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IMPACT OF THE PHYSICAL EDUCATION AND SPORTS PROGRAMS ON CHILDREN' S PSYCHOSOCIAL AND SPIRITUAL DEVELOPMENT IN VOLCANO DISASTER-PRONE AREA

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# IMPACT OF THE PHYSICAL EDUCATION AND SPORTS PROGRAMS ON CHILDREN'S PSYCHOSOCIAL AND SPIRITUAL DEVELOPMENT IN VOLCANO DISASTER-PRONE AREA

A DISSERTATION

Submitted to Kyushu University in partial fulfillment of the requirements For the degree of Doctor of Philosophy

By

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#### Abstract

Natural disasters such as volcano eruptions have an impact not only on the human victim's physical aspects, but also on their social, psychological, and spiritual aspects. The psychosocial and spiritual impacts of natural disasters on children have been examined in several studies. In this context, physical education (PE) and sports can have several benefits and be a means for the successful development of children's psychosocial and spiritual aspects. The associated variables of psychosocial and spiritual development can be explored by observing naturally occurring behaviors and social interactions of elementary school children in PE and sports in areas prone to volcanoes. Therefore, the preliminary, first, and second studies in this dissertation tried to investigate the impact of PE and sports programs on the psychosocial and spiritual development of children in the Merapi volcano disaster area in Yogyakarta.

The preliminary study aims to assess children's psychosocial skills and negative emotional states, develop a psychosocial skills scale, and examine the relationship between children's psychosocial skills and negative emotional states. Nine PE and sports teachers, four experts in the educational and psychological fields, 745 children in the disaster, urban, and suburban areas, and 810 children in the disaster-prone areas were involved in this study. The teachers participated in structured interviews, the experts reviewed the scale, and children completed the Depression, Anxiety, and Stress Scale (DASS) (Lovibond & Lovibond, 1995) and the Psychosocial Skills Scale (PSS). The qualitative analysis of teachers' interview results conducted through data display, reduction, and verification/conclusions. Statistical analyses conducted through one-way analysis of variance (ANOVA), exploratory and confirmatory factor analysis, multiple correlations, Cronbach's coefficient (Alpha), and Pearson correlation analysis. The teachers perceived that the children in all areas have essential and sufficient psychosocial skills but still require support on developing stress coping, communication, social awareness, and problem-solving skills. Children living in the disaster areas have a lower negative emotional state than those living in urban and suburban areas. The PSS with a foursubscale structure (stress coping, communication, social awareness, and problemsolving skills) was validated and found reliable, which was indicated by a good fit in construct validity, internal validity, and internal consistency/reliability. The negative emotional states have a delicate relationship with the psychosocial skills of children in the disaster-prone areas.

The first study aims to evaluate the effect of PE and sports programs on children's negative emotional states (depression, anxiety, and stress) and examine the effects of PE and sports programs on children's psychosocial skills (stress coping, communication, social awareness, and problem-solving). Fifteen PE and sports teachers and 810 elementary school children between the fourth and sixth grades in disaster-prone areas were involved in the study. Schools were randomly assigned to an intervention group and first and second control groups. The intervention group received a specially designed PE and sports program using psychosocial-based practices. The first and second control groups completed the pre-existing PE and sports programs over 28 weeks during the 2014-2015 academic year. The DASS and PSS were administered before and after the education

programs. Two-way multivariate analysis of variance (MANOVA), two- and oneway analyses of variance (ANOVA), and paired sample t-tests were used to compare the mean of the groups at pre-test and post-test. A special psychosocialbased PE and sports program, which implemented as an intervention for children in the Merapi volcano disaster-prone areas had a significant impact in decreasing negative emotional states (depression, anxiety, and stress). Likewise, the program had a significant impact in increasing psychosocial skills (stress coping, communication, social awareness, problem-solving).

The second study aims to explore the effect of the PE and sports program on children's religiosity and spirituality in a volcano disaster-prone area. Fifteen PE and sports teachers and 881 elementary school children between fourth and sixth grades in disaster-prone areas (5 to 15 km from the top of the Merapi volcano) participated in this study. The 15 elementary schools randomly assigned to the intervention group and first and second control groups. The intervention group received a psychosocial and traditional-based PE and sports program while the control group completed PE and sports programs consistent with each school's existing program in the second semester of the 2015-2016 academic year. Data collected using the Religiosity and Spirituality Scale for Youth (RaSSY) (Hernandez, 2011). Two-way MANOVA, two- and one-way ANOVA, and paired sample t-tests were used to compare the three groups at pre-test and post-test. There was a significant impact of the psychosocial and traditional-based PE and spirituality in volcano disaster-prome areas.

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#### **Chapter 1: General Introduction**

# 1) Background

There have been several volcanic eruptions in Indonesia, and the slopes of its 130 active volcanoes have densely populated for thousands of years. Volcanic eruptions have occurred often, and the Merapi volcano is currently active. Merapi is located between Central Java and Yogyakarta and attracts many researchers from around the world (Lavigne et al., 2008). The Special Region of Yogyakarta is located near the southern coast of Java Island, covering an area of 3,185.80 km2 (Pemerintah Daerah Istimewa Yogyakarta, 2010). Merapi's last and largest eruption occurred in 2010. This volcanic disaster killed and injured many people and temporarily displaced approximately 100,000 residents (Riyadi, 2010). Victims, particularly children, were adversely affected physically, socially, psychologically, and spiritually. They have also caused large disadvantage to wealth, community, and to people's mental health (Jogia, Kulatunga, Yates, & Wedawatta, 2014). Major populace victims and destruction caused by natural disasters (Yonekura, Ueno, & Iwanaka, 2013). Natural disasters occurred immediately and inadvertently cause widespread damage to people's lives and pose enormous environmental threats to society (Aslam & Tariq, 2010).

Many studies have examined disaster psychosocial and spiritual impacts on children. This impacts are visible after the occurrence of natural disasters such as earthquakes, tsunamis, floods, fires, hurricanes, typhoons, and volcanic eruptions. Natural and human-made disasters affect the people including children psychologically and may behave differently (Kilic, Ozguven, & Sayil, 2003; Jogia et al., 2014; Mondal et al., 2013). After a disaster, some individuals may display permanent psychological changes such as general psychological distress for 12 months, and post-traumatic stress reaction may continue for 18 months (Aslam & Tariq, 2010). Uemoto, Asakawa, Takamiya, Asakawa, and Inui (2012) found that acute psychological and physical symptoms among family members and sometimes the effects cannot detect on the children's mental health after the catastrophe. Ronholt, Karsberg, and Elklit (2013) emphasized that disasters affect societies psychologically and cause adverse its effects on children in particular. Regarding the connection of spirituality and psychological aspects, some of the religious believed that depressed youth do not correlate with better mental health (Dew et al., 2010). However, reducing stress and anger connects with proper spiritual/religious handling mechanisms (Hernandez, 2011). It means that spirituality or religiosity has a crucial role in providing psychological reinforcement in the face of various problems of life. Children's reactions to disasters both psychological and behavioral depend on the stage of their cognitive and emotional development and coping strategies (Kar, 2009), the others to fulfill their needs (Yonekura, Ueno, & Iwanaka, 2013), and need the long-term and comprehensive interventions of social and mental health (Uemoto et al., 2012).

Some experts have pointed out that schools and their curriculum can use as a means to intervene. Schools are an ideal place to implement post-disaster interventions (Wolmer, Laor, Dedeoglu, Siev, & Yazgan, 2005). Primary school curriculums have the potential to develop children's spiritual and religious

impression (Lynch, 2015). Furthermore, schools are well positioned to promote health-related and physical activities (Jenkinson & Benson, 2010). Also, the school environment is a very powerful social determinant of physical activity, constant interaction to affect choices, and including the engagement in PE and physical activities (Jenkinson & Benson, 2010).

As a part of a school's curriculum, Physical Education (PE) and sports can have several benefits on children's psychosocial functioning. According to Huitt and Dawson (2011), a school-wide intervention program can have a substantial positive impact on children's social development, providing families and communities support it. PE and sports can serve as psychological interventions; they are typically the only areas within a school's curriculum that address problems related to the physical and mental health of students (Curelaru, Abalasei, & Cristea, 2011). The benefits of PE and sports approaches for children were psychosocial health, self-development, and positive attitudes (Piko & Keresztes, 2006). Psychological benefits for students are even more important than the skills gained from physical activity programs (Wahl-Alexander & Sinelnikov, 2013). PE and sports can assist youth to non-verbally access, express, and resolve many troubling issues (Henley, 2005). The opportunity to learn new problem-solving skills, manage emotions and behavior, and form healthy relationships provide in PE and sports programs (Henley, Schweitzer, de Gara, & Vetter, 2007). Through PE and sports, children can express difficult or painful emotions or desires, wants, fears, worries, and fantasies, both verbally and nonverbally, and reenactment the traumatic experience (Kar, 2009). Spiritual/religious concepts such as critical thinking,

awareness and tolerance, and the crucial role of body, mind, and spirit in preserving holistic health can focus on integrated PE and sports programs (Lodewyk, Lu, & Kentel, 2009).

Moreover, in various terms, sport or exercise can help develop children's psychosocial strengths, as sports are an integrated part of the social lives of individuals and societies. As expressed by Morris, Sallybanks, Willis, and Makkai (2003), exercise can facilitate personal and social development by promoting positive behavior. In general, sports is a social and cultural product associated with the identity of children to strengthen social relations and develop social capital to establish a healthy society (Maguire et al., 2002). Lawrence (2005) asserts that sports are important to both the individual and society in economic, cultural, and financial terms. Similarly, Coakley (2001) states that sports is a cultural practice that distinguished by place and time around the world. Sports is reflective of culture and society, deepen social differences, and a vehicle for social conflict (Freeman, 2001). The psychological impact of excellent sports performance is similar to the spiritual/religious experience (Hilty, 2016). It can conclude that sports are a social and cultural product that can be understood and examined in detail by studying the actions of individuals and societies in the area of physical exercise. Therefore, the psychosocial and spiritual benefits of sport and exercise in the form of understanding and application of the social and psychological values and can use as capital in civic life.

Some researchers have explored variables that can influence the development of one's psychosocial and spiritual characteristics. PE and sports are considered to be agents for the successful development of psychological and spiritual aspects of individuals' lives. The impact of PE and sports programs and their influence on a child's character development and affective status in Indonesian school settings have been studied (Mutohir, 2015). However, a comprehensive exploratory study of all the potential variables associated with psychosocial and spiritual development has not conducted. Physical education and sports have not been used optimally to develop children's psychosocial and spiritual development, so a comprehensive analysis is required to ascertain this. The variables associated with psychosocial and spiritual development can explore by observing children's behavior and social interactions, which naturally occur when PE and sports implemented in elementary school classes. Likewise, the use of PE and sports programs to improve the psychosocial and spiritual development of children in areas struck by volcano disasters in Indonesia has not studied.

#### 2) Purposes of the Study

Based on the background provided, this study investigates the impact of PE and sports programs focusing on the psychosocial and spiritual development of children in the Merapi volcano disaster area in Yogyakarta. With examining relevant literature, this study divided into preliminary, first, and second studies. The preliminary study aims to assess children's psychosocial skills and negative emotional states (Chapter 3), develop a psychosocial skills' scale, and examine the relationship between children's psychosocial skills and their negative emotional states (Chapter 4). The first study aims to evaluate the effect of PE and sports programs on children's negative emotional states (depression, anxiety, and stress) (Chapter 5) and children's psychosocial skills (stress coping, communication, social awareness, and problem-solving) (Chapter 6). The second study aims to explore the effects of PE and sports programs on children's religiosity and spirituality in a volcano disaster-prone area (Chapter 7).

#### **Chapter 2: Theoretical and literature review**

# 1) Sport for Development Theory

The theoretical underpinning of this study is to consider sports as a tool for development. Development here refers to the development of children who live in certain adverse conditions, such as disaster-prone areas. PE and sports, ranging from physical activities to competitive sports, play a significant role in all societies. Access to and participation in PE and sports is essential for individuals of all ages to lead healthy and fulfilling lives. PE and sports can serve as a vehicle for the acquisition of social and psychological skills (Lyras & Peachey, 2011) and plays a significant role in the formation of identities leading to more calm dispositions among children (Feuerman, 2014). In particular, Donnelly, Darnell, Wells, and Coakley (2007) explained that a person-centered PE and sports program has a positive impact on children to develop character, improve moral behavior, and encourage empathy and reasoning. Sports-related experience is the basis for the sports development approach, which looks at how participation in multiple sports can produce more positive experiences than negative ones, for children (Côté, Turnnidge, & Evans, 2014). Sports participation programs executed well with adequate resources and sound design will promote positive social behavior, and this should combine with non-sport programs to achieve broader personality development goals (Hartmann & Kwauk, 2011). Therefore, PE and sports programs need to be well organized and structured to produce good results in the development of children (Hartmann & Kwauk, 2011).

Sports for Peace and Development combine's theories from some different disciplines to describe better, explain, and predict sports practices related to the UN Millennium Development Goals (MDG) (Lyras, 2009). The right to play and participate in sports has addressed in many United Nations (UN) conventions (INSDC, 2010). In 2002, the potential value of sports encouraged the UN to create a report, titled UN MDG, which assessed its potential contributions. Sports in development programs can serve as a tool for (1) educational development, (2) individual and social development, and (3) increased social inclusion (United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003).

There are four main benefits of sports and games in emergency situations these are depicted in Figure 2.1 and discussed in detail below.



Figure 2.1. The value of sports and games (United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003).

## (1) Health

For children, sports and games are crucial for the health and development of very core competencies, as well as for optimal growth and physical, cognitive, emotional, and social development. Games have the role of work in childhood and are the foundation of healthy psychosocial development (Duncan & Arntson, 2004). For children whose lives are disrupted by disaster or conflict, such activities become necessary for healing from trauma. Games are a powerful tool for reducing stress and seem to be a restorative force for children in stressful situations (Van Leer, 2005; Naudeau, 2005). Structured and regularly scheduled games, sports, drama, music, and art activities are important in emergencies and post-conflict periods because these activities allow children to process the events around them and resume a more natural development in childhood (Triplehorn, 2001).

#### (2) Psychosocial Rehabilitation

Research shows that participation in sports and games activities can help restore the mental functionality of members of the public who experience severe stress and psychological trauma to an average level comparable to that before the crisis. Although it is not understood exactly how exercise programs can completely alleviate stress and trauma experienced by children, there is clear evidence that involvement in sports provides tremendous healing power to those suffering from psychological and physical trauma and anxiety associated with stress (Schwery, 2008). Research shows that social support provided by family, friends, companions, teachers, peers, or other adults can facilitate the post-emergency healing process (IASC, 2007). Sports and games can be effective psychosocial interventions for children when adapted to local (traditional) culture resulting in increased social interaction, self-defense, and tangible healing.

#### (3) Education

In the absence of formal school structures, sports activities and games can be a valuable way to provide education during and after an emergency. Activities targeted to help children recover from disasters are often a key element of a postemergency education program. Application of urgency programming must include a strategy for long-term education. Activities, materials, sports equipment, and trainer instructions can continue to be part of the standard curriculum once the first healing after an emergency takes place. Three phases of emergency (see Table 2.1) includes sports activities and games in the early phase of the emergency response and support to make a secure place for children to participate in recreational and educational activities (Schwery, 2008). Although often regarded as an essential event in little re-education, sporting and games activities maintain their value throughout the entire education system and should be an integral part of all phases of recovery.

## (4) Community Building

Sports could be a useful means to help normalize the lives of people in affected areas by natural disasters. Sports activities will provide a structured environment that creates a feeling of security and stability, encourage social integration, and reduce idleness children. Children will get the sense of safety/normality and enjoy their leisure time through regularly scheduled activities. This program will help children recover from the trauma and provide an exercise place for children to learn the valuable participation skills in society (Sinclair, 2001). Physical activity can make a positive contribution to the physical and psychological health and lifestyle of those living in distress, for example, refugees. Traditional games, dances, songs, and stories give a feeling of comfort during the crisis and also help to reinforce the sense of children's cultural identity. Participation in the group activities will improve a solidarity and community awareness, cooperation, communication, and conflict resolution skills (Duncan and Arntson, 2004).

	Emergency Phases	Sport in Emergencies			
	Response				
• W	Vater supply & sanitation •	Create the safe space & activities to			
• Fe	ood security, nutrition & food aid	occupy children & youth			
• Sl	helter & site management •	Sanitation & hygiene			
• H	lealth services	education/outreach			
	Reco	very			
• Ps	sychosocial rehabilitation •	Assess children's psychosocial			
• E	ducation	disorders			
• R	ecreation	Refer children to treatment			
	•	Structure programs to alleviate trauma			
		and promote a return to normalcy			
	•	Pair children with supportive adult			
		figures			
	•	Facilitate children's re-entry into			
		school			
	•	Spread joy and happiness			
	Reconstruction				
• C	ommunity development •	Develop leadership			
• So	ocial services •	Promote cooperation & conflict			
• E	conomic reconstruction	management skills			
	•	Increase awareness about diseases			
	•	Enhancing of daily coping and other			
		life skills			

 Table 2.1. The contributions of sports and games in three phases after an emergency (Schwery, 2008).

In conclusion of many academic studies, Schulenkorf, Sherry, and Rowe (2016) stated that sports for development include theoretical and empirical studies of various sports disciplines and their supporting sciences. Therefore, it should be used through scientific assessment procedures to identify three components content, process, and outcomes of sports interventions to solve some social issues (e.g. intolerance, racism, and conflict) (Lyras, 2009). He further explained that "content refers to kind of sports and educational themes; process relates to the context and the methodology that used, and outcome point to the impacts of the sports experience" (Lyras, 2009). He also suggested that "Field experimental method will provide evidence regarding best practices to more effectively promote positive change at psychological, social, and societal aspects" (Lyras, 2009).

## 2) PE and Sports as a Psychosocial Intervention Effort

Sports programs are now used to promote peacemaking and conflict resolution, education and youth empowerment, health teaching and disease prevention, gender equality and the emancipation of female and participation of special need persons and minorities. Sport is a universal jargon that can be an effective means to provide emergency situational control capabilities to avoid confusion. More recently, sports interventions have used in the field as a psychological rehabilitation relief of people affected by disasters. These may also improve responsiveness to other psychosocial treatments (Gschwend & Selvaraju, 2008). Henley (2005) emphasized that sports and play activities can assist youth non-verbally to access, express and resolve the myriad issues they face, by giving them a less confrontational means to address issues that they did not have the cognitive or psychological capacity to understand with a different situation. Furthermore, Henley et al. (2007) also explain that play can make children sensitive to other needs and values, able to handle exception and power, manage emotions, control themselves, and share with others.

Psychosocial sports programs are rapidly gaining popularity as post-disaster interventions due to their ease of application in many cultures and abilities to reach more victims effectively (Gschwend & Selvaraju, 2008). Psychosocial-based sports and play activities have been able to provide children's resilience to develop and manage their psychological problem (Henley, 2005). Henley et al. (2007) also stated that PE and sports as psychosocial interventions for children conducted in various situations for peacebuilding, educational and health support, social problem-solving, and psychological and social rehabilitation. Specifically, PE and sports programs offer children the opportunity to learn new problem-solving skills in managing their emotions and behaviors, as well as to have healthy peer relationships (Henley et al., 2007).

In these circumstances, PE and sports programs become an interesting approach to support psychosocial rehabilitation in post-disaster trauma for children. PE and sports are physical activities that, are very popular all around the world, meaning that they can use in various forms and different cultural contexts. Sport, exercise, and physical education programs will be able to provide the occasion to eliminate terror, find joy, maximize the freedom, and improve health and wellbeing (Lawson, 2005). Moreover, sport can offer a form of collective and groupbased support, through which many individuals helped in a cost-effective way (Kunz, 2005). The sport has positive impacts on both the people and at the group/community level of society. The framework of physical activities can provide substantial information for the effective implementation of sports initiatives that aim to promote moral development and conflict resolution (Lyras, 2011). These makes it an ideal instrument for the psychosocial approach to overcoming post-disaster-trauma. The psychosocial approach emphasizes the rehabilitation of social and psychological problems in a graceful and non-disturb ways to individuals and groups. These activities include a focus on community empowerment based on the respect of local culture and traditions, as well as helping the individual via the community by supporting the collective resiliency.

