner violence survivors. Lastly, we have provided free counseling opportunities to three intimate partner violence survivors. This series of preventive programs had several implications, namely that the community gains knowledge about intimate partner violence, the readiness of members/volunteers of the Batir community in providing PFA and peer-counseling for survivors, and changes in the thoughts, feelings, and behavior of survivors who have had the opportunity for counseling treatment (Pratiwi et al., 2021).

Implications, Suggestions, and Directions for Further Research

As explained in the previous sections, intimate partner violence is a context of events that have serious physical, psychological, and sexual impacts on individuals who experience it. These impacts can persist even though the individual has left the violent relationship. Physical injuries, low self-esteem, self-blame, dependency, loss of hope, anxiety about sexual health, difficulty concentrating, disrupted aspects of work-life, stress, anxiety, depression, low self-confidence, and suicidal ideation are some of the impacts (e.g., Grace et al., 2018; Pratiwi, 2017; Pratiwi et al., 2022). These serious consequences have prompted many studies to carry out curative efforts on the specific impacts experienced by individuals associated with intimate partner violence.

It is easier to find studies aiming to reduce or increase the impact of the opposite construct of the impact that occurs in both national and international studies. For example, Perangin-angin et al. (2021) tested the effectiveness of six sessions of Cognitive Behavior Therapy to treat post-traumatic stress disorder (PTSD) in four female survivors of dating violence. This study concluded that there was a decrease in PTSD symptoms and changes in maladaptive thoughts to become more adaptive and positive in the four study participants. Reardon et al. (2020) applied Acceptance Commitment Therapy (ACT) to treat intimate partner violence survivors. The intervention focused on using mindfulness to strengthen participants' psychological flexibility. Thus, the condition of the factors that maintain intimate partner violence will be reduced.

Several studies serve to understand the adverse effects of intimate partner violence, and intervention approaches focus on reducing the psychological impact on survivors. Research on the relationship between intimate partner violence and psychological distress has shown that the two are significantly positively correlated (Pratiwi & Yasa, 2021). The adverse effects caused by intimate partner violence can also sustain more severe psychological consequences if the effects are not addressed immediately.

We have carried out initial efforts to design and implement preventive programs in the context of intimate partner violence. A series of activities targeting the general public by involving the community and intimate partner violence survivors brings forth a new responsibility and understanding of the need for further research to prevent intimate partner violence. Ideally, before a program is implemented, it is necessary to conduct an in-depth study of the psychological dynamics of individuals experiencing intimate partner violence and the causal factors that drive the emergence of abusive relationships in Indonesian culture. Applied research can be built on the strong basic foundation of the psychological dynamics of intimate partner violence survivors.

Another opportunity that can be explored more broadly and in-depth is the development of theories regarding the psychological dynamics of intimate partner violence. Both the psychological dynamics that make a survivor persist in an abusive relationship and an analysis of the psychosocial readiness model of a survivor in the Indonesian context. The second study may encourage and push for the development of screening tools that support clinicians' performance in handling intimate partner

violence cases. Additionally, intimate partner violence is still understudied in the context of male survivors.

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CHAPTER 19

The Urgency of Career Adaptability, Career Competence, and Career Engagement in College Students

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Abstract

College students are expected to have abilities above their performance; they need to develop job readiness and job skills, explore possible career paths to choose, and form more specific vocational goals and plans. Therefore, they can act to implement these goals. Currently, college students do not have career engagement to respond to the existing challenges. One of the factors that influence career engagement is career adaptability and career competence. Career adaptability enables individuals to master the resources to deal with the situations they face effectively. Career competence prepares them for such situations by enabling them to develop their careers proactively. Thus, the better college students' adaptability and career competence, the higher the career engagement. This paper describes the concept, urgency, and efforts to increase career adaptability, career competence, and career engagement in college students.

Keywords: Career Adaptability, Career Competence, Career Engagement, college students

Introduction

This chapter analyzes the correlation between career adaptability and career competence with college student career engagement. This paper describes the data and information obtained through previous studies by Saraswati et al. (2020).