## 3) The Psychosocial Skills Development through PE and Sports

There are various intervention and psychosocial rehabilitation and development methods for children. PE and sports in the school setting is one such method. Educational sport is a sport-specific intervention to promote positive relations between groups (Lawson, 2005). Henley (2005) mentioned that sport is a neutral and safe vehicle for the stabilization of the social and behavioral manifestation of children during and after major disasters. PE program focused on improving students' well-being by integrating techniques to reduce stress with physical activity affects their basic psychological and somatic coping skills and helps with stress reduction after a traumatic event (Wahl-Alexander & Sinelnikov, 2013). Physical activity plays a significant role in the psychological well-being of

a student (Piko & Keresztes, 2006). It facilitates interaction and social development through full engagement in activities and exercises (Sozen, 2012). In the learning process of PE, students engaged in activities that require critical thinking and inquiry, problem-solving, and collaboration with others (Wright, Macdonald, & Burrows, 2004).

The physical education and sports programs can develop of student's psychosocial skills at the school. As expressed by Curelaru, Abalasei, and Cristea (2011), physical education is the only discipline in the curriculum that addresses the physical and psychological health problems of preschool, school, and college students. According to Piko & Keresztes (2006), in public health programs, physical education is related to health and should be emphasized to improve the psychosocial benefits of physical activity. It should, in turn, increase the level of student participation in schools and encourage them to apply the skills of mental, emotional, social and physical to pursue a healthy lifestyle (Morrison & Nash, 2012).

Some research related to psychosocial skills and physical education programs in schools has published as well. Wang and Sugiyama (2014) found that student's social skills increased after the new PE program and it was effective in improving social skills. Furthermore, Sugiyama, Shibukura, Nishida, Ito, Sasaki, and Isogai (2009) stated that psychosocial skills acquired through physical education could be transferred to live using simple interventions. Similarly, Sugiyama, Nagao, Yamasaki, Kawazu, Wang, and Kumasaki (2009) found that individual traits such as social orientation can be determinants in the process of improving the communication skills fostered by organized physical education. In general, it can conclude that the benefits of sport and play in psychosocial improvement programs are aided by the natural tendency of children to utilize the intended skills while playing, which assists in recovery from trauma and the support of existing strengths (Kunz, 2005).

Referring to many previous studies, Lyras (2011) stated that some researchers have tried examining the effect of PE and sports lesson on the moral development. Among the psychosocial benefits, sports activities can help develop a sense of competence, self-determination, autonomy, and an internal locus of control (Piko & Keresztes, 2006). Curelaru, Abalasei, and Cristea (2011) stated that exercise can be a valuable resource for young people to learn the skills necessary to function in the family, school, and society; this accomplished by teaching them responsible behavior, internalization of rules, courage, effectiveness, persistence, and tolerance of frustration. In contrast, facilitating and inhibiting motivational climate in physical education in secondary schools has no effect on social and psychological factors (Morrison & Nash, 2012).

Physical activity plays a significant role in the mental well-being of students as well as in their perceptions of health, and it can also serve as a protection against excessive emphasis on extrinsic values (Piko & Keresztes, 2006). Students who practice sport and play are excited to exercise, show that they have more negative attitudes toward bullying, compared to others. Exercise reduces psychological stress in general, teaches discipline, fair play, and life organization, and fosters respect for the others (Curelaru, Abalasei, & Cristea, 2011). Furthermore, they emphasize that practicing sport is associated with a real vision of life. Similarly, Piko and Keresztes (2006) states that regular physical activity becomes a source of personal development and orients values to create a healthy life.

Cooperative learning is one of the constructivist approaches that well-known methods used in PE and sports classes. Constructivist approach is the learning approach that useful for students in creating an environment that can change their knowledge, attitudes, and behavior, and problem-solving ability in a variety of situations (Brown & King, 2000). As revealed by Dyson (2001), many PE teachers use different forms of cooperative activities such as cooperative games, or some elements of cooperative learning in their PE program. Furthermore, he emphasized that PE teachers can become facilitators that enable students to interact socially with one another and to build up their knowledge (Dyson, 2002). In cooperative learning, the main character is to involve students in working in small groups, to help each other in the achievement of every learning objective (Gorucu, 2016). Participation of students in cooperative learning based on the development of certain basic social skills demonstrated an improvement in their skills in and attitudes to group work (Goudas & Magotsiou, 2009). Specifically, Bay-Hinitz, Peterson, and Quilitch (1994) explained that coordinated effort between two or more students is needed so that they can engage well in a variety of structured cooperative games. Finally, collaborative learning in PE will hopefully help achieve an improvement in academic performance, communication skills, and psychological health (Chiu, Hsin, & Huang, 2014).

#### 4) Spirituality and Religiosity Development through PE and Sports

Spirituality and religiosity are sensitive and important aspects of life that require optimal time and policies to involve youths in their exploration (Bullock, Nadeau, & Renaud, 2012). Spirituality and religiosity have different meanings, yet are interconnected (Jirásek, 2015). As defined, spirituality/religiosity is a come across the appearance of strength, power, energy, or the sense of God always be with us (Dillon & Jennifer, 2000). Spirituality is "an essential aspect of religious practice" (Hilty, 2016). Hernandez (2011) emphasized that religiosity is the faith and praxis associated with religion or God and spirituality is the application of one's faith and praxis from contact and remains without religion. Specifically, religion is an organized system of faith, function, and practice, fixed in a religious tradition (invisible) or God's last right. (Dew et al., 2010). The relationship between spirituality and religion can interpret as follows: religion is the foundation of one's spirituality, and one's spirituality can grow without an underlying religion (Hurych, 2011; Anderson, 2007; Parsian & Dunning, 2009). Spirituality is a basic life process, joy involvement, immolation, love and connects with self, others, and nature. (Lodewyk, Lu, & Kentel, 2009). "Spirituality refers to personal experiences or seeks reality/transcendence that is not necessarily connected institutionally" (Dew et al., 2010). Spirituality focuses on sense, luxury, and reconciliation, which helps individuals change their condition and build a new self-concept (Parsian & Dunning, 2009). In this study, the spirituality and religiosity of children living in disaster-prone areas examined as they faced day-to-day living situations.

A relationship between spirituality/religiosity, health, and wellbeing has in research studies. Hernandez (2011) reported several found that spirituality/religiosity affects the wellbeing and health improvement of adults. Spirituality is the critical fundamental dimension of education, health, and wellbeing and referred to as spiritual health (Anderson, 2007). An association between spirituality and overall health has reported in the research literature (Udermann, 2000). Hurych (2011) showed that the spiritual is the motivating force that arises on the competitive or health aspect. According to Islam, a good Muslim enjoys good health and fitness (Wabuyabo, Wamukoya, & Bulinda, 2015). Likewise, spirituality/religiosity and sports have connections with various aspects of human life. Sports and meditation focused on the mind, body, and attention are essential aspects of a religious or spiritual life (Hilty, 2016). "Sport can develop a religious attitude that is based on mutual respect and overcomes recognized differences" (Jirásek, 2015). Parry (2007) reported relationships between many aspects of sports and spirituality, such as health and well-being, ethical development, and the spirit of the game. The physical aspects of young people, such as strength, endurance, dexterity, precision, and the ability to analyze situations are the foci of development in national sports (Marchibayeva, 2016). Religious values, practices, and rituals often appear in the context of sports (Obare, 2000; Jirásek, 2015). Amara (2013) reported a relationship between sports and spirituality and religiosity in programs involving religious minorities as national sports event hosts.

Spirituality has clear indicators and outcomes and is an important part of the educational curriculum, especially for the health and well-being achieved through

deep relationships with others, nature, and experiences (Anderson, 2007). Spirituality, a learning dimension of physical education and health, has been incorporated in holistic-oriented curricula and pedagogy clearly and openly, to integrate the cultural orientation of motion and balance and enhance students' spiritual awareness (Lodewyk, Lu, & Kentel, 2009). Health and physical education also provide many opportunities for children to have spiritual experiences through the implementation of regular physical activity in weekly lessons (Lynch, 2013). Furthermore, Lodewyk, Lu, and Kentel (2009) stated that students' spiritual development can be promoted through participation in physical activities, games, traditional culture, and music to help them become more relaxed, creative, motivated, and able to interact with each other. Consistent with that opinion, Jirásek (2015) focuses on using the concept of spiritual health in physical education by essential characteristics of existence, relationships, reality and purpose of life, and transfer. Anderson (2007)suggested practical ways to include spirituality/religiosity in health and physical education, such as explaining various movements of a physical activity, describing acts of heroism in the world of sports, talking about the benefits of a sport, motivating students to do kind acts during physical activities or exercise, and discussing issues touching the hearts of students leading them to do good works for others.

# 5) The Psychosocial and Traditional-based PE and Sports Programs

Psychosocial and traditional-based physical education (PE) and sports programs have employed several types of physical activity, problem-solving techniques, and activities to promote coping with stress, including relaxation exercises. These programs have also used cooperative physical activities in groups to address the negative emotional states, psychosocial skills, religiosity, and spirituality of children in volcano disaster-prone areas. The primary purpose of these programs is to decrease children's negative emotions and symptoms, such as depression, anxiety, and stress, improve their psychosocial functioning, and enhance their spirituality.

Differences in the psychosocial and traditional-based PE and sports programs and the other programs in the elementary schools of Indonesia shown in Table 2.2. Major differences among the three programs outlined. First, a new curriculum used in the psychosocial and traditional-based PE and sports programs, but the other program were not modified; they were implemented using the curricula with the existing procedures. Second, the lessons in the psychosocial and traditional-based PE and sports programs were conducted differently in the first and second programs regarding the number of lessons. Third, psychosocial and traditional-based activities was implemented as part of the intervention program in the psychosocial and traditional-based PE and sports programs, while each of the control groups performed their physical activity program. Finally, a 10-minute relaxation exercise at the end of each lesson completed in the psychosocial and traditional-based PE and sports programs, but not in the other programs.
	Groups					
Aspects	The psychosocial and traditional- based	Normal program 1	Normal program 2			
Curriculum-	2013 Indonesian	2013 Indonesian	2006 Indonesian			
based	Curriculum (New).	Curriculum (New).	Curriculum (former).			
Subject Matters	Games and sport, physical fitness, educational gymnastic, and rhythmic activity.	Games and sport, physical fitness, educational gymnastic, and rhythmic activity.	Games and sport, developing the activity, gymnastic and rhythmic activity, water activity (sometimes), outdoor education (sometimes), and Health (theoretical)			
Lessons times	Twice a week for each 70 minutes (140 minutes a week)	Once a week for each 140 minutes.	Once a week for 115 minutes.			
Students	Students in 4 – 6 grades	Students all grades.	Students all grades			
Physical Activities	<ul><li>43 psychosocial- based physical activities.</li><li>32 Traditional-based physical activities</li></ul>	Physical Activities are depending on teachers and school condition.	Physical Activities are depending on teachers and school condition.			
Relaxation exercise	10 minutes Holistic Relaxation Exercise at the end of each lesson.	Without relaxation exercise.	Without relaxation exercise.			

Table 2.2. Differences between psychosocial and traditional-based PE andsports programs and another programs.

The psychosocial and traditional-based PE and sports program's development process included a curriculum analysis, syllabus preparation, lesson plan, and determination of activities. In the curriculum analysis, I identified the core and basic competencies, which are skills that students must acquire in the learning process. Based on the identified competencies, we prepared an instructional syllabus, which included translations of the identified competencies (cognitive, affective, and psychomotor), psychosocial skills, materials, lesson times, and similar activities. Subsequently, the syllabus described in the lesson plan that included the days and dates of meetings, subject matter, instructional activities (opening, main, and closure activities), and learning times. Specifically, the plan outlined children's participation in 43 psychosocial and 32 traditional-based physical activities and holistic relaxation exercises in cooperative groups. It was summarized in a teacher's guidebook (Handbook) and accompanied by video supplements To facilitate implementation of this program. The development process of the programs shown in Figure 2.2.



Figure 2.2. The development process of psychosocial and traditional-based PE and Sports Programs.

The following is an example of a psychosocial-based physical activity used in the PE and sports program. The name of activity is "frog and ants". It is a cooperative game in which students have to help their classmates for the match to continue. The 4<sup>th</sup> - 6<sup>th</sup>-grade students were suggested to play this game. The material needed in the game included a mat/rug and cones. Firstly, the game begins by choosing a student as a "frog," while the others were "ants." On the cue of the teacher, the frog moves to mark the ants by capturing or touching parts of the body. The exposed ants then laid on their back with their legs and hands move on. At this point, the four unsigned ants try to save the injured ants by carrying them to a special area safely and carefully. Also, the four ants carrying the "sick" ant are safe, and the frog should not mark them. Additionally, any ant already placed on the mat or rug has two seconds to go before they can be marked back by the frog. Finally, the game ends when all the ants have characterized, and the frog changes when the game is over. Overall, the teacher emphasizes that every student who becomes an ant should work together to help the marked or injured ants. The game has represented in Figure 2.3.



Figure 2.3. The "frog and ants" game.

The following is an example of a traditional-based game used in the PE and sports program. The name of activity is *gobak sodor*. This traditional game, known by various names throughout Indonesia, is useful for developing strategies, communication, and cooperation. This game can be played by elementary-school children in grades 4 to 6. Equipment, such as chalk, cones, and chest numbers are required to play the game. The rectangular game field (shown in Figure 2.4) lined every 3–4 meters and length can be added to the field as needed. The game begins by forming two teams (attackers and defenders), with the number of players in each group adjusted to the courts available. Each player on the defender team stands on the existing lines in the field, while the attackers assemble in the starting area. After a cue to start the game, a player from the attacker team tries to pass and avoid players from the defender team without being touched until reaching the finish line. Then the player returns to the starting area in the same way, without being touched. The attacker team is victorious and receives points towards a winning score if all the players on their team return to the starting area safely. The teams change roles

from attackers to defenders when a defender touches one attacker. The game finishes within a specified time limit.



Figure 2.4. The "gobak sodor" game.

## 6) A Hypothetical Model

Based on the theoretical and empirical evidence of the studies above, PE and sports should be viable tools for enhancing children's psychosocial and spiritual development including their who live in disaster-prone areas. PE and sports are important for preparing for emergencies, as they promote health, psychosocial rehabilitation, community development, and education. PE and sports contribute to the response, recovery, and reconstruction phases of disasters. Various studies have found that PE and sports have important roles in the recovery from emergencies. PE and sports are more widely used for trauma recovery through developing a comfortable and pleasant environment. Psychosocial rehabilitation is necessary for children, and sports provide opportunities for them to engage in activities in competitive and diverse groups. PE and sports are the most likely vehicles for psychosocial and spiritual development, as evidenced by various studies. Due to the integration of PE and sports in education, in general, it should be easy to implement psychosocial and traditional-based interventions to allow children to reduce their negative emotional states and develop strong psychosocial and spiritual skills.

It was hypothesized that children's negative emotional states (depression, anxiety, and stress) would subside and their psychosocial skills (coping with stress, communication, social awareness, and problem-solving) would improve because of their participation in a psychosocial-based PE and sports program. It was also hypothesized that their religiosity and spirituality would be enhanced through participation in a psychosocial and traditional-based PE and sports program. The hypothetical model of the study shown in Figure 2.5.



Figure 2.5. A hypothetical model of children's psychosocial and spiritual development through physical education and sports.

## Chapter 3: Assessment of the Children's Psychosocial Skills and Negative Emotional States in Yogyakarta Area, Indonesia

## 1) Purposes of the study

The aims of this preliminary study was to explore various psychosocial skills of fourth- to sixth-grade elementary school children from the PE and sports teacher's perspective and investigate children's negative emotional states in the urban, suburban, and disaster area of Yogyakarta, Indonesia.

## 2) Method

## (1) Participants

The nine (two females and seven males) PE and sports teachers at the elementary schools in Yogyakarta consisted of three in disaster, two in urban, and four in a suburban area. The teaching experience of PE and sports teachers are ranging from 4 to 29 years in the school. The brief characteristic of this participant shown in Table 3.1.

	Initial		Teaching	
No.	Teacher	Sex	Experience	Area
	I cachei		(Years)	
1	TW	F	4	Disaster
2	JS	Μ	19	Disaster
3	DY	Μ	4	Disaster
4	W	Μ	17	Urban
5	SL	F	24	Urban
6	S	Μ	29	Suburban
7	GS	Μ	16	Suburban
8	DW	Μ	9	Suburban
9	AS	Μ	9	Suburban

Table 3.1. The characteristics of PE and sports teacher participants.

A total 745 children of fourth to sixth-graders from three elementary schools located in the disaster area (near Merapi Volcano), two elementary schools located in the urban area (Yogyakarta city), and four elementary schools located in the suburban area (Sleman district) were involved in this study. The characteristic of the children shown in Table 3.2.

Table 3.2. The characteristics of the children participants.										
Area	Schools	Sex		Age		Grade				
		F	М	Mean	SD	4 <sup>th</sup>	$5^{th}$	$6^{\text{th}}$		
Disaster	3	67	91	10.3	1.08	52	50	56		
Urban	2	92	94	10.5	1.58	59	58	69		
Suburban	4	204	197	10.6	1.13	138	123	140		

Note: F=Female, M=Male, SD=Standard Deviation.

### (2) Procedure

A qualitative and quantitative research design implemented in this study. A qualitative design was conducted by individual semi-structured interviews with the nine PE teachers to gain an in-depth information of PE and sports teachers' perceptions about children's psychosocial skills in PE and sports classes and their daily school activity. A quantitative research by questionnaire survey design was used to explore the negative emotional state of the 745 elementary school children from fourth to sixth grades. The procedure of this study shown in Figure 3.1.



Figure 3.1. The design of this study.

# (3) Data Collection

**PE and sports teacher interviews**. In-depth semi-structured interviews conducted one hour with each teacher to enhance data integrity without losing the opportunity to follow up with questions or to dig deeper into the responses. Therefore, to establish triangulation method, in-depth semi-structured interview combined conversational and structured question interviewing to support the trustworthiness of the data. A semi-structured interview format given a chance to delve deeper into the participant's responses and ask follow-up questions that lead to a richer and more compelling data (Finn & McInnis, 2014). Therefore, the teachers answered open questions regarding their perspective on children's psychosocial skills during PE and sports lesson and daily school activity. The special interview guides developed for this study based on the factors of research to be known. The selected questions from the interview guide shown in Table 3.3.

The interviews placed in the teacher room, classroom, or field at the end of the PE

and sports lesson.

	Table 5.5. FE and sports teachers interview questions guidennes.
No	Question
1	How long have you taught in school?
2	How many children of the 4 <sup>th</sup> -6 <sup>th</sup> grade in this school?
3	How the psychosocial skills characteristics of the children (4 <sup>th</sup> -6 <sup>th</sup> grade) in general.
4	Specifically, what kind of children's psychosocial skills aspects that have been developed such as stress coping, communication, social awareness, and problem-solving skills?
5	In your opinion, what children's psychosocial skills elements needed to develop in their school daily activities and community?
6	How did you and school develop children's psychosocial skills?
7	How do you think about the relationship between psychosocial skills and PE and sports programs?
8	Have you or school done the children's psychosocial skills assessment/measurement?
9	How did you saw the relationship between teacher-student, student-student, and parent-school, especially in terms psychosocial skills development?

Table 3.3. PE and sports teachers interview questions guidelines.

**Children's negative emotional state**. The negative emotional state of children measured by the Depression, Anxiety, and Stress Scales (DASS 42) (Lovibond & Lovibond, 1995). The 42-item questionnaire consists of three self-report scales. Each scale contained 14 items and divided into subscales of 2–5 items with similar content. Dementia, despair, devaluation of life, self-humiliation, and lack of interest/involvement, anhedonia, and inertia assessed on the depression scale. The anxiety scale has indicators of autonomic arousal, musculoskeletal effects, situational anxiety, and subjective experience of anxious affect. A chronic non-specific arousal scale assessed sensitivity to stress. Respondents are asked to

use a 4-point severity scale to rate the extent to which they have experienced each symptom over the past week.

	Depression	Anxiety	Stress
Normal	0 - 9	0-7	0 - 14
Mild	10 - 13	8 - 9	15 – 18
Moderate	14 - 20	10 - 14	19 – 25
Severe	21 – 27	15 – 19	26 - 33
Extremely Severe	28+	20+	34+

Table 3.4. DASS symptom severity ratings (Lovibond & Lovibond, 1995).

Figure 3.4 shows the severity rating index of DASS. The DASS 42 that formatted of Indonesian has analyzed the validity and reliability for children in our sample. The internal validity (p < 0.01) and a reliability test of Cronbach's alpha (0.904) verified that the DASS 42 was suitable for our sample.

## (4) Data Analysis

The qualitative analysis through three concurrent flows of activity: data reduction; data display; and conclusion drawing/verification (Miles & Huberman, 1984) used to examine the interview results of teachers. One-way analysis of variance (ANOVA) used to discuss the differences of children's negative emotional state between disaster, urban, and suburban area in the study.

#### 3) Results

### (1) Psychosocial Characteristics of The children

The analyses focused on stress coping, communication, social awareness/empathy, and problem-solving skills of children in grades 4 to 6.

Psychosocial skills have many aspects; therefore, the analyses of the research findings were designed to explore the data in more specific detail. Various psychosocial characteristics were identified based on interviews with PE and sports teachers.

The PE and sports teachers believed that the children did not yet have adequate skills to cope with stress; they frequently saw the children express their feelings of stress through negative behaviors.

The children still tend to be naughty, irritable, and lazy about their learning (JS/disaster). The children's visible symptoms of stress include being quiet, being angry, having a "do not care" attitude, or showing lack of concern (SL/urban). The children's skills for coping with stress are not too visible (S/suburban).

In particular, the teachers felt that the children in the disaster area continued to have deep fears associated with various characteristics of the disaster, such as a roar, although there were no obvious signs of an impending volcanic eruption. They had not been able to overcome their fears that caused their stress.

There are still effects of the trauma on the child after the disaster (TW/disaster). The children have been afraid of thunder after the disaster, so the development of their social skills has been quite difficult (DY/disaster). Children in the catastrophe area still have traumatic stress because of the disaster (JS/disaster).

The PE and sports teachers also noticed that the children needed to improve their skills for coping with stress, mainly with the help of others. The children need to develop their skills for coping with stress through sports games (DY/disaster). The children's abilities to cope with stress have to be improved (SL/urban). Capacity to cope with stress needs to be developed in the children (AS/suburban).

The PE and sports teachers perceived that the children in the fourth to sixth grades in the Sleman District (suburban) and the city (urban) had excellent communication skills, as expressed in the interviews.

The children can make friends easily, and they respect each other (W/urban). Most students can communicate with their classmates to engage in good teamwork (DW/suburban).

However, the teachers said that children in the volcano disaster area did not exhibit good communication skills and should interact with friends (becoming familiar with friends) to reduce their negative behaviors (angry, lazy, mischievous, and irreverent).

The children are less able to control their emotions (high emotion) and concerns about friends (JS/disaster). The children in the disaster areas tend to be aggressive when performing activities outside the classroom (such as sports or exercise) (DY/disaster). The children in the affected areas still lack manners and appropriate behaviors (TW/disaster).

The PE and sports teachers saw that the children needed communication skills to develop interactions with friends (familiarity with friends) and to reduce their negative behaviors, such as anger, laziness, mischief, and rude behaviors. They need to strengthen their interpersonal relationships with their teachers (GS/suburban). The abilities and characteristics needing improvement by the children are expressing an opinion, self-esteem, and playing with friends (S/suburban). The relationship between the children and their parents are more important for those in the disaster area to ensure their safety (TW/disaster).

The PE and sports teachers noted that the children in the urban, suburban, and volcano-disaster areas all showed good social-awareness (e.g., concern of friends, empathy with friends, and empathy with special-needs children).

The children have empathy for their friends and can work well in a variety of activities at school (W/urban). The children also have a desire to work in groups, can choose good friends, and empathize with special-needs children (JS/disaster). The children have also been able to socialize with friends and teachers (GS/suburban).

According to the PE and sports teachers, although the children had good social awareness skills, they still needed to develop them.

They should be developed through cooperation and protecting the group (DW/suburban). The children need to increase their ability to protect each other with love, especially when volcano eruptions occur (TW/disaster).

The PE and sports teachers thought that the fourth- to sixth-graders in the suburban, urban, and disaster areas did not have the problem-solving skills needed to deal with their problems and those of others.

In the process of solving problems, the children still need the help of others, such as teachers or parents (S/suburban). The children in the urban areas respond more quickly and can solve problems in their complex environment (SL/urban). The children in the disaster area still do not have the thinking skills needed to solve problems (passive cognitive); thus, they are less responsive to a variety of problems (JS/disaster).

The teachers also emphasized that the problem-solving skills that need to be developed are discussing/deliberating an issue, quickly making decisions, and conflict resolution.

After a disaster, parents also face difficult issues that affect their children's thinking skills. (TW/disaster). Their children need to improve their ability to express their opinions and their decision-making skills (SL/urban). When interacting with friends, children are often involved in conflict; thus, conflict-resolution skills are needed (AS/suburban).

When I ask the teacher about the relationship between PE and sports and psychosocial skills, the teachers explained that PE and sports have become a method of improving children's psychosocial skills.

Yes, I think, there is a relationship, but sometimes it is impossible to see, so it needs proof (SL/urban). I would like PE and sports to be one of the methods to improve children's psychosocial skills, for example, giving all children an equal chance to try some new games (S/suburban). I have seen that children are happier with PE and sports; it is unlikely that they will become stressed by sports; instead, sports reduce children's stress, and they become more energetic (JS/disaster).

The teachers asked about the relationship between the teachers, students, and parents regarding the children's psychosocial development.

I felt that we had a close relationship, for example, we were able to discuss their problems with learning and the relationships between students were not a problem (DY/disaster). Yes, a good relationship enhances psychosocial skills through actual behaviors, for example, if a friend was sick, students asked to visit the friend, or when a friend's parent became ill or died, the students requested to visit the friend together (S/suburban). Yes, these relationships exist; the parents always asked teachers to teach psychosocial skills to their children (W/urban).

## (2) Negative Emotional State of the Children

There was a significant difference in mean scores in depression (F (2, 744) = 6.735, p = 0.001), anxiety (F (2, 744) = 10.471, p = 0.000), and stress (F (2, 744) = 21.907, p = 0.000) between children in urban, suburban, and disaster area. It is summarized in Table 3.5.

Table 3.5. Statistical summary of negative emotional states in each area.									
Negative	Urban area		Suburb	Suburban area		er area			
emotional	(N=	186)	(N=	401)	(N=	158)	F		
states	Mean	SD	Mean	SD	Mean	SD			
Depression	7.32	5.702	5.72	4.669	6.04	4.689	6.735*		
Anxiety	9.83	5.582	9.49	5.261	7.51	4.404	10.471*		
Stress	10.94	6.505	11.59	6.116	7.91	4.836	21.907*		

• • • • • • • • • • • • • • • Table 2 5 Statistical c 

Note: \*p < 0.05, SD=Standard Deviation.



Figure 3.2. Mean differences of negative emotional states.

As shown in Figure 3.2, It can describe that there was a significant mean difference on children's depression state between disaster and urban area (p = 0.017) and urban and suburban (p = 0.000), but not between disaster and suburban (p = 0.489). A significant mean difference observed in children's anxiety state between disaster and urban area (p = 0.000) and disaster and suburban (p = 0.000), but not between urban and suburban (p = 0.460). In children's stress state, there was a significant mean difference between disaster and urban area (p = 0.000) and disaster and urban area (p = 0.000) and disaster and urban area (p = 0.000). In children's stress state, there was a significant mean difference between disaster and urban area (p = 0.000) and disaster and suburban (p = 0.000), but not between urban and suburban (p = 0.215). Table 3.6 described the LSD post hoc analysis to show mean differences between areas mentioned above.

Aroo	Me	Mean differences				
Alea	Depression	Anxiety	Stress			
Disaster-urban	-1.279*	-2.372*	-3.030*			
Disaster-suburban	0.322	-1.987*	-3.688*			
Urban-suburban	-1.601*	-0.340	-0.658			
Note: *p < 0.05						

Table 3.6. Post hoc LSD analysis of negative emotional states.

The children's depression state in the disaster area was a significantly lower than the urban area (M = 6.04 < M = 7.32), but there was not a significantly higher than suburban (M = 6.04 > M = 5.72). The disaster area was considerably lower than the urban area (M = 7.51 < M = 9.83) and the suburban area (M = 7.51 < M = 9.49) in children's anxiety state. The children's stress state in the disaster area was significantly lower than the urban area (M = 7.91 < M = 10.94) and the suburban area (M = 7.91 < M = 11.59). Overall, it can conclude that negative emotional state of children in disaster area was significantly lower than the urban and suburban area.

#### 4) Discussion

The teachers believed that the children from all three areas had adequate psychosocial skills, but required support to develop skills for coping with stress, communication, social awareness, and problem-solving. However, the children living in the disaster area had a lower negative emotional state than those residing in the urban and suburban areas. The students in disaster areas are necessary to enhance the psychosocial skills and keep or reduce their negative emotional states by physical education and sports programs which involve varied activities to have a positive impact on the both aspects of children.

The PE and sports teachers perceived that the children did not have good coping skills to deal with stress and needed to develop them. Children require coping skills to survive and continue their lives; thus, they needed to develop appropriate coping skills to promote and maintain their physical and psychological well-being (Wagner, Myers & McIninch, 1999; Kadhiravan & Kumar, 2012). Jellesma (2013) stated that coping with stress is complicated and that physical symptoms emerge in many children. Mondal et al. (2013) emphasized that in children affected by disaster, the loss of family members, structural devastation, or a fear response can result in emotional deterioration, and stress-related symptoms begin to appear immediately after the disaster. Another perspective is that the coping strategies of children determine their psychological reactions to the disaster that facilitate coping and rapid recovery, ensuring positive outcomes that are sustained (Kar, 2009).

The PE and sports teachers noticed that the children in the suburban and urban areas had good communication skills, but those in the disaster area did not exhibit this strength; therefore, children in all areas still need to develop communication skills. Communication skills considered among the most essential skills required of children in disaster areas. The necessary skills were seen as urgent because communication is a basic skill learned in personal and social frameworks (Hollander, Wood, & Herbert, 2003). Moreover, communication is the process of mutually transferring feelings and thoughts (Aydin, 2015). It matters how a person expresses him/herself through interactions with others (Erdogan & Bayraktar, 2014).

The PE and sports teachers believed that the children had social awareness skills, but needed to develop them. Social awareness is the ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand the social and ethical norms for behavior, and to recognize family, school, and community resources and support (Collaborative for Academic, Social, Emotional Learning, 2015). The term empathy refers to two related human abilities: mental perspective taking (cognitive empathy) and the vicarious sharing of emotion (emotional empathy) (Smith, 2006; Cotton, 2001). Children who have social awareness can think critically and adapt to social changes (Tsui, 2000; Greene & Kamimura, 2003).

The PE and sports teachers felt that the children in all of the areas in this study lacked problem-solving skills and needed to improve them. Learning problemsolving skills is important for every aspect of a child's life, both personal and social aspects (Gorucu, 2016). Children with well-developed problem-solving skills can identify effective solutions to a problem (Thompson, Bhatt, & Watson, 2013). Educational programs must be based on problems that students are most likely to face during their lives, and education should be imparted through activities that support them (Tasgin, 2011; Yigiter, 2013).

Much effort has been devoted to developing psychosocial skills by both individual teachers and schools. Routine psychosocial activities in the school setting, the provision of instructional materials, and incidentals activities are examples of such efforts. During the school's psychosocial activities, the children participated in joint activities, such as a homestay program, scouting, ceremonies, field trips, praying, morning exercise, being in line before entering the classroom, and playing through dancing and singing. These activities are consistent with those of Jenkinson and Benson (2010), who identified schools as appropriate settings to promote health and physical activity because of the amount of time students spend there and because the curricula is sufficiently adaptable to include such content. For the instructional activities, teachers integrated psychosocial skills into their lessons. These activities included practicing the expression of opinions, discussing seating arrangements in the classroom, emphasizing materials to teach volcanic or disaster knowledge, and deciding on the types of games and sports used in physical education. These activities were designed in accordance with the essential role of the teacher to help students learn and apply the moral reasoning process and to serve as role models for telling the truth, respecting others, accepting and fulfilling responsibility, playing fair, earning and returning trust, and living a moral life (Lumpkin, 2008). The potential for teachers to support or thwart students' innate psychological needs for autonomy, competence, and relatedness were explored (Taylor, Ntoumanis, & Smith, 2009). Incidental activities, such as participation in voluntary events, social activities, non-government organizations (NGO) training programs, and the Disaster Management Institution or related agency programs were also available to students.

The teachers mentioned that PE and sports are a positive way to improve children's psychosocial skills by giving them opportunities, such as trying new games, participation in multicultural groupings, socialization, cooperation, and enjoying movement. PE is an important educational contributor to students' personal development and provides opportunities for enjoyment, learning new motor skills and cooperating with others (Hassandra, Goudas, & Chroni, 2003). The PE teachers can help students to develop important character and moral virtues (Lumpkin, 2008). Therefore, establishing healthy relationships among teachers, students, and parents should lead to students' positive behaviors and psychosocial skills development.

The current study found that the negative emotional state of the children in the disaster area was significantly lower than that of the children in the urban and suburban areas. This finding is inconsistent with the researcher's initial assumption that the negative emotional state of the children in the disaster area would be higher than that of the children in the urban and suburban areas, as reported by Aslam and Tariq (2010). That study found that individuals living in areas affected by disasters scored significantly higher on measures of depression, anxiety, and stress compared to those living in unaffected areas. There are several possible explanations for finding a lower negative emotional state among the children in the disaster area. For example, religious (Lavigne et al., 2008) and cultural (Jogia, Kulatunga, Yates, & Wedawatta, 2014) factors affecting children's encounters with and responses to natural disasters should be examined. The data for this study were collected almost three years after the 2010 Merapi Volcano eruption and disaster occurred; so, it is possible that the children who were affected by the disaster had returned to their pre-crisis level of psychological functioning. As was the case one year after the earthquake, fear and anxiety symptoms tended to diminish (Uemoto et al., 2012). Moreover, the psychosocial rehabilitation programs by the government and nongovernment organizations after the disaster might have affected the children's negative emotional state. Psychosocial rehabilitation intervention is necessary for individuals who are victims of a disaster (Aslam & Tariq, 2010; Kolaitis, 2011; Kar, 2009; Uemoto et al., 2012). Furthermore, the complexity of the lives of the children who lived in the urban and suburban areas might have contributed to their higher negative emotional state than children who lived in the disaster area.

## 5) Summary

The PE and sports teachers perceived that the children in the fourth to sixth grades had good psychosocial skills, but required some improvement in their skills for coping with stress, communication, social awareness, and problem-solving. They also thought that PE and sports could be an effective way for primary schools to develop children's psychosocial skills. The teachers also recognized that healthy relationships among the teachers, students, and parents were important factors in the success of the teachers' efforts to help children develop psychosocial skills. The children who lived in the disaster area had a lower negative emotional state than those who lived in the urban and suburban areas. Further investigations of the impact of the PE and sports program should involve a variety of activities to decrease children's negative emotional state, and, more importantly, to develop their psychosocial skills.

# Chapter 4: Development of the Children's Psychosocial Skills Scale and its Relationship with Negative Emotional States in a Disaster-Prone Area

#### 1) Purposes of the study

This second preliminary study consists of the first and second study. The purpose of the first study is to develop an instrument to measure the children's psychosocial skills and the second study aims to examine the relationship between psychosocial skills and negative emotional states of children in a disaster-prone area.

## 2) Method

### (1) Participants

**First Study**. The educational and psychological experts were involved in reviewing the items of scale. The educational experts included a room and a PE and sport elementary school teachers and an educational researcher while the psychological expert is in the field of social psychology. A total 745 children in 4<sup>th</sup>  $-6^{th}$  grade from nine elementary schools: three schools located near Merapi volcano (disaster area); two schools based in Yogyakarta city (urban area); and four schools located in Sleman district (suburban area) as shown in Table 4.1 participated in the study.

Schools -	Sex		Ag	Age		Grade		
	F	М	Mean	SD	4th	5th	6th	
3	67	91	10.3	1.08	52	50	56	
2	92	94	10.5	1.58	59	58	69	
4	204	197	10.6	1.13	138	123	140	
	Schools 3 2 4	Schools         Ser.           3         67           2         92           4         204	Schools $ $	Schools         Sex         Ag           F         M         Mean           3         67         91         10.3           2         92         94         10.5           4         204         197         10.6	$\begin{tabular}{ c c c c c c c } \hline Sex & Age \\ \hline F & M & Mean & SD \\ \hline 3 & 67 & 91 & 10.3 & 1.08 \\ \hline 2 & 92 & 94 & 10.5 & 1.58 \\ \hline 4 & 204 & 197 & 10.6 & 1.13 \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c c c } \hline Set & Set & Age \\ \hline F & M & Mean & SD & 4th \\ \hline 3 & 67 & 91 & 10.3 & 1.08 & 52 \\ \hline 2 & 92 & 94 & 10.5 & 1.58 & 59 \\ \hline 4 & 204 & 197 & 10.6 & 1.13 & 138 \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	

Table 4.1. The characteristics of children participants in the first study.

Note: F=Female, M=Male, SD= Standard Deviation.

**Second Study**. A complete 810 fourth through sixth-grade students (440 girls and 370 boys) from the fifteen elementary schools in disaster-prone areas 5–15 km from the top of the Merapi volcano participated in the study. Participants in this study described in Table 4.2.

	Sahaala -	Children in grade					
No.	Schools	$4^{th}$	$5^{\text{th}}$	$6^{th}$	Ν		
1	Bronggang	12	15	17	44		
2	Muhammadiyah Cepitsari	24	23	15	62		
3	Watuadeg	16	17	17	50		
4	Cangkringan 1	15	9	12	36		
5	Kepuharjo	31	23	20	74		
6	Banaran	11	13	19	43		
7	Cangkringan 2	9	11	11	31		
8	Gungan	11	6	15	32		
9	Kiyaran 2	14	14	22	50		
10	Negeri Kiyaran 1	24	19	15	58		
11	Bronggang Baru	27	20	26	73		
12	Glagaharjo	18	22	18	58		
13	Cancangan	21	31	18	70		
14	Kuwang	16	16	18	50		
15	Baitussalam 2	33	27	19	79		
					810		

Table 4.2. School and children participants in the second study.

### (2) Procedure

The development of the Psychosocial Skills Scale (PSS) in the **first study** was based on specific guidelines for scale development (DeVellis, 2003): (1) determine clearly what is to be measured; (2) generate an item pool; (3) determine a format for measurement; (4) have the item pool reviewed by experts; (5) include scale validation items; (6) administer the items to a development sample; (7) evaluate the items; and (8) complete the final version of the scale. In the **second study**, the children completed the Depression Anxiety Stress Scales (DASS 42) and the final version of the PSS.

## (3) Data Collection

**First Study**. The pilot version of PSS included four self-report subscales designed to measure coping with stress, communication, social awareness, and problem-solving skills among the children. Each of the four subscales contained ten items. Respondents rated each item on a 4-point scale according to their circumstances, with response options ranging from not according to me (0), less suited to me (1), moderately according to me (2), and completely according to me (3).

**Second Study**. Based on the results of the first study, the final version of the PSS was used to measure coping with stress, communication, social awareness, and problem-solving skills among the children in the study. The negative emotional state of the children was measured using the DASS 42 (Lovibond & Lovibond, 1995). The 42-item self-report questionnaire consisted of three subscales; each scale consists of 14 items, divided further into subscales of 2–5 items with similar

content. Respondents are asked to use a 4-point severity scale to rate the extent to which they have experienced each symptom over the past week.

#### (4) Data Analysis

All analyses were performed using SPSS and AMOS version 22.0 for Windows, and the statistical significance was set at p < 0.05. In the **first study**, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed to assess the construct validity of the PSS. Multiple correlations among the items and the item-total were calculated to examine the scale's internal validity, and the scale's reliability was tested using Cronbach's alpha coefficient. In the **second study**, the relationship between psychosocial skills and negative emotional state was examined using Pearson correlations analysis.

#### 3) Results

#### (1) First Study

**Determine what to measure.** I decided to measure the children's psychosocial skills. The psychosocial skills in this context consisted of coping with stress, communication, social awareness, and problem-solving. Coping with stress refers to an individual's cognitive and behavioral efforts to manage stress (Carpenter, 1992). Communication is a basic skill one has learned to communicate effectively (Hollander, Wood, & Herbert, 2003). Social awareness is the ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports (CASEL, 2015). Problem-

solving defined as a cognitive-affective-behavioral process through which an individual or group identifies or discovers an efficient way of coping with a problem encountered in everyday life (Yigiter, 2013). These skills are crucial for children in their daily lives.