One of the future challenges for college students is having a successful career (Baiti et al., 2017; Chan, 2017). Labor market developments such

as globalization, the speed of technological progress, the increasing use of outsourcing, and part-time workers are significantly changing the context of work and creating changes in how individuals manage their careers (Sullivan & Baruch, 2009). The reality of the labor market also requires college students to have started planning and managing their long-term careers during the study period. College students are expected to have abilities above their performance. They need to develop job readiness and job skills, explore possible career paths to choose, and form more specific vocational goals and plans. Therefore, they can act to implement these goals (Lent & Brown, 2013).

The development of science and technology in the current global era that is full of competition is a challenge for universities (Kadarisman, 2011). This is supported by Wijaya's (2016) statement that the rapid development of technology and information requires all individuals to have competence or expertise. In other words, not only do universities need to produce quality students, they also need to develop them by directing them toward a good career trajectory and ensuring they're competent in their respective fields. Every activity process requires the direct involvement of college students to have high career competence (Saraswati et al., 2021). In this regard, college students are expected to have abilities above their performance.

In contrast to the existing reality, the Indonesia Career Center Network (ICCN, 2017) revealed that 87 percent of Indonesian college students were in the wrong major because the majors taken were not in line with their interests (Awaliyah & Murdaningsih, 2019). Edwindha et al. (2017) described the impact of college students who feel they were in the wrong major, which causes them to be unprepared to live campus life with various occurring tasks and problems. Ultimately, college students often complain and feel unable to attend lectures. This is in line with what was expressed by Hidayat (as cited in Hartono & Gunawan, 2017). Hidayat mentioned that not understanding their potential, not understanding the desired field of work, worrying about not acquiring a job, and not planning for the future are problems college students face in the career and work fields.

Career problems have gotten worse since the Covid-19 pandemic. According to researchers from the Institute for Development of Economics and Finance (INDEF) Media, the trend of labor absorption in the modern industry before COVID-19 hit Indonesia shows that skilled production

workers with undergraduate degrees have decreased. Skilled production workers who work in factories are replaced by outsourcing workers, most of whom are not required to have a degree (Santia, 2020). Previous research reinforces this by explaining that college students will face challenges in determining their careers, including the lack of self-motivation to continue developing career skills, uncertainty in accessing information and career development programs, and economic and technological challenges (Saraswati et al. ., 2018).

This has an impact on the demands for increasing the quality and productivity of educated human beings to continue to exist and be able to compete in different lives. Chan (2017) revealed that in the 21st century, careers are becoming more flexible, interest-oriented, and self-directed. Clarity of career goals alone is no longer sufficient to require individual involvement in proactive career behavior, which is very important for individuals to own. In this case, Bandura (1999) stated that college students must develop a vocational identity, explore the world of work, make career choices, enter work, change career fields, and adjust to work.

College students need to develop job readiness and job skills, explore possible career paths to choose, and form more specific vocational goals and plans. Thus, they can work to implement these goals (Lent & Brown, 2013). This is supported by the opinion of Hirschi & Freund (2014), that stated that career engagement that college students have while at university predicts higher job and career satisfaction several months after starting work. This is in line with the statement that to realize a plan, college students need to take steps that prepare them to face challenges (Baiti et al., 2017). It is also necessary to have a persistent effort to gain what they desire. With a strenuous effort to obtain what they desire by exploring their careers, college students are predicted to have successful careers in the future.

Thus, to obtain career-related resources to manage and be skilled successfully, one's early career is essential in today's world of work (Akkermans et al., 2012). Young people must begin proactively managing their careers during their studies to successfully transition to the labor market (Koen et al., 2012). To achieve this, they need certain resources and competencies that assist them in successfully managing their careers and stimulate their well-being and performance (Hirschi & Herrman, 2012). In early adulthood, setting up a career means adapting to the social

environment while finding ways to increase one's chances of achieving one's expectations when preparing for work roles (Savickas, 2005). Based on the results of the UNNES student survey, it is known that college students start planning their careers in the first year of college (42%).

It is widely believed that an individual with higher education can easily find decent jobs (Kennet et al., 2011; Kretovics & Lara, 2015). This assumption is also applicable in Indonesia, where many college students continue their education at university. During and after graduation, a university graduate will find the right job in the competitive and unstable world of work. Some have careers, but they are not in line with the majors taken in college.

Therefore, self-involvement that is related to desired career activities is needed – which is known as career engagement. Hirschi (2014) described career engagement as the degree to which a person proactively develops one's career as expressed by various career behaviors. Career engagement can be interpreted as a clear and specific career behavior proactively to direct someone to achieve the desired career. This study focuses on career engagement as indicated by clear and specific career behaviors to enhance individual career development (Hirschi et al., 2014). College students need to be proactively involved in managing their careers. Career engagement is included in career self-management behavior, where individual behavior increases career opportunities and future success (Wiernik & Kostal, 2019).