Generate an item pool. I initially drafted a self-report scale to measure children's psychosocial skills that included four subscales that assessed children's stress coping, communication, social awareness, and problem-solving. Each subscale consisted of 10 items. All items were developed using simple statements in the Indonesian language.

**Determine the format for measurement.** The Likert-type scale was selected to rate responses because it was easier to score and the respondents were familiar with the format. The items measured the children's agreement with statements' describing them on a 4-point scale, with responses ranging from not according to me (0), less suited to me (1), moderately according to me (2), and completely according to me (3). The choice of a 4-point instead of a 5-point scale was intended to force apathetic or ambivalent respondents to choose a final response category (Garland, 1991).

**Review of the item pool by experts.** The researcher selected four experts from the areas of education and psychology to review the initial item pool.

*The education experts*. The educational experts of study consisted of a classroom, PE, and sports teacher, and a researcher in education. I asked the teachers and the educational researcher to review the scale and provide input on it. They checked the quality of each item regarding its content, clarity, and legibility,

especially its suitability for children in the fourth to sixth grades of elementary school. They also reviewed the response options for their compatibility with the information obtained by the researcher. The researcher obtained feedback from these experts to refine and revise the scale's items. They suggested improving the item's statements by using easier words that could be understood by the children. The scale's statements were restructured to form simple sentences. The experts also suggested avoiding the use of educational terminology that would elude the children. For the response options, the experts suggested using the appropriate reading and comprehension level for children's responses to the statements, by considering their level of thinking skills.

*The psychology expert*. The expert from the specialty area of social psychology recommended revisions and corrections of the scale's items. This expert checked the each item's compatibility with the concept of psychosocial skills to be investigated and reviewed the scale's response options. The expert judged that ten items (statements) for each subscale were sufficient for extracting information. This expert also revised statements that were unclear, ambiguous, or lengthy. The expert agreed with the use of the 4-point rating scale without a neutral option to ascertain a firm position on the children's attitudes through their responses to the items.

**Include scale validation items.** In this step, the researcher selected items that had been suggested by experts according to their field of expertise. The researcher selected ten statements to measure each skill, which summed to 40 items. The valid items in the scale's English version shown in Table 4.3.

	Table 4.3. The correct version of item statements in PSS.
Items	Stress Coping Statements
1	I avoid contact when having problems with a friend.
2	I do something that is fun to solve a problem with a friend.
3	I avoid anything that makes me disappointed.
4	I think that every problem in the school will resolve itself automatically.
5	I do something to calm down when I face problems at school.
6	I avoid feeling disappointed or I forget about problems at school.
7	I engage in exercise/sport.
8	According to me, any problem can be resolved well.
9	I engage in a hobby/interest that helps me feel relaxed and happy.
10	I pray diligently.
Items	Communication Statements
1	I say "please" and "thank you" when I asked for something to someone.
2	The clothes which I wear make others feel comfortable.
3	I am not cursing/using abusive language in a public place.
4	My hair is clean and Natty.
5	I have a good body condition.
6	I saw his eyes, while talking to someone.
7	My nails are cleanly and neatly trimmed.
8	I am angry and impatient, when something is not as I would like.
9	I try not to criticize, when others do something different with me.
10	I am grateful to those who helped or gave me a gift.
Items	Social Awareness Statements
1	I do not care about friends who tease or call my name
2	I am trying to understand the feelings of a friend who was angry, upset, or sad.
3	I feel pity for the people affected by the disaster/accident.
4	I do things that pleasure my parents, (such as: helping at home) without being asked.
5	I spoke to the parents when opinions are different.
6	I received a sentence of older people without angry.
7	I make friends easily.
8	I invite others to participate in community activities.
9	I smiled, waved or nodded in others.
10	I participate in school activities (such as extracurricular sports, boy scouts etc.).

Table 4.3. The correct version of item statements in PSS.

Items	Problem-solving Statements
1	I like to solve problems and make decisions
2	I love to collaborate within groups to complete tasks.
3	I resolve problems quickly and easily.
4	I can learn quickly and easily.
5	I know the details of the task and do it right.
6	I am an intelligent person and can think in complicated situations.
7	I am more concerned about facing uncertain problems.
8	I try to sort the problems faced starting from the easiest to the most difficult.
9	I like to do something that can be done well.
10	I can make difficult decisions easily and be firm on them.

Administer the items to a development sample. The researcher conducted a pilot study of the validated subscale using a sample with similar characteristics to the research sample. As explained in the description of the study's participants, 745 children from the fourth to sixth grades of elementary school in the Yogyakarta area comprised the development sample from the urban, suburban, and disaster areas (see Table 4.1).

**Evaluation of the items.** In this step, the researcher evaluated the scale's items based on the data obtained from the pilot study of the development sample. Statistical analyses were performed to assess the scale's construct and internal validity, and its internal consistency/reliability. Construct validity was tested using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The internal validity examined by calculating multiple correlations of the scores on the individual items with the total score, and the scale's internal consistency/reliability was verified using Cronbach's alpha coefficient.

Before the EFA, the researcher performed the required Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO MSA). The following scores were obtained: stress coping = 0.728 (moderate), communication = 0.827 (good), social awareness = 0.874 (good), and problem solving = 0.905 (very good). The scores on the Bartlett's Test of Sphericity were 1,148.691 for coping with stress, 1,170.953 for communication, 1,557.175 for social awareness, and 1,840.836 for problemsolving, with 45 degrees of freedom and a probability of < 0.001, indicating significant results. Thus, the sample was deemed appropriate for further analysis. The summary of the analysis presented in Table 4.4.

	Dai tiett 5 test.									
				Bartlett's Test of Sphericity						
No.	Scale	Items	KMO MSA	Approx.	df	Sig.				
				Chi-Square		-				
1	Stress Coping	10	0.782	1148.691	45	0.000				
2	Communication	10	0.827	1170.953	45	0.000				
3	Social Awareness	10	0.874	1557.175	45	0.000				
4	Problem Solving	10	0.905	1840.836	45	0.000				

 

 Table 4.4. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's test.

The next step of the EFA, the extraction of factors to view eigenvalues in the scree plot, showed that three components of stress coping, two components of communication, two components of social awareness, and one component of problem-solving had eigenvalues greater than one.

Varimax rotation of the factors was used to maximize the relationship between the variables with multiple iterations or rounds. The varimax method was selected to rotate the initial extraction factor results and eventually obtain the results in one column where the values were as close as possible to zero.

Item statements were disqualified if the rotated factor loading was less than 0.30 (< 0.30). The rotation factor results indicated that there were no items with a

rotated factor loading less than 0.30, as shown in Table 4.5. The distribution of the items and the names of each factor, based on the rotated factors, are presented in Table 4.6. In the next steps, a CFA was performed to verify the model's goodness of fit. The fit indices were the Root Mean Square Error of Approximating (RMSEA), the Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Comparative Fit Index (CFI), which indicated that the model had a good fit, as shown in Table 4.7.

Stress Coping				Communication			Social Awareness			Problem-Solving	
Scale				Scale			scale			Scale	
	Component				Component			Component			Component
Items	1	2	3	Items	1	2	Items	1	2	Items	1
9	0.749			4	0.751		7	0.701		1	0.671
8	0.654			10	0.664		3	0.690		3	0.668
7	0.653			1	0.655		10	0.690		4	0.663
10	0.651			5	0.643		4	0.670		5	0.663
3		0.732		7	0.553		8	0.626		9	0.655
1		0.691		2	0.497		9	0.612		2	0.621
6		0.579		9		0.711	2	0.526		6	0.618
2		0.558		8		-0.615	1		0.802	7	0.610
4			0.892	3		0.596	5		0.609	8	0.597
5			0.558	6		0.520	6		0.497	10	0.582

Table 4.5. Extraction and rotation of factor.

Table 4.6. The name of factors and distribution of items.

Scale	Factors	Item distribution		
Stress coping	Reactivity to stress	7, 8, 9, 10		
	Assess situation	1, 2, 3, 6		
	Relaxation	4, 5		
Communication	Verbal	3, 6, 8, 9		
	Nonverbal	1, 2, 4, 5, 7, 10		
Social Awareness	Cognitive empathy	1, 5, 6		
	Emotional empathy	2, 3, 4, 7, 8, 9, 10		
Problem-solving	Decision-making process	1, 2, 3, 4, 5, 6, 7, 8, 9, 10		

			0		
No.	Scale	RMSEA	GFI	AGFI	CFI
1	Stress Coping	0.055	0.973	0.954	0.936
2	Communication	0.051	0.973	0.957	0.942
3	Social Awareness	0.054	0.973	0.956	0.952
4	Problem Solving	0.057	0.966	0.947	0.953

Table 4.7. CFA Indexes of a good fit model.

The internal validity of the items for each subscale was examined by calculating the correlations between each item's score and the total score on each subscale. Pearson's correlation coefficient was significant (p < 0.01 in the two-tailed test) between the items' scores and total score on each subscale. These results are presented in Table 4.8.

itoms	Pearson correlation coefficient (r)							
items	Stress Coping	Communication	Social Awareness	Problem-solving				
1	0.420**	0.624**	0.316**	0.674**				
2	0.533**	0.606**	0.628**	0.622**				
3	0.588**	0.521**	0.649**	0.660**				
4	0.424**	0.627**	0.619**	0.648**				
5	0.619**	0.573**	0.539**	0.648**				
6	0.613**	0.538**	0.611**	0.617**				
7	0.475**	0.470**	0.655**	0.622**				
8	0.610**	-0.293**	0.645**	0.609**				
9	0.593**	0.592**	0.640**	0.649**				
10	0.491**	0.590**	0.617**	0.597**				

 Table 4.8. Pearson correlation coefficient of the item in each scale.

Note: **\*\***p < 0.01 in two tailed test.

To examine the instrument's internal consistency/reliability, the researcher calculated Cronbach's alpha coefficient for each subscale, which indicated adequate reliability: 0.727 for the coping with stress subscale; 0.699 for the communication

subscale; 0.794 for the social awareness subscale; and 0.835 for the problemsolving subscale. Thus, the item statements on the scale had high internal consistency/reliability. Finally, the analysis of the scale's construct validity indicated a good model fit; a significant correlation between all the items and the total score showed good internal validity; and the internal consistency, as measured by Cronbach's alpha was acceptable for this sample.

**Completion of the final version of the scale.** Based on the results of the analysis of scales' construct validity using factor analysis, internal validity, and consistency/reliability, the item statements in each scale significantly contributed to the indicators. Furthermore, the statistical results indicated the scale's structure contained four different subscales. The subscales consist of 10 items on coping skills for stress (reactivity to stress, assessment of the situation, and relaxation factors), 10 items on communication skills (verbal and nonverbal factors), 10 items on social awareness skills (cognitive and emotional empathy factors), and 10 items on problem-solving skills (decision-making process factor). The final version of the scale included general information about the respondents name, date of birth, age, sex, school's name, grade), and instructions for completion (how to answer the questions and the four possible answers) for use in the subsequent study.

Afterward, researcher performed one-way ANOVA to examine the differences of psychosocial skills between areas. There were a significant difference of mean scores in stress coping (F (2, 744) = 31.252, p = 0.000), communication (F (2, 744) = 29.338, p = 0.000), social awareness (F (2, 744) = 19.311, p = 0.000),
and problem-solving (F (2, 744) = 18.343, p = 0.000) between children in urban, suburban, and disaster area.

As shown in Figure 4.1 and Table 4.9, it can be describe that the children's stress coping skills in the disaster area was a significantly lower than the urban (M = 12.91 < M = 14.48) and suburban (M = 12.91 < M = 16.57) area. The disaster area was considerably lower than the urban (M = 15.32 < M = 17.10) and the suburban (M = 15.34 < M = 18.84) area in children's communication skills. The children's social awareness skills in the disaster area was significantly lower than the urban (M = 15.70 < M = 17.33) and the suburban (M = 15.70 < M = 18.78) area. Similar results also found that the children's problem-solving skills in disaster area was significantly lower than the urban (M = 15.09 < M = 17.68) area. It means that all psychosocial skills aspects of children in disaster area are significantly lower than urban and suburban area.



Figure 4.1. Mean differences of psychosocial skills.

	Urban area		Suburban area		Disaster area		
Psychosocial skills	(N=186)		(N=4	(N=401)		(N=158)	
	М	SD	М	SD	М	SD	
Stress coping	14.84	5.390	16.57	4.816	12.91	5.149	31.252*
Communication	17.10	5.311	18.84	4.849	15.32	5.112	29.338*
Social Awareness	17.33	5.163	18.78	5.262	15.70	5.915	19.311*
Problem-solving	15.25	5.834	17.68	5.407	15.09	5.881	18.343*

 Table 4.9. Statistical summary of psychosocial skills in each area.

Note: \*p < 0.05, M=Mean, SD=Standard Deviation.

### (2) Second Study

The Pearson's correlation analysis was performed to examine the relationship between negative emotional state and psychosocial skills variables. There are a significant negative correlation between depression and communication (r = -0.065, p = 0.032), social awareness (r = -0.083, p = 0.009), and problem-solving (r = -0.058, p = 0.049) but not between depression and stress coping (r = -0.045, p =0.098). There are not a significant correlation between anxiety and stress with psychosocial skills components. It can conclude that the relationship between negative emotional state and psychosocial skills is fragile and tended no connection between them. It can see in Table 4.10.

Variables	Coping Stress	Communication	Social Awareness	Problem-solving					
Depression	-0.045	-0.065*	-0.083**	-0.058*					
Anxiety	0.026	0.021	0.021	0.011					
Stress	0.035	0.032	0.025	-0.006					
Note:*p < 0.05, *	*p < 0.01								

Table 4.10. Summary of Pearson correlation analysis.

#### 4) Discussion

#### (1) First Study

The results of this study provide empirical evidence that the PSS is a reliable and valid measure of children's psychosocial (coping with stress, communication, social awareness, and problem solving) skills. The overall scale consists of four subscales for use with fourth- to sixth-grade children in elementary school. This scale was developed using a sample of children from various areas of Yogyakarta, Indonesia. The development of the PSS involved education and psychology experts who provided direct input on the generation of the items. Efforts were made to ensure that the items were developmentally appropriate for the sample's children in wording and content. Each of the four subscales was developed with the purpose of measuring a specific skill. The coping with stress subscale was developed to assess the children's ability to deal with stressful problems in their school and daily activities. This subscale's purpose is consistent with the assumption that individuals cope with stress by using avoidance measures to reduce stressful problems (Aslam & Tariq, 2010). The communication skills subscale was developed to measure children's verbal and nonverbal communication skills. This scale's purpose is based on the premise that there are three levels of communication: logical (words), paraverbal (tone, volume, a rate of speech, and so on), and nonverbal (facial expression, position, movement, clothing, and so on) communication (Preja, 2013). The social awareness skills subscale measures children's cognitive and emotional empathy. This subscale is consistent with the definition of social awareness as being closely related to the ability to empathize to understand (cognitive) and feel emotions

(emotional/affective) in response to others' situations (Cotton, 2001; Blair, 2005; Smith, 2006; Zhou & Ee, 2012). The problem-solving skills subscale was developed to assess the problem-solving ability of the children in their daily activities. Problem-solving skills involve the use of cognitive, affective, and behavioral processes to solve problems encountered in everyday life (Karademir & Tasçi, 2015; Yigiter, 2013; Thompson, Bhatt, & Watson, 2013).

#### (2) Second Study

This study found that depression (a negative state) among the children in the disaster-prone area was a significant and negative relationship with communication, social awareness, and problem-solving skills. A depressed state might have negatively influenced the psychosocial skills of communication, social awareness, and problem-solving. Therefore, a reduction in depression should be followed by increased communication, social awareness, and problem-solving skills of the children and vice versa. This finding is consistent with the notion that depression involves some contributing factors, such as genetics, environment, lifestyle, brain activity, psychology, and personality (Moghaddam et al., 2012). The current study's findings are similar with that of a study by Yasin and Dzulkifli (2010) that reported a significant negative relationship between social support and depression. Another study found that the ability/inability to solve a problem with a positive attitude was associated with the risk of depression (Becker-Weidman, Jacobs, Reinecke, Silva, & March, 2010). However, a study by Tully, Ames, Garcia, and Donohue (2016) reported different findings. Specifically, a positive correlation between social

awareness and depression by level of cognitive empathy was associated with elevated depression.

Anxiety and stress state was not a significant relationship of any of the psychosocial skills. It means that the children's anxiety state in the disaster-prone area did relate not alter significantly to their psychosocial skills. The current study's findings contradict some previous studies. A study by Aslam and Tariq (2010) found that resilient individuals were less vulnerable to anxiety, and another study found that the anxiety associated with differences in the communicative behavior of individuals involved physical changes and changes in speech and voice (Almeida, Behlau, & Leite, 2011). In the overall consideration, the relationship between stress and psychosocial skills found in the current studies also not match with previous studies. The actual problems experienced by the children during and after a major disaster influenced their social and behavior changes (Henley, 2005). Similarly, stress can be an early symptom of a medical problem among children, resulting in their loss of social interaction (Jellesma, 2013). Two studies that have examined the relationship between stress and psychosocial skills reported an association between stress and coping strategies (Chou, Chao, Yang, Yeh, & Lee, 2011). Other studies have concluded that stress is a significant predictor of empathy among students (Parks et al., 2015) and that the presence of stress and having experienced problems predicted excellent problem-solving skills (Karademir & Tasci, 2015).

### 5) Summary

In the first study, the PSS (coping with stress, communication, social awareness, and problem-solving) was developed and validated. The scale was used to measure the psychosocial skills of fourth- to sixth-grade children in elementary school in the Yogyakarta area, including the disaster-prone area. Despite using published guidelines and appropriate statistical analyses for the scale's development, this study has several limitations. First, our sample consists of fourth- to sixth-grade elementary school children from the Yogyakarta area of Indonesia; therefore, our results cannot be generalized to children who live in other geographical locations in Indonesia. Second, experts in fields specializing in psychosocial skills were not involved in this study. Third, in the preliminary examination of the scale's construct validity, the researcher did not analyze the correlations between the PSS factors and the factors of other scales.

The relationship between the children's negative emotional state and psychosocial skills in the disaster-prone area was reported in the second study. A fragile relationship between negative emotional state and psychosocial skills of children in the disaster-prone area reported in the second study. Depression, stress, and anxiety tended no good rapport with stress coping, communication, social awareness, and problem-solving skills. It means that an increasing or decreasing in the negative emotional state may not affect the psychosocial skills of children in disaster-prone areas and vice versa. Further research on intervention programs is needed to harmonize the two components so that the children will have the psychological and social strength to meet the challenges of everyday life and the possibility of an impending disaster.

# Chapter 5: Reducing Children's Negative Emotional States through Physical Education and Sports in Disaster-Prone Areas

#### 1) Purpose of the study

The study aims to examine the effects of physical education (PE) and sports programs on reducing children's negative emotional states in disaster-prone areas.

### 2) Method

### (1) Participants

The fifteen elementary schools in disaster-prone areas 5–15 km from the top of the Merapi volcano randomly organized into an intervention group and two control groups. School determination can be done randomly in the interventions program (Ronan & Johnson, 1999). Fifteen PE and sports teachers, and 810 fourth through sixth-grade children (440 girls and 370 boys) enrolled in elementary schools participated in this study. The children's ages ranged from 7 to 15 years old (ages: Mean = 10.3, SD = 1.09). 266 children consisted of 110 females and 156 males in the intervention group (ages: Mean = 10.3, SD = 1.11). The first control group had 214 children, 105 females and 109 males (ages: Mean = 10.4, SD = 1.19). The second control group had 330 children, 155 female and 175 males (ages: Mean = 10.3, SD = 0.999). Table 5.1 shows the characteristics of children participants.

Group -	А	ge		Grade		Sex		
	Mean	SD	4 <sup>th</sup>	5 <sup>th</sup>	$6^{th}$	F	М	
Intervention	10.34	1.112	98	87	81	110	156	
Control 1	10.39	1.192	69	63	82	105	109	
Control 2	10.29	0.999	115	116	99	155	175	
Mater CD-Ctand	and Desidetia	- E-Eamala	M_Mala					

 Table 5.1. Children characteristics for the intervention and control groups.

Note: SD=Standard Deviation, F=Female, M=Male.

#### (2) Procedure

The study was designed in three phases: planning, implementation, and evaluation. In the planning phase, PE and sports program based on psychosocial education practices that use physical activities in a group, problem-solving and coping with stress, including holistic relaxation exercises in handbooks and video supplements developed for the intervention group (see Chapter 2). Furthermore, field experimental design (shown in Figure 5.1) used in the implementation phase which begins by administered the DASS 42 to all children. Conducted a special training incorporated theoretical and practical for teachers of PE and sports assigned to the intervention group whereas PE and sports teachers in the first and second control groups were not provided additional training and involved in focus group discussions. Implemented all programs occurred over two semesters (28 weeks) and administered the DASS 42 to all children again. In the evaluation phase, DASS 42 used to evaluate children's negative emotional state at before and after the PE and sports programs.



Figure 5.1. Field experimental design of this study.

### (3) Data Collection

The negative emotional state of children measured by the Depression, Anxiety, and Stress Scales (DASS 42) (Lovibond & Lovibond, 1995). The 42-item questionnaire consists of three self-report scales. Each scale contained 14 items and divided into subscales of 2–5 items with similar content. Dysphoria, hopelessness, devaluation of life, self-deprecation, and lack of interest/involvement, anhedonia, and inertia assessed on the depression scale. The anxiety scale has indicators of autonomic arousal, musculoskeletal effects, situational anxiety, and subjective experience of anxious affect. A chronic non-specific arousal scale assessed sensitivity to stress. Respondents are asked to use a 4-point severity scale to rate the extent to which they have experienced each symptom over the past week. Table 5.2 shows the severity rating index of DASS.

	Depression	Anxiety	Stress
Normal	0 – 9	0 - 7	0-14
Mild	10 - 13	8 – 9	15 - 18
Moderate	14 - 20	10 - 14	19 - 25
Severe	21 - 27	15 - 19	26 - 33
Extremely Severe	28+	20+	34+

Table 5.2. DASS symptom severity ratings (Lovibond & Lovibond, 1995).

The DASS 42 was administered to 745 children in the fourth through sixth grades in Yogyakarta schools before any PE and sports programs began (see Chapter 3). The DASS 42 was analyzed the validity and reliability in the sample. The analysis of internal validity verified that the DASS 42 was suitable for our sample (p < 0.01). A reliability test of the DASS 42 for children in this study yielded a Cronbach's alpha of 0.904.

# (4) Data Analysis

Two-way multivariate (MANOVA) and analysis of variance (ANOVA) tested for interaction effect and differences between the intervention and control groups before and after the PE and sports programs. One-way ANOVA was used to compare the changes in negative emotional states (depression, anxiety, and stress) before and after PE and sports program across groups. Paired sample t-tests were used to evaluate differences within groups. Data analysis was performed using SPSS Version 22.0 for Windows.

# 3) Results

There was a significant interaction effect of mean depression scores between test and groups (F (2, 807) = 4.182, p = 0.016; Wilks'  $\Lambda$  = 0.990) and when the pre and post-test scores of groups are combined (F (2, 807) = 7.327, p = 0.001). The groups had significantly different changes in depression states from pre- to post-intervention. It is shown in Figure 5.2.



Figure 5.2. Comparison of depression states within and between group and test.

To compare the change in depression scores across groups, we performed a one-way ANOVA. Significant differences of depression states between groups were found (F (2, 807) = 4.182, p = 0.016). There were significant differences in depression states between the intervention group and first control group (p = 0.005) and second control group (p = 0.040). However, there was no significant difference between control groups (p = 0.325). Figure 5.3 shows the plots of mean depression differences between groups.



Figure 5.3. Mean depression score changes for groups.

The differences of depression before and after PE and Sports programs within groups assessed by using a paired-samples t-test. There was a significant reduction in depression after the psychosocial PE and sports program for the intervention group (t (265) = 5.384, p = 0.000). The second control group also showed a significant decrease in depression scores after their program (t (329) = 2.420, p = 0.016). There was no significant reduction in depression for the first control group (t (213) = 0.718, p = 0.474). The intervention and second control groups showed decreased depression as a result of their respective programs. Results summarized in Table 5.3.

Table 5.5. Faired-sample t-tests for depression.										
Group —	Μ	ean	Standard	_ +						
	Pre	Post	Pre	Post	— i					
Intervention	7.41	5.72	5.934	5.393	5.384*					
Control 1	7.59	7.31	5.443	5.621	0.718*					
Control 2	6.28	5.53	4.710	5.221	2.420*					

Table 5.3. Paired-sample t-tests for depression.

Note: \*p < 0.05 in two tailed test.

There was a significant interaction effect between mean anxiety scores and groups (F (2, 807) = 5.110, p = 0.006; Wilks'  $\Lambda$  = 0.987). The groups had significantly different changes in anxiety from pre- to post-programming (F (2, 807) = 9.358, p = 0.000). The plot in Figure 5.4 shows the differences. To compare changes in anxiety scores across groups, a one-way ANOVA performed. There were significant differences between anxiety states in groups (F (2, 807) = 5.110, p = 0.006).



Figure 5.4. Comparison of anxiety within and between groups and test.

Significant differences in anxiety were found between the intervention group and the second control group (p = 0.002) but were not identified between the intervention group and first control group (p = 0.064), or between the first and second control groups (p = 0.296). Figure 5.5 shows the plots of mean anxiety change between groups.



Figure 5.5. Mean anxiety changes in groups.

Afterward, paired-sample t-tests were performed to assess group differences in anxiety before and after the PE and sports program. There was a significant reduction of anxiety after the PE and sports program for the intervention group (t (265) = 6.599, p = 0.000) and first control group (t (213) = 2.744, p = 0.007). Anxiety was not significantly reduced for the second control group (t (329) = 1.723), p = 0.086). Results summarized in Table 5.4.

Table 5.4. Paired- sample t-tests for anxiety.									
Group –	Me	an	Standard	+					
	Pre	Post	Pre	Post	- i				
Intervention	9.44	7.34	5.518	4.876	6.599*				
Control 1	10.57	9.45	6.015	5.839	2.744*				
Control 2	8.72	8.13	4.943	5.754	1.723				

. .

Note: \*p < 0.05 in two tailed test.

There was the significant interaction effect of mean stress scores between test and groups (F (2, 807) = 7.631, p = 0.001; Wilks'  $\Lambda$  = 0.981). Mean stress scores

are also significantly different when the pre- and post-tests of the group are combined (F (2, 807) = 4.216, p = 0.015). The plot in figure 5.6 summarizes these results.



Figure 5.6. Comparison of Stress within and between groups and test.

Then, a one-way ANOVA was performed to compare the mean change in stress scores across groups. There were significant differences of stress states between the groups (F (2, 807) = 7.631, p = 0.001). Significant differences appeared between the interventions and first control group (p = 0.000), as well as the second control group (p = 0.002). No significant differences found between the first and second control groups (p = 0.746). Figure 5.7 shows the plots of mean stress differences between groups.



Figure 5.7. Mean stress differences between groups.

Furthermore, paired-sample t-tests were performed to assess group differences in stress states before and after the PE and sports program. There was a significant reduction in anxiety after the PE and sports program for the intervention group (t (265) = 8.250, p = 0.000) and the second control group (t (329) = 3.322, p = 0.001), but not for the first control group (t (213) = 1.946, p = 0.053). Results summarized in Table 5.5.

Table 5.5. Tan cu-sample t-tests for stress.										
Group —	M	ean	Standard	Standard Deviation						
	Pre	Post	Pre	Post	— i					
Intervention	10.95	7.98	6.059	5.665	8.250*					
Control 1	11.23	10.38	6.096	5.861	1.946					
Control 2	10.84	9.56	5.888	6.382	3.322*					

Table 5.5. Paired-sample t-tests for stress

Note: p < 0.05 in two tailed test.

### 4) Discussion

Analysis of the effects of PE and sports programs on depression showed significant interactions and differences between groups. There was a significant reduction in depression for the intervention group (Mean = 1.692) and second

control group (M = 0.758), but not for the first control group (M = 0.280). The therapeutic, psychosocial PE and sports program had a significant impact on the decrease in depression for children in the intervention group. Our results supported by Annesi (2005) that confirms a significant reduction in depression for a treatment group engaged in physical activity compared to a control group who was getting no exercise. The decrease in depression is a significant finding especially for children who have been traumatized after disasters (Aslam & Tariq, 2010; Kolaitis et al., 2011; Roussos et al., 2005). Some research has found a significant reduction in depression in some training and exercise program (Camero, Hobss, Stringer, Branscum, & Taylor, 2012; Motta, Kuligowski, & Marino, 2010; Bicer, Asghari, Kharazi, & Asl, 2012). It is the necessary role of PE and sports programs to lower depression so traumatized children can enjoy their daily lives again. Moghaddam, Mehrdad, Salehian, and Shirmohammadzadeh (2012) have also demonstrated a significant reduction in children's depression rates through participation in many sports like swimming, track and field, and football.

The analysis of the effect of PE and sports programs on anxiety showed significant interactions and differences between groups as well. A significant reduction in anxiety for the intervention group (M = 2.098) and first control group (M = 1.112) found, but none for the second control group (M = 0.582). The PE and sports programs of both the intervention and first control groups had a positive effect on the reduction of anxiety. PE and sports programs in the second control group did not have a positive impact on the reduction of anxiety state. Exercise has also been shown to be an effective treatment for anxiety (Moghaddam et al., 2012;

Yildrim, 2012; Bicer et al., 2012). According to many researchers, anxiety reduction is necessary for children who have experienced a disaster (Kar, 2009; Ronholt, Karsberg & Elklit, 2013; Uemoto et al., 2012).

The analysis of the effects of PE and sports programs on stress showed significant interactions and differences between and within groups. PE and sports programs in the intervention and second control groups had a positive effect on the reduction of stress. Moghaddam et al., (2012) support our findings that regular exercise reduces stress. Other researchers have found that developmentally appropriate physical activity in PE or an after-school program could affect necessary psychological and somatic coping skills in stress reduction (Wahl-Alexander & Sinelnikov, 2013; Ronan & Johnson, 1999). Others have found that children in a disaster prone area would need sufficient skills to help support stress reduction and prevent other negative psychological symptoms (Uemoto et al., 2012; Yonekura, Ueno, & Iwanaka, 2013).

A 10-minute relaxation exercise at the end of the lesson may significantly contribute to the reducing of children's negative emotional state. The finding supports that an integration of relaxation exercises and physical activity will improve the mental health of female children (Masomeh, Mehdi, & Monire, 2012). Also, it was revealed by some research that the Tai Chi motion which part of this relaxation training program has provided many positive benefits for many people (Sandlund & Norlander 2000). The yoga exercises included in this program have also been supported by researchers as effective interventions for stress reduction

(Jellesma, 2013) and are an effective way of reducing depressive symptoms of children in urban school environments (Steiner et al., 2013).

# 5) Summary

A psychosocial-based PE and sports program implemented as an intervention with a group of children in the Merapi volcano disaster-prone areas of Indonesia. A significant impact on negative emotional states (depression, anxiety, and stress) supported as an outcome of this program. Control groups did not show a decrease in negative emotional states for all factors examined. Expectedly, the program to be the major development of specialized physical education and sports curriculum for the school in disaster-prone areas. Although the program evaluation results showed desirable results, there may be some possible weaknesses. Limitations include differences in the teaching abilities of teachers that may have had consequences in program implementation, potential differences in school policies for curricula in PE and sports, school infrastructure deficiencies, and differences in the application of the program itself.

# Chapter 6: Enhancing Psychosocial Skills of Children in Disaster-Prone Areas through Physical Education and Sports

### 1) Purpose of the study

The study examines the effect of the physical education (PE) and sports programs on the improvement of children's psychosocial (stress coping, communication, social awareness, and problem-solving) skills in a volcano disaster-prone areas.

# 2) Method

# (1) Participants

Fifteen elementary schools in disaster-prone areas, 5–15 km from the top of the Merapi volcano, were randomly organized into an intervention group and two control groups. In the intervention program, schools determined randomly (Ronan & Johnson, 1999). Based on that, fifteen PE and sports teachers and 810 fourth through sixth-grade children (440 girls and 370 boys) from elementary schools participated in the study.

The participants in this study described in Table 6.1. Specifically, on children's characteristic, ages ranged from 7 to 15 years (Mean = 10.3, SD = 1.09). The 266 children consisted of 110 females and 156 males children in the intervention group (ages: Mean = 10.3, SD = 1.11). The first control group had 214 children; 105 females and 109 males (ages: Mean = 10.4, SD = 1.19). The second control group had 330 children; 155 females and 175 males (ages: Mean = 10.3, SD = 0.99). Table 6.2 shows the characteristics of children participants.

Crowna	Sabaala	Cada	Taabara	Chi	ldren	in gra	ade
Groups	Schools	Code	reachers	$4^{th}$	$5^{th}$	6 <sup>th</sup>	Ν
	Bronggang	IG 1	E N K	12	15	17	44
	Muhammadiyah Cepitsari	IG 2	A D A	24	23	15	62
Intervention	Watuadeg	IG 3	НS	16	17	17	50
	Cangkringan 1	IG 4	Μ	15	9	12	36
	Kepuharjo	IG 5	Sn	31	23	20	74
	Banaran	CG 1.1	Sr	11	13	19	43
	Cangkringan 2	CG 1.2	SL	9	11	11	31
Control 1	Gungan	CG 1.3	Sm	11	6	15	32
	Kiyaran 2	CG 1.4	SS	14	14	22	50
	Negeri Kiyaran 1	CG 1.5	B S	24	19	15	58
	Bronggang Baru	CG 2.1	S M	27	20	26	73
	Glagaharjo	CG 2.2	ΕS	18	22	18	58
Control 2	Cancangan	CG 2.3	ΗP	21	31	18	70
	Kuwang	CG 2.4	A M K	16	16	18	50
	Baitussalam 2	CG 2.5	A W	33	27	19	79
							810

Table 6.1. Schools, teachers, and children involved in this study.

Table 6.2. Characteristics of children participants.

Group -	Age	e	(	Grade			Sex	
Group	Mean	SD	$4^{th}$	$5^{th}$	6 <sup>th</sup>	F	М	
Intervention	10.34	1.11	98	87	81	110	156	
Control 1	10.39	1.19	69	63	82	105	109	
Control 2	10.29	0.99	115	116	99	155	175	
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Note: SD=Standard Deviation, F=Female, M=Male.

# (2) Procedure

The study conducted in the planning, implementation, and evaluation phases. In the planning phase, the psychosocial-based PE and sports programs were developed (see Chapter 2), and the scales to measure children's psychosocial skills were prepared (see Chapter 4). In the implementation phase, the researcher used the experimental design (shown in Figure 6.1) to examine the effect of the programs which consist of participating schools were determined and randomized into three groups. Psychosocial skills survey scales administered to all children in before the PE and sports programs. A specialized theoretical and practically incorporated training about psychosocial-based PE and sports conducted for teachers in the intervention group. A first and second control groups in which teachers were just involved in focused group discussions about their regular programs. All groups were implementing their programs over two semesters during the 2014/15 school year. At the end of the program, children's psychosocial skills measured by the same scales. In the evaluation phase, the results of children's psychosocial skills scale in before and after the PE and sports programs were analyzed.



Figure 6.1. Field experimental design of the study.

#### (3) Data collection

Stress Coping Skills. The stress coping skills scale was developed to assess the ability of elementary school children to deal with stressful problems in their school and daily activities (see Chapter 4). The questionnaire comprises ten items to which the children respond using a Likert-type scale that includes the following responses: not according to me (0), less suited to me (1), moderately according to me (2), and completely according to me (3). Total scores could range from 0 to 30 points. The stress coping skills scale developed by using scale development process (DeVilles, 2003), and it was administered to 745 children in the fourth through sixth grades in Yogyakarta schools before any PE and sports programs began. The items of the scale evaluated regarding their construct and internal validity, and internal consistency (reliability) for the children in our sample. A confirmatory factor analysis verified that the root mean square error of approximating (RMSEA) was 0.055, the goodness of fit index (GFI) index was 0.973, adjusted goodness of fit index (AGFI) index was 0.954, and comparative fit index (CFI) index is 0.936. Each index indicated a good model fit. A significant correlation between all items and total scores showed good internal validity (p < 0.05 in two-tailed test). Additionally, the Cronbach's alpha of the stress coping skills scale for children in this study was 0.727, indicating that the internal consistency of the factors was acceptable for this sample.

**Communication Skills.** Researcher created the communication skills scale (see Chapter 4) used in pre and post-testing. The scale contained ten items measuring verbal and nonverbal communication factors. All the items rated by 4-

point judgments of how well each item described the child, with values ranging from 0 (not according to me) to 3 (completely according to me). It is to force apathetic respondents to make a choice of the scale response categories which are available (Garland, 1991). Verbal communication was measured using four items (e.g., "I saw his eyes while talking to someone"). Total scores ranged from 0 to 12 points. Nonverbal communication was measured using six items (e.g., "I am grateful to those who helped or gave me a gift"). Total scores ranged from 0 to 18 points. Before its use in this study, the scale administered to 745 children. The scale validity examined by confirmatory factor analysis which each index indicated a good fit. The root mean square error of approximation (RMSEA) was a minimum of 0.051. The GFI index had a fit of 0.973. AGFI index was 0.957. CFI index was 0.942. A good internal consistency (reliability) of the scale indicated by Cronbach's alpha was 0.699. These verified that the scales were suitable for the sample.

**Social Awareness Skills**. The social awareness skills scale developed by the researcher for this study contained ten items measuring children's cognitive and emotional empathy (see Chapter 4). All items were rated on 4-point frequency scales according to their circumstances, with values ranging from 0 (not according to me) to 3 (completely according to me). Three items measured cognitive empathy (e.g., "I received a sentence of older people without anger) and total scores ranged from 0 to 9 points. Emotional empathy was measured using seven items (e.g., "I feel pity for the people affected by the disaster/accident") and total scores ranged from 0 to 21 points. The validity and reliability examined from 745 children who filled out the scale. The confirmatory factor analysis which used to indicate the

validity shown a model good fit in RMSEA was a minimum of 0.054; GFI index had a fit of 0.973; AGFI index was 0.956, and CFI index was 0.952. The Cronbach's alpha was 0.794 also indicate good internal consistency (reliability) of this scale.

**Problem-solving Skills**. A problem-solving skills scale was developed to assess the problem-solving ability of elementary children in daily activities, using 10 Likert-type items (see Chapter 4). This scale was drawn up and administered by the researcher in conjunction with another scale. All items evaluated for construct and internal validity, and internal consistency (reliability). A good fit model was indicated by the confirmatory factor analysis with the following values: RMSEA = 0.057, GFI = 0.966, AGFI = 0.947, and CFI = 0.953. Also, the internal consistency (Cronbach's alpha 0.835) of the factors was acceptable for children in our sample. Simple statements and native Indonesian language used on the scale.

#### (4) Data Analysis

All analyses were performed using SPSS Version 22.0 for Windows, and statistical significance was set at p < 0.05. Two-way MANOVA and ANOVA used to calculate the interaction effect and differences between the intervention and control groups in before and after the programs. Further analysis to compare the changes across groups used one-way ANOVA. Finally, paired sample t-tests were performed to evaluate differences within groups.

## 3) Results

A significant interaction effect was observed between the mean scores of the intervention and control groups (F (2, 807) = 9.567, p = 0.000; Wilks'  $\Lambda$  = 0.977),

as shown in Figure 6.2, which indicates that the groups showed significantly different levels of change in their stress coping skills from pre- to post-intervention. The one-way ANOVA revealed significant differences (F (2, 807) = 9.567, p = 0.000) in the mean change of stress coping skills between groups. There were significant differences in stress coping skills between the intervention group and the first (p = 0.007) and second (p = 0.000) control groups. In contrast, there was no significant difference between the two control groups (p = 0.706).



Figure 6.2. Comparison of stress coping skills within and between the intervention and the two control groups.

A paired-samples t-test indicated a significant improvement in the stress coping skills in the intervention group (t (265) = -5.393, p = 0.000). On the other hand, there was no significant enhancement in the stress coping skills in the first (t (213) = -1.210, p = 0.228) and second (t (329) = -0.078, p = 0.938) control groups. Table 6.3 shows the summarized results.