Presently, it is still unclear what personal career resources related to studies are needed by college students in developing careers in the future. (Hirschi & Herrmann, 2012) indicated the types of resources for successful career self-management, such as psychological (optimism, flexibility), identity (career adaptability), and social resources (network). Efforts to empirically investigate the resources that contribute to early adult career success highlight important elements such as career planning and networking (De Vos et al., 2016), self-efficacy, optimism, and self-esteem (Bakker, 2015), and proactive behavior and career expectations (Hirschi, 2014).

Career adaptability and career competence are interrelated. However, the two constructs are conceptually and empirically different from each other. Career adaptability is primarily reactive in terms of adapting to constant changes. Meanwhile, career competence is primarily proactive

in achieving "career fit," i.e., when individuals can develop competencies that support them to thrive in today's dynamic labor market (Akkermans et al., 2015). When individuals have career adaptability, it enables them to deal with the situations they face effectively. Career competencies prepare individuals for various situations that allow them to proactively develop their careers (Akkermans & Tims, 2017).

Overall, career adaptability and career competence are equally important career resources for career engagement. This paper describes the concepts and urgency of career adaptability, career competence, and career engagement in college students that college students, researchers, practitioners, and policymakers who are involved in improving student career development can utilize.

Concept and Theory of Career Adaptability, Career Competence, dan Career Engagement

Career Adaptability

Career adaptability was first proposed by Super and Knasel (1981) as a central construct in adult career development (Savickas, 1997). Since then, it has been used as a key competency in career success (O'Connell et al., 2008; Creed et al., 2009). Career adaptability eases preparation for various roles in all situations. Career adaptability is a characteristic that shows flexibility or desire to fulfill career tasks, career transitions, and deal with career trauma correctly (Savickas & Porfeli, 2012).

Career adaptability is the readiness to face predictable and unpredictable tasks and roles to determine strategies to increase the chances of getting relevant results. In this case, it can also be considered as readiness to cope with work and working conditions changes. The role of career adaptability provides several benefits, such as increasing understanding of abilities, commitments, and interests; improving the quality of work to achieve life satisfaction; and preparing oneself to face obstacles through career planning.

Career adaptability refers to the flexibility or desire to fulfill career tasks, career transitions, and deal with career trauma with a suitable approach. Each stage of development has a different developmental task; thus, it is necessary to be prepared to fulfill it. Career transition is the movement of individuals

from one job to another. This move can be planned or unplanned; it can be desirable or undesirable. Career trauma is an unexpected and unwanted painful event. As the highest conceptualization of a career, career adaptability consists of several dimensions, including concern, control, curiosity, and confidence (Savickas & Porfeli, 2012). The career dimension is a strategy to deal with career obstacles, i.e., concern about future careers, self-control and careers, curiosity to explore oneself, supportive career direction, and self-confidence to realize ideals (Coolen, 2014).

Bimrose et al. (2011) mentioned the benefits of increasing career adaptability, i.e., increasing life satisfaction, increasing commitment to the organization/company, aiding individuals to find quality work, achieving career success, assisting individuals to return to work interest with better job satisfaction, and to assist individuals to consider job loss, as well as preparing for the unknown and overcoming existing obstacles.

Career Competence

Career competence was proposed by those based on four career perspectives, i.e., boundaryless career (Defillippi & Arthur, 1994), protean career (Hall, 1996), self-management (King, 2004), and human capital (Kuijpers et al., 2011). Based on the four career perspectives, career competence is intended as an individual's career as a whole and distinguishes it from job skills and work competencies that lead to success in carrying out work (Akkermans et al., 2013). Career competence is defined as knowledge, skills, and core skills for career development that can be influenced and developed by individuals (Akkermans et al., 2013).

Based on the four career perspectives, Akkermans et al., (2013) integrated a career competency framework consisting of three dimensions, i.e., reflective competence in career, communicative competence, and behavioral competence.

Reflective competence in a career focuses on building long-term career awareness and combining personal and professional career reflection. These two career sub-competencies originate from reflection on motivation which is interpreted as a reflection of values, desires and motivation by considering a personal career, and reflection on quality which is interpreted as a reflection of strengths, weaknesses, and skills by considering a personal career.