Casua	Mean		SD					4
Group	Pre	Post	Pre	Post	df	Λ	F	l
Intervention	14.91	16.90	5.038	5.960				-5.393**
Control 1	16.15	16.57	4.372	5.113	2,807	0.977*	9.567*	-1.210
Control 2	15.44	15.46	4.891	4.999				-0.078
NT ( * (0))	\ <u>~</u> <u>~</u> <u>~</u> ∧	05.4			1 1 0 '	· ·		

Table 6.3. Summary of findings on stress coping skills.

Note: \*p < 0.05, \*\*p < 0.05 in two-tailed test, SD=Standard Deviation.

There was a statistically significant interaction effect of the mean of communication skills scores between the test and groups (F (2, 807) = 5.749, p = 0.003; Wilks'  $\Lambda = 0.986$ ). In contrast, these were not significantly different (F (2, 807) = 0.466, p = 0.628) when the pre and post-tests groups were combined. The comparison shown in Figure 6.3.



Figure 6.3. Comparison of the mean of communication skills for three groups.

The mean change scores for communication skills from pre- to postintervention were significantly different among the groups. Post hoc analysis of Least Significant Difference (LSD) showed statistically significant differences in mean of communication skills scores between intervention and first control group (p = 0.019) and also between intervention and the second group (p = 0.001), but not between first and second control groups (p = 0.528). There was a statistically significant enhancement in communication skills of the intervention group after the psychosocial-based PE and sports program (t (265) = -6.691, p = 0.000). Similarly, the first control group (t (213) = -3.226, p = 0.001) also showed a statistically significant increase in communication skills scores after their program. It was also found in the second control group (t (329) = -2.513, p = 0.012) that showed a statistically significant increase in communication skills scores. Thus, it can be concluded that all groups showed an increase in communication skills as a result of their respective programs. The summarized results of communication skills in all groups shown in Table 6.4.

 Table 6.4. Summary of findings on communication skills.

Group	Mean		SD					t
Group	Pre	Post	Pre	Post	df	Λ	F	ι
Intervention	16.89	19.18	5.448	5.754				-6.691**
Control 1	17.88	18.89	4.355	5.494	2,807	0.986*	5.749*	-3.226**
Control 2	17.75	18.54	5.068	5.634				-2.513**
				<b>AD A</b>	1 1 5			

Note: \*p < 0.05, \*\*p < 0.05 in two-tailed test, SD=Standard Deviation.

There was a significant interaction effect of the mean of social awareness scores between test and groups (F (2, 807) = 10.838, p = 0.000; Wilks'  $\Lambda$  = 0.974). However, there were no significant differences (F (2, 807) = 0.639, p = 0.528) when the pre and post-tests groups were combined. Figure 6.4 illustrates the comparison among the three groups about social awareness skills.



Figure 6.4. Comparison of the mean of social awareness skills for three groups.

The social awareness skills scores from pre-test to post-test were also significantly different across groups. Specifically, post hoc analysis of Least Significant Difference (LSD) showed significant differences of mean social awareness skills between intervention and first control groups (p = 0.002) and also between intervention and second control groups (p = 0.000) but not between the two control groups (p = 0.332).

There was a significant increase in social awareness skills after the psychosocial-based PE and sports program for the intervention group (t (265) = - 5.803, p = 0.000). On the other hand, the first (t (213) = -0.782, p = 0.435) and second (t (329) = 0.565, p = 0.572) control groups did not show a significant increase. In brief, the intervention group showed improvement in social awareness

skills as a result of the implemented program. The improvement can be seen in Table 6.5.

Group	Me	Mean		SD				+
Oroup	Pre	Post	Pre	Post	df	Λ	F	ι
Intervention	16.90	18.80	5.325	5.931				-5.803**
Control 1	18.19	18.49	4.974	5.876	2,807	0.974*	10.838*	-0.782
Control 2	18.12	17.94	5.815	5.815				0.565
	** .0.05		1 1 1	an ai	1 10	• .•		

Table 6.5. Summary of findings on social awareness skills.

Note: p < 0.05, p < 0.05 in two-tailed test, SD=Standard Deviation.

There was a significant interaction effect of mean scores on problem-solving skills between the intervention and control groups (F (2, 807) = 4.151, p = 0.016; Wilks'  $\Lambda$  = 0.990). The groups had significantly different changes in problem-solving skills from pre- to post-intervention. The one-way ANOVA revealed significant differences (F (2, 807) = 4.151, p = 0.016) in the mean change of problem-solving skills between the three groups. The Tukey's HSD Post Hoc Test revealed significant differences in problem-solving skills between the intervention group and the second control group (p = 0.012) but with the first control group (p = 0.248). Likewise, there was no significant difference between the two control groups (p = 0.559). The differences have plotted in Figure 6.5.



Figure 6.5. Comparison of problem-solving skills within and between group and test.

Furthermore, researcher assessed the differences in problem-solving skills before and after the implementation of the PE and sports programs within groups by using a paired-samples t-test. There was a significant enhancement in problemsolving skills after the psychosocial PE and sports program for the intervention group (t (265) = -2.953, p = 0.003). However, there was no significant enhancement in the problem-solving skills of the first (t (213) = -0.596, p = 0.552) and second (t (329) = 0.927, p = 0.355) control groups. These results have summarized in Table 6.6.

Table 6.6. Summary of findings on problem-solving skills.

Group	Mean		SD					+
	Pre	Post	Pre	Post	df	Λ	F	l
Intervention	16.65	17.82	5.966	6.626				-2.953**
Control 1	17.02	17.27	5.489	5.903	2,807	0.990*	4.151*	-0.596
Control 2	16.95	16.64	5.489	6.353				0.927
	0.5 shale	0.05 .		D GD	1 1 5	• .•		

Note: \*p < 0.05, \*\*p < 0.05 in two-tailed test, SD=Standard Deviation.

#### 4) Discussion

The PE and sports program that implemented in the intervention group provided a significant improvement in children's stress coping skills. In contrast, the programs executed in the two control groups showed a non-significant increase in this ability. The results of this study are by those of a previous study conducted by Kumar and Bhukar (2013) that showed that children could manage their stress by participating in regular physical activities in the PE context. Preceding research also supports our results in that it described that a coping training program within PE classes could reduce stress among vocational children by improving their adaptive coping skills (Lang, Feldmeth, Brand, Holsboer-Trachsler, Pühse & Gerber, 2016a). Furthermore, another study found that children involved in a PE program had various experiences that helped them respond their stress and learn all kinds of coping strategies (Lang, Feldmeth, Brand, Holsboer-Trachsler, Pühse & Gerber, 2016b). Likewise, a study found that athletic children have higher problembased coping strategies that non-athletic kids do (Azizi, 2011). In another similar research, but in a different context, those actively engaged in physical exercise were found to have better abilities in coping effectively with positive emotions, which improved their problem-focused coping (Kim & McKenzie, 2014).

The research results indicated that all three PE and sports programs associated with a significant improvement in communication skills, including the unique program in the intervention group. It supports the hypothesis that psychosocialbased PE and sports program can improve communication skills of children in volcano disaster areas. These findings also confirmed the purpose of the present study, that is, the findings were in line with our initial expectations. Several previous research supported the current study results. For example, Aydin (2015) found that university children who participated in PE and sports in school displayed a higher level of communication skills. Aykora, Tekin, Ozdag, Dereceli, and Uzunkaya (2010) also found that the PE children had more top communication skills than fine arts children. Another finding showed that the communication skills of high school children who were actively involved in sports activities were higher than children with a sedentary lifestyle (Abakay, 2013). He also impressed that sport plays a crucial role in enhancing communication skills and decreasing submissive behaviors (Abakay, 2013). Erdogan and Bayraktar (2014) studies found that participating in sports led to an increase in communication skills. In this study, communication skills comprised two factors, namely, verbal and nonverbal communication. The results indicate that children in all groups of the program had significant improvement in verbal communication skills. In line with that, Preja (2013) stated that in physical education and sports activity, the children consistently use verbal as well as non-verbal communication, like codes, signs, drawings, and so on. Whereas in nonverbal communication skills, a significant improvement just was found in the intervention group. It is supported by studies which found that nonverbal skills significantly improved when children actively participated in sports activities (Sugiyama, 2012; Sugiyama et al., 2009). Likewise, the finding that sports and play activities can assist youth to non-verbally access, express, and resolve a myriad of troubling issues (Henley, 2005).

An overall analysis revealed psychosocial-based PE and sports program had a significant effect on the improvement of children's social awareness skills in the intervention group. In contrast, another program in the two control groups did not have a significant effect on social awareness skills. These key findings confirm that the hypothesis of the study supported. In line with the study of PE and sports classes, Akelaitis (2015) found that the older children had a higher level of social awareness ability than younger ones. Further supporting this statement, Velardo, Elliott, Filiault, and Drummond (2010) stated that a big challenge faced by the society about youth sports participation benefits is improving social awareness. In this study, social awareness consisted of two factors, namely, cognitive and emotional empathy. It is according to The Illinois Children's Mental Health Partnership (2011) that empathy is the foundation of social awareness. Some opinions explained that empathy is the ability that involves the cognitive and affective aspects of the human being (Blair, 2005; Garton & Gringart, 2005; Zhou & Ee, 2012). Our results showed that a significant improvement of both emotional and cognitive empathy of the children just was found in the intervention group. These results support the findings of some previous studies, for example, García-López and Gutiérrez (2013) found that sports education intervention program could improve student's empathy. Another study stated that the sports program had a substantial effect on empathy ability of the vocational school children (Yigiter & Ustaoglu, 2013). Similarly, sport-based life skills positively impacted the adolescent's level of empathic concern (Brunelle, Danish, & Forneris, 2007).

Akelaitis (2015) also found that PE classes resulted in higher level empathy ability of younger children.

In the current study, the researcher also found that the problem-solving skills of the children in the intervention group showed a significant improvement after their participation in the PE and sports program, but the same findings unobserved for the other two groups in the study. This finding supported by a study conducted by Dyson (2001), who found that, in the game context, children developed the ability to use their decision-making skills to solve various problems. In line with this, another study showed that problem-solving skills improved through PE lessons that helped develop children' skills and creativity (Senduran & Amman, 2015). As well as, Wang and Sugiyama (2014) found that children more easily to involve in independently problem-solving after a PE lesson specifically. Concerning cooperative games, children who participated in collaborative group PE lessons were happy to help their peers, which significantly improved their problem-solving skills (Gorucu, 2016). Other findings, which also supported this results, found that PE and sports training has a positive effect on high school children' problem-solving skills (Sozen, 2012). Overall, Yigiter (2013) emphasized that, as an example of a real life situation, sport affords a sense of responsibility and teaches problemsolving skills to children while they compete.

The psychosocial-based PE and sports program adopted cooperative learning which is a constructivist approach (Brown & King, 2000). This cooperative learning focuses on the cooperative play (Dyson, 2001) to enable children to interact socially with each other in building their knowledge (Dyson, 2002). Cooperative learning
involves students in working in small groups, helping each other in achieving each learning objective (Gorucu, 2016) so as to enable the development of their social skills and basic attitudes (Goudas & Magotsiou, 2009). Cooperative learning involves two or more children in their activities (Bay-Hinitz, Peterson, and Quilitch, 1994) to help achieve improved academic performance, communication skills, and psychological health (Chiu, Hsin, & Huang, 2014).

## 5) Summary

The psychosocial-based PE and sports program leads to an increase in psychosocial skills (stress coping, communication, social awareness, problemsolving) of children in volcano disaster-prone areas. The program also had a positive effect on the factors of investigative skills. Comparing with another PE and sports program, a properly planned, executed, and measured psychosocial-based PE and sports intervention programs would be an effective way to improve psychosocial skills of children in the volcano disaster-prone area. On the other hand, there may be some weaknesses in this study such as differences in the teaching abilities of teachers, differences in school policies regarding curriculum in PE and sports, and school infrastructure deficiencies. Further research examining the implications of this intervention program on the improvement of other psychosocial skills and relationship with mental health and physical condition of children are needed. In further studies, the effectiveness of the program should be carried out under conditions of other disaster areas such as floods, earthquakes, or war.

# Chapter 7: Effect of the Physical Education and Sports on Children's Religiosity and Spirituality in Disaster-Prone Area

## 1) Purpose of the study

The purpose of this study was to examine the effect of a special physical education (PE) and sports program on the religiosity and spirituality of children in a volcano disaster-prone area and compare it with other programs.

## 2) Method

#### (1) Participants

Fifteen elementary schools in disaster-prone areas, 5 - 15 km from the top of the Merapi volcano, were randomly organized into an intervention group and two control groups. In the intervention program, schools determined randomly (Ronan & Johnson, 1999). Based on that, fifteen PE and sports teachers and 881 (ages: M = 10.6, SD = 1.12) fourth through sixth-grade children (480 girls and 401 boys) from elementary schools participated in the study. The participants in this study described in Table 7.1.

Specifically, with respect to children' characteristic, ages ranged from 8 to 15 years (ages: Mean = 10.6, SD = 1.12). There were 323 children consisting of 126 females and 197 males children in the intervention group (ages: Mean = 10.9, SD = 1.19). The first control group had 187 children; 91 females and 96 males (ages: Mean = 10.5, SD = 1.03). The second control group had 371 children; 155 females and 175 males (ages: Mean = 10.4, SD = 1.05). Table 7.2 shows the characteristics of children participants.

Crowns	Sahaala	Code	Taabara	Children in grad		$\begin{array}{c} en \text{ in grad} \\ \hline en \text{ in grad} \\ \hline 6 \text{ th} \\ \hline 2 \text{ 15} \\ \hline 42 \text{ 15} \\ \hline 42 \text{ 15} \\ \hline 5 \text{ 18} \\ \hline 5 \text{ 9} \\ \hline 7 \text{ 29} \\ \hline 7 \text{ 29} \\ \hline 12 \\ \hline 11 \\ \hline 0 \text{ 6} \\ \hline 3 \text{ 14} \\ \hline 3 \text{ 12} \\ \hline 5 \text{ 23} \\ \hline 7 \text{ 19} \\ \hline 4 \text{ 27} \\ \hline 1 \text{ 17} \end{array}$	ade
Groups	Schools		reachers	$4^{th}$	Children in gra $4^{th}$ $5^{th}$ $6^{th}$ 7121532414219161812159292729101012117119106151314242312312623251719252427202417363225	Ν	
	Bronggang	IG 1	E N K	7	12	15	34
	Umbulharjo 2	IG 2	Hu	32	41	42	115
Groups Intervention Control 1 N B Control 2	Watuadeg	IG 3	НS	19	16	18	53
	Cangkringan 1	IG 4	М	12	15	9	36
	Kepuharjo	IG 5	Sn	29	27	29	85
	Banaran	CG 1.1	Sr	10	10	12	32
	Cangkringan 2	CG 1.2	S L	11	7	11	29
Control 1	Gungan	CG 1.3	Sm	9	10	6	25
Groups Intervention Control 1 Control 2	Kiyaran 2	CG 1.4	SS	15	13	14	42
	SchoolsCodBronggangIG 1Umbulharjo 2IG 2WatuadegIG 2WatuadegIG 2Cangkringan 1IG 2KepuharjoIG 2BanaranCG 1Cangkringan 2CG 1GunganCG 1Kiyaran 2CG 1Negeri Kiyaran 1CG 1Bronggang BaruCG 2GlagaharjoCG 2QunganCG 2Baitussalam 2CG 2	CG 1.5	B S	24	23	12	59
	Bronggang Baru	CG 2.1	S M	31	26	23	80
	Glagaharjo	CG 2.2	ΕS	25	17	19	61
Control 2	Cancangan	CG 2.3	ΗP	25	24	27	76
	Pusmalang	CG 2.4	Р	20	24	17	61
	Baitussalam 2	CG 2.5	AW	36	32	25	93
							881

Table 7.1. School, teacher, and children participants.

Table 7.2. Characteristics of children participants.

					1		
Crown	А	ge		Grade		Se	ex
Group	Mean	SD	4 <sup>th</sup>	$5^{th}$	6 <sup>th</sup>	F	М
Intervention	10.9	1.19	99	111	113	126	197
Control 1	10.5	1.03	69	63	55	91	96
Control 2	10.4	1.05	137	123	111	184	187
11. 00.	1 1 5 1 1	<b>D D</b>	1 16 16	1			

Note: SD = Standard Deviation; F = Female; M = Male

## (2) Procedure

The study implemented the psychosocial and traditional-based PE and sports programs using an experimental design with three different conditions (see Chapter 2). As shown in Figure 7.1, participating schools were selected and randomized into three groups, and the Religiosity and Spirituality Scale for Youth (RaSSY) was administered to all children before the PE and sports programs. Theoretical and

practical information about psychosocial and traditional-based PE and sports were incorporated in training for teachers in the intervention group. The first and second control groups consisted of teachers involved only in focus-group discussions about their programs' routines. All groups implemented their programs over one semester during the 2016-2017 school year, and at the end of the program, children's religiosity and spirituality were measured a second time using the same instrument.



Figure 7.1. The field experimental design of the study.

## (3) Data Collection

The RaSSY developed by Hernandez (2011) was used to measure the children's religiosity and spirituality. The 37 items in this scale comprise two factors: faith-based coping (22 items) - the use of religious beliefs, knowledge, and prayer to obtain comfort, strength, relief, or guidance - and religious, social support/activities (15 items) - religious, social support and participation in other religious activities. Items were rated on a 4-point scale, ranging from 0 = "never" to 3 = "almost always," indicating the degree to which respondents agreed with each item. The researcher and a professional translator translated the original scale from English to simple Indonesian. The scale, which was administered to 881 children in the pre- and post-intervention stages, was examined for its validity and reliability. The results of exploratory and confirmatory factor analyses and internal consistency indicated the scale was suitable for our sample. The scale's goodness of fit indices, including the Root Mean Square Error of Approximating (RMSEA), the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), and the Comparative Fit Index (CFI), and Cronbach's alpha coefficient for internal consistency (reliability), were examined in the pre- and post-tests (Table 7.3).

Table 7.3. A good fit in	dexes of the	e scale.
A good fit Indexes	Dat	а
	Pre	Post
RMSEA	0.041	0.043
GFI	0.906	0.900
AGFI	0.894	0.886
CFI	0.909	0.899
Cronbach's Alfa	0.934	0.930

T 11 7 7 A C 41

#### (4) Data Analysis

Two-way MANOVA and ANOVA was used to assess interaction effect and differences between the intervention and control groups in before and after the programs. Further analysis to compare the changes across groups used one-way ANOVA. Then, paired sample t-tests were performed to evaluate differences within groups. All analyses were performed using SPSS Version 22.0 for Windows, and statistical significance was set at p < 0.05.

#### 3) Results

There was a statistically significant interaction effect of the mean of religiosity and spirituality scores between the test and groups (F (2, 878) = 4.177, p = 0.016; Wilks'  $\Lambda$  = 0.991). In contrast, these were not significantly different (F (2, 878) = 0.152, p = 0.859) when the pre and post-tests groups were combined.



Figure 7.2. Comparison of the mean of religiosity and spirituality for three groups.

Figure 7.2 shows the significant difference in the mean change of religiosity and spirituality from pre- to post-intervention among the groups. Post hoc analysis of Least Significant Difference (LSD) showed statistically significant differences in mean of religiosity and spirituality scores between intervention and first control group (p = 0.006) and also between intervention and the second group (p = 0.041), but not between first and second control groups (p = 0.287).

There was a statistically significant enhancement in religiosity and spirituality of the intervention group after the psychosocial and traditional-based PE and sports program (t (322) = -7.245, p = 0.000). Similarly, the second control group (t (370) = -2.741, p = 0.006) also showed a statistically significant increase of scores after their program. In contrast, the first control group (t (186) = -1.104, p = 0.271) was not a significant increase of scores. Thus, it can conclude that intervention and second control groups showed an increase in religiosity and spirituality as a result of their respective programs. The enhancement of this skills in all groups summarized in Table 7.4.

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Crown	Me	ean	S	D				+
Group	Pre	Post	Pre	Post	df	Λ	F	ι
Intervention	65.83	69.14	18.72	17.41				-7.245**
Control 1	66.58	67.32	17.13	17.12	2, 878	0.991	4.177*	-1.104
Control 2	65.96	67.67	16.17	16.59				-2.741**

Table 7.4. Summary of findings on religiosity and spirituality.

Note: p < 0.05, p < 0.05 in two-tailed test, SD=Standard Deviation.

#### 4) Discussion

The present study found that the psychosocial and traditional-based PE and sports program in the intervention group significantly enhanced children's religiosity and spirituality. These results are supported by the study of Lodewyk, Lu, and Kentel (2009), which found that religious and spiritual values, such as awareness, caring, serenity, and tolerance were activated during physical education. Likewise, health and PE lessons have been reported to have greater potential to influence spiritual development related to everyday activities in schools and communities (Lynch, 2015). This study's results are also consistent with those of Hilty (2016), who found that running had a spiritual and religious aspect because its repetitive motion and mind-clearing benefits helped individuals find meaning and purpose in life, similar to religious practitioners. Children's interest in health and PE form their attitudes toward physical activity and spirituality (Lynch, 2013). Children's spirituality was firmly associated with happiness; therefore, they should be happier if they are more spiritual (Holder, Coleman, & Wallace, 2010). In conclusion, the outcomes of physical education, including its cognitive, affective, and psychomotor aspects, should support children's spirituality (NASPE, 2005).

In the intervention group, the researchers included 10 minutes of relaxation exercises at the end of the each lesson. This addition was based on the opinion that activating children's spirituality is possible through Eastern forms of movement, such as yoga, meditation, and relaxation exercises in the cool-down phase of a lesson to provide them with regular interludes of silence, rest, and solitude (Lodewyk, Lu, & Kentel, 2009). The implemented PE and sports program also emphasizes praying at the beginning and end of the lesson to promote children's serenity, commitment, bonding with friends, control of their emotions, and achievement (Coakley, 2003; Watson & Czech, 2005). Consistent with our implementation of prayer, many professional sportspersons have developed habits and rituals involving prayer in their sports and physical activities (Dillon & Jennifer, 2000; Obare, 2000) to ask for success for themselves or their team and express gratitude for the results (Jirásek 2015).

Similar results were found in the second control group, which implemented the former curriculum of the PE and sports program. These results were unexpected because the researcher did not emphasize religiosity or spirituality in this group's PE and sports program. There are many possible reasons to notice this finding. For example, the Islamic religious-based schools might be affected the increase of children's religiosity and spirituality. This possibility is consistent with the fact that in Islam, all of the human aspects are important (Khanifar, Moghimi, Memar, & Jandaghi, 2008). Moreover, for Muslims, participation in sports related to their existence and faith (Amara, 2013; Wabuyabo, Wamukoya, & Bulinda, 2015).

## 5) Summary

The implementation of psychosocial and traditional-based PE and sports programs facilitated the development of the children's behaviors and attitudes related to their spiritual and religious beliefs, which led to increased levels of religiosity and spirituality of those in the disaster-prone area. Religion-based schools contributed much to the enhancement of the children's spirituality and religiosity. These schools perform a variety of religious traditions and rituals in their daily school activities, including in PE and sports lessons. The researcher identified study limitations, including the children's religious backgrounds, differences in the teachers' abilities to implement the program, school equipment, and infrastructure deficiencies, and school policy differences in the PE and sports programs. Comprehensive and in-depth investigations of children's spirituality and religiosity are needed in future studies. The relationship among physical, psychosocial, spiritual, and religious aspects should also be investigated.

#### **Chapter 8: General Discussion**

#### 1) Conclusions

This dissertation consists of three investigations, namely, the preliminary, first, and second studies. In the preliminary study, the children in the disaster-prone area required support to develop psychosocial skills and had a lower negative emotional state. Also, the PSS scale was developed, and the children's negative emotional state seems uncorrelated with their psychosocial skills. The first study found that the psychosocial-based PE and sports program influences the reduction of children's negative emotional states and improvement of the children's psychosocial skills significantly. The second study found that the psychosocial and traditional-based PE and sports programs had a significant impact on the children's spiritual development in spirituality and religiosity factors.

Psychosocial and traditional-based PE and sports program that implemented in the intervention group has some unique characteristics to support decreasing in children's negative emotional state, improving psychosocial skills, and enhancing spirituality/religiosity. First, the psychosocial and traditional-based PE and sports programs adopted a new curriculum so that appropriate the current subject matters and contemporary context. Second, the psychosocial and traditional-based PE and sports programs conducted the number of lessons based on the lesson times sharing in every week. Third, psychosocial and traditional-based physical activities in this program employed cooperatives, groups, and problem-solving approaches are able to produce traditional and educational values for children benefits. Finally, the program emphasized a 10-minutes holistic relaxation exercise at the end of each lesson.

Based on these findings, I formulated a model of children's psychosocial and spiritual development through PE and sports for the disaster-prone area (Figure 8.1). The model consists of structured PE and sports in the primary school curriculum for disaster-prone areas and includes various activities, such as games and sports, gymnastics, physical fitness, and rhythmic activities. The content can be changed to fit with modifications of the curriculum structure. In the process stage, the model emphasized psychosocial and traditional-based interventions in the PE and sports lessons context. Use of the field experimental method when implementing interventions in the psychosocial and traditional-based PE and sports lessons should involve existing resources, such as principals, teachers, equipment, and the school environment. The outcomes are the changes in the targeted children's psychosocial and spiritual development. In this study, changes occurred in children with a lower negative emotional state (depression, anxiety, stress) and higher level of psychosocial (stress coping, communication, social awareness, problem solving) skills and spirituality/religiosity).



Figure 8.1. The model of children's psychosocial and spiritual development through physical education and sports.

## 2) Implications

This dissertation has theoretical implications for the use of sports for development theory, in particular for children who live in disaster-prone areas. The model recommended in this dissertation supports the integration of four sports values for development and peace. This model integrates education as a core value with other sports-related values (health, psychosocial rehabilitation, and community building), so that the Millennium Development Goals, regarding the using of sports to promote child development, will be reached (Lyras, 2009; United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003). The model presented herein was based on three components of sports interventions for development (Lyras, 2009). The outcomes of this model emphasize children's mental health, psychosocial skills, and spirituality to establish the fundamentals of resilience when facing life's problems, especially disasters.

This dissertation supports the notion that constructive PE and sports that are adapted to environmental conditions can be developed. These findings provide empirical evidence for the integration of PE and sports to promote the competence and personal development of children living in certain areas. A planned, executed and measured psychosocial and traditional-based PE and sports program is an alternative method of developing the psychological, social, and spiritual aspects of children in disaster-prone areas. This program can be introduced to practitioners of PE and sports gradually in similar areas by building cooperation among governments, researchers. and practitioners of PE and sports (teacher/instructor/coaches). It can also be adapted to different types of disasters.

## 3) Limitations

The studies in this dissertation have limitations, as described in each chapter. There are also limitations in the study as a whole. In the preliminary study, the researcher used in-depth semi-structured interviews to explore the PE and sports teachers' perspectives on children's psychosocial skills. Data were collected only from the teachers and were not cross-checked with the other participants or by observation, thereby increasing the possibility of bias. There are potential limitations related to the development of the PSS, such as the children's sample for the pilot study, the selection of experts from some areas, and the lack of information about the relationship between the PSS and other existing scales. In the first and second studies, the researcher used questionnaires with a scale format, such as the DASS 42 to measure the negative emotional state, the PSS to measure psychosocial skills, and the RaSSY to measure the children's religiosity and spirituality. There are possible limitations regarding the information gathered using these questionnaires, such as respondents' inability to understand some content (e.g., changes in emotions, behaviors, feelings) and the need to provide accurate responses. The respondents might have forgotten to answer the questions in the context of the situation, or they had different interpretations of and answers to questions based on their situations.

In the first and second studies, the field experiment found significant differences in the three treatment conditions, but uncontrolled variables most likely influenced the studies' results. For example, the children's social/living circumstances might have influenced their psychological development, thereby causing differences among them, and the children's religious backgrounds might have affected their levels of religiosity and spirituality. This study involved a considerable number of individuals, such as researchers, principals, and teachers with different backgrounds. The study's researcher might have had a different teaching abilities and experiences, and the principals might have had differences in school policies for curricula in PE and sports. Moreover, any shortcomings in coordination between the researchers, principals, teachers, and children could have

led to poor cooperation between them. Additional factors that might have affected the study are deficiencies in the schools' infrastructures.

## 4) Future Investigations

The implications and limitations of this dissertation have generated ideas for further investigations. First, PE and sports programs should involve a wide variety of physical activities to address not only children's psychosocial skills and spirituality, but also their physical, intellectual, and other aspects. Future research should emphasize controlling all the variables that might influence the outcomes. Subsequent investigations should focus on children's developmental characteristics in greater depth and breadth to obtain larger effects. Instruments that are more comprehensive and adaptable for measuring children's development should be used in future intervention programs. The effectiveness of the program on children's developmental aspects should be replicated under other disaster conditions, i.e., both natural disasters, such as floods and earthquakes, and human-made disasters, such as war and local conflicts.

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Appendix A

Depression Anxiety and Stress Scale (DASS)

(Indonesian version)

## TES DASS

## Petunjuk Pengisian

Kuesioner ini terdiri dari berbagai pernyataan yang mungkin sesuai dengan pengalaman kamu dalam menghadapi situasi hidup sehari-hari. Terdapat empat pilihan jawaban yang disediakan untuk setiap pernyataan yaitu:

- 0 : Tidak sesuai dengan saya sama sekali, atau tidak pernah.
- 1 : Sesuai dengan saya sampai tingkat tertentu, atau kadang kadang.
- 2 : Sesuai dengan saya sampai batas yang dapat dipertimbangkan, atau lumayan sering.
- 3 : Sangat sesuai dengan saya, atau sering sekali.

Selanjutnya, kamu diminta untuk menjawab dengan cara **memberi tanda** silang (X) pada salah satu kolom yang paling sesuai dengan pengalaman kamu selama satu minggu belakangan ini. Tidak ada jawaban yang benar ataupun salah, karena itu isilah sesuai dengan keadaan diri kamu yang sesungguhnya, yaitu berdasarkan jawaban pertama yang terlintas dalam pikiran kamu.

No	PERNYATAAN	0	1	2	3
1	Saya merasa bahwa diri saya menjadi marah karena hal-hal sepele.				
2	Saya merasa bibir saya sering kering.				
3	Saya sama sekali tidak dapat merasakan perasaan positif.				
4	Saya mengalami kesulitan bernafas (misalnya: seringkali terengah-engah atau tidak dapat bernafas padahal tidak melakukan aktivitas fisik sebelumnya).				
5	Saya sepertinya tidak kuat lagi untuk melakukan suatu kegiatan.				
6	Saya cenderung bereaksi berlebihan terhadap suatu situasi.				
7	Saya merasa goyah (misalnya, kaki terasa mau 'copot').				
8	Saya merasa sulit untuk bersantai.				
9	Saya menemukan diri saya berada dalam situasi yang membuat saya merasa sangat cemas dan saya akan merasa sangat lega jika semua ini berakhir.				
10	Saya merasa tidak ada hal yang dapat diharapkan di masa depan.				

No	PERNYATAAN	0	1	2	3
11	Saya menemukan diri saya mudah merasa kesal.				
12	Saya merasa telah menghabiskan banyak energi untuk merasa cemas.				
13	Saya merasa sedih dan tertekan.				
14	Saya menemukan diri saya menjadi tidak sabar ketika mengalami penundaan (misalnya: kemacetan lalu lintas, menunggu sesuatu).				
15	Saya merasa lemas seperti mau pingsan.				
16	Saya merasa saya kehilangan minat akan segala hal.				
17	Saya merasa bahwa saya tidak berharga sebagai seorang manusia.				
18	Saya merasa bahwa saya mudah tersinggung.				
19	Saya berkeringat secara berlebihan (misalnya: tangan berkeringat), padahal temperatur tidak panas atau tidak melakukan aktivitas fisik sebelumnya.				
20	Saya merasa takut tanpa alasan yang jelas.				
21	Saya merasa bahwa hidup tidak bermanfaat.				
22	Saya merasa sulit untuk beristirahat.				
23	Saya mengalami kesulitan dalam menelan.				
24	Saya tidak dapat merasakan kenikmatan dari berbagai hal yang saya lakukan.				
25	Saya menyadari kegiatan jantung, walaupun saya tidak sehabis melakukan aktivitas fisik (misalnya: merasa detak jantung meningkat atau melemah).				
26	Saya merasa putus asa dan sedih.				
27	Saya merasa bahwa saya sangat mudah marah.				
28	Saya merasa saya hampir panik.				
29	Saya merasa sulit untuk tenang setelah sesuatu membuat saya kesal.				

No	PERNYATAAN	0	1	2	3
30	Saya takut bahwa saya akan 'terhambat' oleh tugas-tugas sepele yang tidak biasa saya lakukan.				
31	Saya tidak merasa antusias dalam hal apapun.				
32	Saya sulit untuk sabar dalam menghadapi gangguan terhadap hal yang sedang saya lakukan.				
33	Saya sedang merasa gelisah.				
34	Saya merasa bahwa saya tidak berharga.				
35	Saya tidak dapat memaklumi hal apapun yang menghalangi saya untuk menyelesaikan hal yang sedang saya lakukan.				
36	Saya merasa sangat ketakutan.				
37	Saya melihat tidak ada harapan untuk masa depan.				
38	Saya merasa bahwa hidup tidak berarti.				
39	Saya menemukan diri saya mudah gelisah.				
40	Saya merasa khawatir dengan situasi dimana saya mungkin menjadi panik dan mempermalukan diri sendiri.				
41	Saya merasa gemetar (misalnya: pada tangan).				
42	Saya merasa sulit untuk meningkatkan inisiatif dalam melakukan sesuatu.				

Harap diperiksa kembali, jangan sampai ada yang terlewatkan.

Terima kasih.

Appendix B

Psychosocial Skills Scale (PSS)

(English & Indonesian version)

# **PSYCHOSOCIAL SKILLS SCALE** (Elementary school children in 4<sup>th</sup> – 6<sup>th</sup> grade)

:
:
:
: Male / Female)*
:
:

## **Instruction:**

- 1. Please read each statement and **cross (X)** one of choices answers which indicates how much the statement applied to you.
- 2. There are four possible answers are:
  - 0 : not according to me
  - 1 : less suited to me
  - 2 : moderately according to me
  - 3 : completely according to me

# A. Stress Coping Skills

No.	Statement	0	1	2	3
1	I avoid contact when having problems with a friend.	0	1	2	3
2	I do something that is fun to solve a problem with a friend.	0	1	2	3
3	I avoid anything that makes me disappointed.	0	1	2	3
4	I think that every problem in the school will resolve itself automatically.	0	1	2	3
5	I do something to calm down when I face problems at school.	0	1	2	3
6	I avoid feeling disappointed or I forget about problems at school.	0	1	2	3
7	I engage in exercise/sport.	0	1	2	3
8	According to me, any problem can be resolved well.	0	1	2	3
9	I engage in a hobby/interest that helps me feel relaxed and happy.	0	1	2	3
10	I pray diligently.	0	1	2	3

## **B.** Communication Skills

No.	Statement	0	1	2	3
11	I say "please" and "thank you" when I asked for something to someone.	0	1	2	3
12	The clothes which I wear make others feel comfortable.	0	1	2	3

13	I am not cursing/using abusive language in a public place.	0	1	2	3
14	My hair is clean and Natty.	0	1	2	3
15	I have a good body condition.	0	1	2	3
16	I saw his eyes, while talking to someone.	0	1	2	3
17	My nails are cleanly and neatly trimmed.	0	1	2	3
18	I am angry and impatient, when something is not as I would like.	0	1	2	3
19	I try not to criticize, when others do something different with me.	0	1	2	3
20	I am grateful to those who helped or gave me a gift.	0	1	2	3

# C. Social Awareness Skills

No.	Statement	0	1	2	3
21	I do not care about friends who tease or call my name	0	1	2	3
22	I am trying to understand the feelings of a friend who	0	1	2	3
	was angry, upset, or sad.	-			-
22	I feel pity for the people affected by the	Δ	1	2	2
23	disaster/accident.	U	I	2	5
24	I do things that pleasure my parents, (such as: helping	Δ	1	2	2
24	at home) without being asked.	U	I	2	3
25	I spoke to the parents when opinions are different.	0	1	2	3
26	I received a sentence of older people without angry.	0	1	2	3
27	I make friends easily.	0	1	2	3
28	I invite others to participate in community activities.	0	1	2	3
29	I smiled, waved or nodded in others.	0	1	2	3
20	I participate in school activities (such as	Δ	1	2	3
30	extracurricular sports, boy scouts, etc.).	U	1	Z	3

# D. Problem-solving Skills

No.	Statement	0	1	2	3
31	I like to solve problems and make decisions	0	1	2	3
32	I love to collaborate within groups to complete tasks.	0	1	2	3
33	I resolve problems quickly and easily.	0	1	2	3
34	I can learn quickly and easily.	0	1	2	3
35	I know the details of the task and do it right.	0	1	2	3
36	I am an intelligent person and can think in complicated	Δ	1	2	2
	situations.	U	1	2	3
37	I am more concerned about facing uncertain problems.	0	1	2	3
38	I try to sort the problems faced starting from the	0	1	2	2
	easiest to the most difficult.		1	2	3
39	I like to do something that can be done well.	0	1	2	3
40	I can make difficult decisions easily and be firm on	0	1	2	2
	them.		1	2	3

# SKALA KETERAMPILAN PSIKOSOSIAL (Anak-anak sekolah dasar kelas 4 – 6)

Nama	:
Tanggal lahir	:
Usia	:
Jenis Kelamin	: Laki-laki / Perempuan)*
Nama Sekolah	:
Kelas	:

# Petunjuk Pengisian:

- 1. Silanglah (X) satu pilihan (angka) yang paling cocok dengan keadaan dirimu.
- 2. Terdapat empat pilihan jawaban yaitu:
  - 0 : Tidak sesuai dengan saya.
  - 1 : Kurang sesuai dengan saya.
  - 2 : Sesuai dengan saya.
  - 3 : Sangat sesuai dengan saya.

## A. Keterampilan Mengatasi Stres

No.	PERNYATAAN	0	1	2	3
1	Saya menghindari apa saja ketika memiliki	0	1	2	3
	masalah dengan teman.	U	1	-	3
2	Saya melakukan hal yang menyenangkan untuk	Δ	1	2	3
	mengatasi masalah dengan teman.	U	1	4	5
3	Saya menghindari apa saja yang membuat saya	Δ	1	2	3
	kecewa.	U	1	2	3
4	Saya berpikir bahwa setiap masalah di sekolah	•	1	2	3
	akan selesai sendiri.	U	1		
5	Saya melakukan sesuatu untuk menenangkan diri	0	1	2	3
	karena masalah di sekolah.				
6	Saya menghindari rasa kecewa atau melupakan	0	1	2	3
	masalah di sekolah.	U			
7	Saya melakukan olahraga.	0	1	2	3
8	Menurut saya, masalah bisa diselesaikan dengan	0	1	2	3
	baik.		1		
9	Saya memiliki kegemaran/minat/hobi yang	0	1	ſ	2
	membantu saya merasa santai dan senang.		I	2	Э
10	Saya rajin beribadah	0	1	2	3
No.	PERNYATAAN	0	1	2	3
-----	--	---	---	---	---
11	Saya mengatakan "tolong" dan "terima kasih" ketika saya meminta sesuatu kepada seseorang.	0	1	2	3
12	Pakaian yang saya kenakan membuat orang lain merasa nyaman.	0	1	2	3
13	Saya tidak mengumpat/menggunakan bahasa kasar di tempat umum.	0	1	2	3
14	Rambut saya bersih dan rapi.	0	1	2	3
15	Saya memiliki keadaan tubuh yang baik.	0	1	2	3
16	Saya melihat matanya, ketika berbicara dengan seseorang.	0	1	2	3
17	Kuku saya bersih dan terpotong rapi.	0	1	2	3
18	Saya marah dan tidak sabar, ketika sesuatu tidak seperti yang saya mau*.	0	1	2	3
19	Saya berusaha tidak mencela, ketika orang lain melakukan sesuatu yang berbeda dengan saya.	0	1	2	3
20	Saya berterimakasih kepada orang yang menolong atau memberi saya hadiah.	0	1	2	3

# B. Keterampilan Berkomunikasi

# C. Keterampilan Kesadaran Sosial

No.	PERNYATAAN	0	1	2	3
21	Saya tidak mempedulikan teman yang menggoda atau memanggil nama saya.	0	1	2	3
22	Saya mencoba memahami perasaan teman yang sedang marah, kecewa, atau sedih.	0	1	2	3
23	Saya merasa kasihan kepada orang lain yang terkena musibah/kecelakaan.	0	1	2	3
24	Saya melakukan hal yang menyenangkan orang tua saya, (seperti: membantu di rumah) tanpa diminta.	0	1	2	3
25	Saya berbicara dengan orang tua, ketika berbeda pendapat.	0	1	2	3
26	Saya menerima hukuman dari orang yang lebih tua tanpa merasa marah.	0	1	2	3
27	Saya mudah berteman.	0	1	2	3
28	Saya mengajak orang lain untuk ikut dalam kegiatan masyarakat.	0	1	2	3
29	Saya tersenyum, melambaikan tangan, atau mengangguk pada orang lain.	0	1	2	3
30	Saya ikut dalam kegiatan sekolah (seperti: ekstrakurikuler olahraga, pramuka, dan lain-lain).	0	1	2	3

No.	PERNYATAAN	0	1	2	3
31	Saya suka menyelesaikan masalah dan mengambil keputusan.	0	1	2	3
32	Saya menyukai kerjasama dalam kelompok agar tugas dapat selesai.	0	1	2	3
33	Saya menyelesaikan masalah dengan cepat dan mudah.	0	1	2	3
34	Saya dapat belajar dengan cepat dan mudah.	0	1	2	3
35	Saya tahu rincian tugas dan melakukannya dengan benar.	0	1	2	3
36	Saya orang yang dapat berpikir rumit dan cerdas.	0	1	2	3
37	Saya lebih memikirkan masalah yang dihadapi daripada masalah lain yang belum pasti.	0	1	2	3
38	Saya mencoba mengurutkan masalah yang dihadapi dari yang termudah sampai yang tersulit.	0	1	2	3
39	Saya suka melakukan sesuatu yang dapat dilakukan dengan baik.	0	1	2	3
40	Saya mudah mengambil keputusan yang sulit dan tegas.	0	1	2	3

D. Keterampilan Pemecahan Masalah

Appendix C

Religiosity and Spirituality Scale for Youth (RaSSY)

(English & Indonesian version)

#### Religiosity and Spirituality Scale for Youth (Hernandez, 2011)

Directions: Many children and teens have different beliefs and activities related to God. Please read each item carefully and rate how often you do each activity or much you believe each item to be true. Use the following answer choices:

- 0 = I never do OR believe this
- 1 = I do OR believe this some of the time
- 2 = I do OR believe this most of the time
- 3 = I always do OR believe this

\*Note that the term "Holy Scriptures" refers to the holy writings of your religion, such as the Bible, Quran, or Torah.