Communicative competence is the ability to communicate effectively with significant others to increase the chances of success for self-care. This component has two career sub-competencies consisting of networking – which is an awareness of self-worth (presence) and professional values in individual networks – and the ability to expand networks that are related to career goals, and self-profile, which is defined as the ability to present and communicate self-knowledge, skills, and abilities to the job market both internally and externally.

Behavioral competence focuses on the ability to shape a career through taking proactive action. This component has two sub-components, i.e., job exploration – which means actively exploring and seeking opportunities related to work and careers in the internal and external job market – and career control, which means actively influencing the learning and working processes related to personal careers through setting goals and planning to achieve it.

Career Engagement

Career engagement studies proactive career behavior based on self-initiative and intentional (Akkermans & Tims, 2017). The career engagement construct includes self-management behavior toward a career, which increases career opportunities and future success (Wiernik & Kostal, 2019). These two categories encourage the emergence of measurement of career engagement by Hirschi et al. (2014) on new constructs that are different from various constructs in the study of career literature.

Career engagement is indicated by clear and specific career behaviors that enhance individual career development (Hirschi et al., 2014). Career engagement is different from a variety of similar-looking constructs that focus on views of thinking, identity, readiness, or attitude. Examples: work engagement (Schaufeli et al., 2002), career commitment (Carson & Bedeian, 1994), career adaptability (Savickas, 1997), and career motivation (London, 1983). By definition, career engagement is the degree to which individuals proactively develop their careers, shown through various career behaviors (Hirschi et al., 2014). Career engagement focuses on overt career behavior in the context of individual career development, not specific behavior at work (Hirschi et al., 2014).

Career engagement can be defined as the current emotional and cognitive relationship with one's career: a state in which a person is focused, energized, and able to derive pleasure from activities related to work and other life roles (Neault et al., 2013). Career engagement is an emotional and cognitive relationship manifested by individuals' behavior related to their future life to improve individual career development. This is also corroborated by Pickerell et al., defining career engagement as a model that describes the relationship between capacity, i.e., individual skills and attributes, availability of organizational resources, or access to appropriate support and challenges, i.e., the level of difficulty or complexity of certain activities given the present individual's capacity to perform the task (Neault & Pickerell, 2011). In this case, career engagement relates to the ability of each individual who has different abilities and challenges to develop their careers.

Beach (2019) revealed that career engagement is an action that individuals can take before they need to make a decision and is an ongoing process. It was revealed that the knowledge gained during education helps inform career decision-making and continuing to obtain further information to inform career pursuits (Beach, 2019). In other words, career engagement is an action that leads to career decision making which is a continuous process during education.

Career engagement is composed of six specific career behaviors that are defined and considered adequate to represent different manifestations of the general level of proactive individuals related to their career development (Hirschi et al., 2014), i.e., career planning, career self-exploration, environmental exploration of career, networking, intentional skill/self-capital development, and positioning behavior.

The importance of Career Adaptability, Career Competence, and Career Engagement to college students

Career adaptability can assist individuals in regulating vocational behavior (Savickas, 2013) – including career behavior when pursuing higher education according to the chosen major. Career adaptability can be categorized as self-regulation that leads to career engagement – where adaptability as the ability of flexibility or the desire to fulfill career tasks, career transition, and dealing with career trauma play an important role in student career engagement during college education. The four

dimensions of career adaptability, i.e., concern about future careers, self-control and career, curiosity to explore oneself and a supportive career direction, and self-confidence to realize goals are important keys in career self-management.

Career competence is considered to increase career engagement. This is because career competence is defined as knowledge, skills, and core skills aimed at career development that can be influenced and developed by individuals. These career competencies are very much needed in career self-management and play a role in career proactive behavior described in the three dimensions of career competence.

The first is reflective competence, which focuses on building long-term career awareness and personal and professional career reflection. Second is communicative competence, which is related to the ability to communicate effectively with significant others to increase the chances of self-career success. Third, behavioral competence focuses on the ability to shape a career through taking proactive action.

Career adaptability (Maggiori et al., 2013) and career competence (Akkermans et al., 2013) can be personal resources that are relevant and play an important role in the career motivational process. Career competence means that the individual endeavors to achieve professional competence, while career adaptability enables individuals to manage and face career challenges. These two personal resources are related through self-management of careers to develop personal careers.

Proactive behavior in achieving a "suitable career" is demonstrated by individuals developing competencies that support them to thrive in today's dynamic labor market (Akkermans et al., 2015). Thus, when individuals can master the resources, career adaptability allows them to deal with the situations they face effectively. Career competence prepares them for such situations by enabling them to develop their careers proactively. Ultimately, the readiness to face the task and career competence affect the career engagement of college students.

Efforts to increase career adaptability, career competence, and career engagement in college students

It is necessary to increase career adaptability, career competence, and career engagement in college students to prepare them to face their career

assignments and competencies. Therefore, college students can develop and be ready for the labor market in the current dynamic era. One of the strategies that can be done is the sustainable career guidance model.

The sustainable career guidance model is defined as a systematic approach to understanding various factors that affect career sustainability and a dynamic approach to facilitating how changes from time to time affect the sustainability of individual careers.

The ability to adapt involves the ability to change career and work behavior in a way that allows someone to succeed in various potential contexts without continuous needs for career development that is driven from the outside. With the skills of identity and the ability to adapt, sustainable reflections are seen as the required "fuel" that challenges and develops individual identity, values, assumptions, and skills throughout one's career. Thus, reflection can be considered as the skills needed in a protean career that is in line with the context of a sustainable career.

The sustainable career guidance model consists of 3 components: the person, the context, and time (De Vos et al., 2016). First, the person (personal) is the main actor in the definition of a sustainable career. Therefore it is important to understand how individuals – through their actions and the interpretations they deliver to experience – affect the sustainability of their careers. The second is the aspect of context. Careers are influenced by various contexts in which they evolve: work context, but also other layers of context, such as the context of personal life, the work sector that one belongs to, the context of the wider labor market, and the community and a person's culture. This makes it important to understand how individuals face opportunities and obstacles in various layers of this context and with stakeholders involved. The third is the aspect of time. Careers develop over time, and therefore, it is necessary to consider what makes a sustainable career in the entire range of life by considering intra-individual changes and changes that occur in different layers of context

The sustainable career guidance model can be understood as a cycle, self-regulation process (Lord & Maher, 1990), where positive and negative experiences of individuals can be felt and interpreted by individuals and various parties involved, providing individual opportunities for dynamic learning. In turn, by sharpening individual understanding of themselves, the personal context and organization/work environment can enable individuals to be more bound and care for their careers and adapt and

influence their environment. Ultimately, this sustainable career model can allow them to continuously improve their perceptions about their career compatibility from time to time (Parasuraman et al., 2000).

When viewed based on sex, the results show that sex does not affect the correlation between career adaptability or career competence against career engagement. Men and women have the same abilities and opportunities related to their proactive career behavior. In other words, there are no differences in strategies that can be applied to increase career adaptability, career competence, and career engagement.

Applying a sustainable career guidance model to college students can also involve stakeholders with the management team of student academic and career activities, i.e., representatives of the counseling and career service center and representatives of the guardian lecturer (or supervisor). Thereby, college students' career preparation and development process will be more optimal carried out comprehensively.

Closing

All college students dream of having a successful career, which is a challenge for every student. College students are expected to have the ability above their performance, and they need to develop work readiness and work skills, explore career paths that allow for elected, forming more specific vocational goals and plans; thus, they can act to implement these goals.

Career engagement is the extent to which individuals are actively involved in the development of their careers, shown by clear and specific career behavior that improves the development of individual careers. Whereas career adaptability is interpreted by a readiness to face predicted or unpredicted duties and roles; thus, they can establish strategies to increase opportunities to gain relevant results. Individual career as a whole and the distinction between work skills and workplace competencies that lead to success in carrying out work can be defined as career competence. Individuals who have career engagement are shown by curiosity, optimism, risk-taking, perseverance, and flexibility to make individuals believe in themselves and feel confident that they can make satisfying career decisions and take advantage of opportunities related to their career development.

With what has been explained, it is important to understand career engagement, career adaptability, and career competence that are useful for college students as prospective workers to constantly adapt to such fast changes and the importance of career competence. Synergy is needed from all stakeholders involved with the management of student academic and career activities, as well as college students themselves, to improve the quality of career development, allowing them to compete and be ready in the dynamic work world.

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