No	Item	I do or believe this					
		Never	Sometimes	Mostly	Always		
1	My religious beliefs make me happy.	0	1	2	3		
2	I pray in public	0	1	2	3		
3	I study/read scriptures	0	1	2	3		
4	When I'm worried or nervous, my faith helps me calm down	0	1	2	3		
5	When I need help, I go to people with my same religious beliefs.	0	1	2	3		
6	I attend prayer groups.	0	1	2	3		
7	Praying gives me strength when I'm upset.		1	2	3		
8	When trying to solve a problem, I ask God for help.	0	1	2	3		
9	I have a close relationship with God	0	1	2	3		
10	When I do something wrong, I ask for God's forgiveness	0	1	2	3		
11	I listen to religious songs or poetry about God	0	1	2	3		
12	I talk with others about my religious beliefs	0	1	2	3		
13	My faith gives me hope in tough times	0	1	2	3		
14	I watch religious TV shows or movies	0	1	2	3		
15	When I face a problem, I pray for God's help	0	1	2	3		

16	I spend time with kids who share my religious beliefs.	0	1	2	3
17	Knowing God is with me keeps me from feeling lonely	0	1	2	3
18	I find teachings about God interesting or helpful.	0	1	2	3
19	My belief in God gives my life meaning	0	1	2	3
20	I believe God will not give me more than I can handle	0	1	2	3
21	I read books about God (other than the holy scriptures).	0	1	2	3
22	I give money based on my religious beliefs	0	1	2	3
23	When something bad happens, I know God is trying to make me stronger	0	1	2	3
24	I volunteer to help others based on my religious beliefs.	0	1	2	3
25	5 I ask other people to pray for me.		1	2	3
26	26 When bad things happen, I know God will show me the answers		1	2	3
27	My beliefs about God help me decide what to do in hard situations	0	1	2	3
28	When I'm upset, I remind myself that God loves me	0	1	2	3
29	I confess my sins to God	0	1	2	3
30	When I'm upset, I remind myself to be thankful for what I have	0	1	2	3
31	When I'm struggling, I ask God to help me understand my situation	0	1	2	3
32	I give others spiritual or religious advice.	0	1	2	3
33	I say scriptures to myself when I'm upset or scared.	0	1	2	3
34	When bad things happen, I try to figure out what lesson God is trying to teach me	0	1	2	3
35	My faith gives me feelings of peacefulness.	0	1	2	3

36	I get strength and support from people in my religious community	0	1	2	3
37	God comforts me.	0	1	2	3

#### Skala Kerohanian dan Keagamaan (Hernandez, 2011)

Petunjuk

Bacalah tiap pernyataan dengan seksama dan hitung seberapa sering kamu melakukan atau seberapa besar kamu percaya pada tiap pernyataan itu yang sesuai dengan keadaanmu. Lingkarilah (O) jawaban pilihan berikut ini:

0 = Aku tidak pernah melakukan/percaya

- 1 = Aku kadang-kadang melakukan/percaya
- 2 = Aku sering melakukan/percaya
- 3 = Aku selalu melakukan/percaya

\*Catatan: Istilah "kitab suci" mengacu pada kitab suci apapun agamamu, misalnya: Injil, Al-Quran, atau Taurat.

		Aku melakukan/percaya				
No	Pernyataan	Tidak	Kadang-	Sering	Selalu	
		Pernah	kadang			
1.	Keimanan membuatku bahagia.	0	1	2	3	
2.	Aku beribadah dengan terang- terangan.	0	1	2	3	
3.	Aku mempelajari/membaca kitab suci.	0	1	2	3	
4.	Ketika merasa cemas, keimananku membuat tenang.	0	1	2	3	
5.	Aku meminta bantuan kepada orang yang seiman.	0	1	2	3	
6.	Aku beribadah secara berjamaah.	0	1	2	3	
7.	Beribadah menguatkanku ketika sedih.	0	1	2	3	
8.	Aku memohon pertolongan Tuhan untuk memecahkan masalah	0	1	2	3	
9.	Aku mendekatkan diri kepada Tuhan.	0	1	2	3	
10.	Aku memohon ampunan Tuhan atas kesalahan yang diperbuat.	0	1	2	3	
11.	Aku mendengarkan lagu/puisi tentang Tuhan.	0	1	2	3	
12.	Aku berbicara dengan orang lain tentang keimananku.	0	1	2	3	

#### Selamat mengerjakan!

13.	Keimananku memberikan harapan ketika dalam kesulitan.	0	1	2	3
14.	Aku menonton film atau acara TV yang bersifat keagamaan.	0	1	2	3
15.	Aku memohon pertolongan Tuhan ketika menghadapi masalah.	0	1	2	3
16.	Aku bergaul dengan anak-anak yang seiman.	0	1	2	3
17.	Aku tidak kesepian karena Tuhan bersamaku.	0	1	2	3
18.	Belajar tentang Tuhan sangat menarik dan bermanfaat buatku.	0	1	2	3
19.	Hidupku lebih berarti karena percaya Tuhan.	0	1	2	3
20.	Tuhan tidak akan mengujiku di luar batas kemampuan.	0	1	2	3
21.	Aku membaca buku tentang Tuhan (selain kitab suci).	0	1	2	3
22.	Aku beramal berdasarkan keimananku.	0	1	2	3
23.	Tuhan sedang mengujiku ketika sesuatu yang buruk terjadi.	0	1	2	3
24.	Aku menolong orang lain dengan ikhlas sesuai keimananku.	0	1	2	3
25.	Aku memohon orang lain mendoakanku.	0	1	2	3
26.	Aku yakin Tuhan akan menunjukkan jawaban ketika sesuatu yang buruk terjadi.	0	1	2	3
27.	Keimananku kepada Tuhan membantuku menentukan pilihan dalam kesulitan.	0	1	2	3
28.	Ketika sedih, aku percaya Tuhan mencintaiku.	0	1	2	3
29.	Aku mengakui dosaku kepada Tuhan.	0	1	2	3
30.	Ketika sedih, aku bersyukur dengan apa yang aku punya.	0	1	2	3
31.	Aku memohon Tuhan memahamiku saat sedang berusaha.	0	1	2	3

32.	Aku menasihati orang lain secara rohani/agama.	0	1	2	3
33.	Aku membaca doa' ketika sedih dan takut.	0	1	2	3
34.	Aku berusaha memahami petunjuk Tuhan ketika sesuatu yang buruk terjadi.	0	1	2	3
35.	Aku merasakan kedamaian karena keimananku.	0	1	2	3
36.	Aku didukung dan dikuatkan oleh orang-orang yang seiman.	0	1	2	3
37.	Keberadaan Tuhan membuatku tenang.	0	1	2	3

Appendix D

The Syllabus Psychosocial and Traditional-Based Physical Education and Sport (English version example)

# 4<sup>th</sup> GRADE, 1<sup>st</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER					AND TIME	
1	Games and sport	Student are able to	Student are able	Student are able	• Student are able	3 x 70	a. Sneak Attack
		practice basic	to understand	to show	to develop	minutes	b. Secret Handshake
		movement of Track	basic movement	awareness to	coping stress,		c. Frogs and Ants
		and Field (running	concepts of	their body,	problem-solving,		d. People Puzzles
		and walking)	Track and Field	discipline,	social and		e. Cooperative
		through games	(running and	cooperation,	interpersonal		Challenge
			walking) in the	tolerance,	skills.		f. Traditional games
			game	appreciating the	• Student are able		
				defeat and	to reduce		
				victory in the	depression,		
				game, and	anxiety, and		
				responsibility	stress states		
		Student are able to	Student are able	Student are able	• Student are able	3 x 70	a. Team Bowling
		practice variation	to understand	to show	to develop	minutes	b. Island Hopping
		and combination of	fundamental	awareness to	coping stress,		c. Through the
		fundamental	movement skills	their body,	problem-solving,		Quicksand
		movement skills	concepts in the	discipline,	social and		d. Foam Ball
		(locomotors, non-	games and sport	cooperation,	interpersonal		Passover
		locomotors,		tolerance,	skills.		e. Cooperative
		manipulative) in the		appreciating the	• Student are able		Games
		games and sport		defeat and	to reduce		f. Traditional games

				victory in the game, and responsibility	depression, anxiety, and stress states		
2	Physical fitness	Student are able to practice various fitness activity to reach Height and weight ideal.	Student are able to know about various fitness activity to reach Height and weight ideal.	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	3 x 70 minutes	<ul> <li>a. Geography General Space</li> <li>b. Invent A Game</li> <li>c. Loop Da Hoop</li> <li>d. Climb the Mountain</li> <li>e. Challenge Stations</li> <li>f. Traditional games</li> </ul>
3	Educational Gymnastic	Student are able to practice a combination of dominant motion patterns to form the skills / techniques basic gymnastics (Such as: handstand, kayang, etc.) and combinations	Student are able to know dominant motion patterns of static and dynamic positions, pedestal and hanger concept in pairs	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	2 x 70 minutes	<ul> <li>a. Titanic Challenge</li> <li>b. Slalom Blindfold</li> <li>c. Group Juggling</li> <li>d. The Bus</li> <li>e. Traditional games</li> </ul>

		dominant movement patterns of static and dynamic positions, pedestal and hanger (for example: hand motion stand pairs) in pairs					
4	Rhythmic activity	Student are able to practice basic movement patterns rhythmic theme local culture which is based on the known concept of motion to the rhythm (beats) without / with music	Student are able to know concept of motion to the rhythm (beats) without / with music	Student are able to show awareness to their body, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	1 x 70 minutes	<ul> <li>a. Cooperative Hoops</li> <li>b. All Aboard</li> <li>c. Traditional games</li> </ul>
						12 x 70 minutes	

# 5<sup>th</sup> GRADE, 1<sup>st</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER					AND TIME	
1	Games and sport	Student are able to practice variations and combinations of the basic motion of track and field (jump, and throw) through the modified game/ sports.	Student are able to understand of basic motion of track and field (jump, and throw) in the modified game/ sports.	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	3 x 70 minutes	<ul> <li>a. Sneak Attack</li> <li>b. Frogs and Ants</li> <li>c. People Puzzles</li> <li>d. Balloons in a Bag Challenge.</li> <li>e. Cooperative Challenge.</li> <li>f. Traditional games</li> </ul>
		Student are able to practice variations and combinations of basic movement patterns based on the movement concept in several of game or sport.	Student are able to understand about the movement concept in several of game or sport.	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	3 x 70 minutes	<ul> <li>a. Island Hopping</li> <li>b. Through the Quicksand</li> <li>c. Cooperative Games</li> <li>d. Cooperative Skills Challenge Stations</li> <li>e. Traditional games</li> </ul>

		Student are able to practice variations and combinations of the basic motion to form the modified basic movement of martial art in a game	Student are able to understand about the modified basic movement of martial art in a game	victory in the game, and responsibility Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game and	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	1 x 70 minutes	a. Strong Fingers b. Traditional games
2	Physical fitness	Student are able to practice aerobic and anaerobic endurance activities for the development of physical fitness	Student are able to understand about aerobic and anaerobic endurance activities for the development of physical fitness	responsibility Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	2 x 70 minutes	<ul> <li>a. Cooperative Fitness</li> <li>b. Challenge Stations</li> <li>c. Traditional games</li> </ul>
3	Educational Gymnastic	Student are able to practice a	Student are able to	Student are able to show	• Student are able to develop coping	1 x 70 minutes	a. Mine Field

	combination of dominant motion patterns to form the skills / basic gymnastics techniques on different tools and motion pattern variations and combinations of static and dynamic dominant position, pedestal and hanger (for example: the pyramid) in small groups	understand about the skills / basic gymnastics techniques and motion pattern in small groups	awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	t c	<ul> <li>b. Stress Balloon Baggage</li> <li>c. Traditional games</li> </ul>
4 Rhythmic activity	Student are able to practice a wide variety of basic movement patterns rhythmic themed regional and national in small groups based on the concept of motion to the rhythm (beats), without / with music	Student are able to understand a basic movement patterns rhythmic based on the concept of motion to the rhythm (beats),	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	2 x 70 minutes	<ul> <li>a. Starships Line Dance</li> <li>b. Create A Line Dance</li> <li>c. Traditional games</li> </ul>

	without / with music		
			12 x 70 minutes

# 6<sup>th</sup> GRADE, 1<sup>st</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER				SKILLS	AND	
						TIME	
1	Games and sport	Student are able to practice variations and combinations of the basic motion of track and field (walk, run, jump, and throwing) with good control through games and sports	Student are able to understand about the basic motion of track and field (walk, run, jump, and throwing) with good control through games and sports	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	3 x 70 minutes	<ul> <li>a. Race for Space</li> <li>b. Frogs and Ants</li> <li>c. People Puzzles</li> <li>d. Balloons in a Bag Challenge</li> <li>e. Cooperative Challenge</li> </ul>
		Student are able to practice variations and combinations of the basic movement patterns of locomotors, non- locomotors, and manipulative which	Student are able to understand about the basic movement patterns on the concept of motion in a variety of	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression,</li> </ul>	3 x 70 minutes	<ul> <li>a. Cooperative Handball</li> <li>b. The Line Game</li> <li>c. Triangle Tag</li> <li>d. Alien Communication</li> <li>e. Cooperative Skills Challenge Stations</li> </ul>

	is based on the concept of motion in a variety of sports and games with good control	sports and games with good control	the defeat and victory in the game, and responsibility	anxiety, and stress states		
	Student are able to practice variations and combinations of the basic motion to form the basis of self-defense movements in the modified games	Student are able to understand the basic motion to form the basis of self-defense movements.	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	1 x 70 minutes	a. Strong Fingers
2 Physical fitness	Student are able to measure fitness status using various assessment tools	Student are able to understand fitness status using various assessment tools	Student are able to show awareness to their body, cooperation, and responsibility.	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states.</li> </ul>	3 x 70 minutes	<ul> <li>a. Fitness Fun With Mats</li> <li>b. The Twelve Ways to Fitness</li> <li>c. Create a Game</li> </ul>

3	Educational Gymnastic	<ul> <li>Student are able to:</li> <li>a. Practice a range of motion exercises dexterity with consistent, accurate and good control.</li> <li>b. practice variations and combinations of the dominant movement patterns of static and dynamic positions, pedestal and hanger (for example: the pyramid) in a large group</li> </ul>	Student are able to: c. Understand a range of motion exercises dexterity with consistent, accurate and good control. d. Understand the dominant movement patterns of static and dynamic positions, pedestal and hanger	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states.</li> </ul>	1 x 70 minutes	a. Balance Gym b. Group Juggling
4	Rhythmic	Student are able to	Student are able	Student are	• Student are able to	1 x 70	a. Team Building and
	activity	practice a	to understand a	able to show	develop coping	minutes	Rhythms Dance
		combination of basic	basic rhythmic	awareness to	stress, problem-		
		rhythmic patterns of	patterns based	their body,	solving, social and		
		motion activity	on the concept	discipline,	interpersonal		
		themed regional and	of motion	cooperation,	skills.		

	national in classical choreography that is based on the concept of motion follow by rhythm (knock), without / with music	follow by rhythm	tolerance, and responsibility	• Student are able to reduce depression, anxiety, and stress states.	
					12 x 70 minutes

# 4<sup>th</sup> GRADE, 2<sup>nd</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER					AND TIME	
1	Games and	Student are able to	Student are able	Student are	• Student are able	4 x 70	a. Sneak Attack
	sport	practice basic	to understand	able to show	to develop	minutes	b. Secret Handshake
		movement of Track	basic	awareness to	coping stress,		c. People Puzzles
		and Field (running	movement	their body,	problem-solving,		d. Balloons in a Bag
		and walking)	concepts of	discipline,	social and		Challenge
		through games	Track and Field	cooperation,	interpersonal		e. Frogs and Ants
			(running and	tolerance,	skills.		f. Cooperative
			walking) in the	appreciating the	• Student are able		Challenge
			game	defeat and	to reduce		g. Traditional games
				victory in the	depression,		
				game, and	anxiety, and		
				responsibility	stress states		
		Student are able to	Student are able	Student are	• Student are able	4 x 70	a. Team Bowling
		practice variation	to understand	able to show	to develop	minutes	b. Island Hopping
		and combination of	fundamental	awareness to	coping stress,		c. Through the
		fundamental	movement	their body,	problem-solving,		Quicksand
		movement skills	skills concepts	discipline,	social and		d. Foam Ball Passover
		(locomotors, non-	in the games	cooperation,	interpersonal		e. Cooperative Games
		locomotors,	and sport	tolerance,	skills.		f. Cooperative Skills
		manipulative) in the		appreciating the	• Student are able		Challenge Stations
		games and sport		defeat and	to reduce		g. Traditional games

				victory in the game, and responsibility	depression, anxiety, and stress states	
2	Physical fitness	Student are able to practice various fitness activity to reach Height and weight ideal.	Student are able to know about various fitness activity to reach Height and weight ideal.	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop minutes</li> <li>coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	<ul> <li>a. Geography General Space</li> <li>b. Invent A Game</li> <li>c. Loop Da Hoop</li> <li>d. Climb the Mountain</li> <li>e. Cooperative Fitness</li> <li>f. Challenge Stations</li> <li>g. Traditional games</li> </ul>
3	Educational Gymnastic	Student are able to practice a combination of dominant motion patterns to form the skills / techniques basic gymnastics (Such as: handstand, kayang, etc.) and combinations	Student are able to know dominant motion patterns of static and dynamic positions, pedestal and hanger concept in pairs	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop minutes</li> <li>coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	<ul><li>a. Titanic Challenge</li><li>b. Group Juggling</li><li>c. The Bus</li><li>d. Mine Field</li><li>e. Traditional games</li></ul>

		dominant movement patterns of static and dynamic positions, pedestal and hanger (for example: hand motion stand pairs) in pairs					
4	Rhythmic activity	Student are able to practice basic movement patterns rhythmic theme local culture which is based on the known concept of motion to the rhythm (beats) without / with music	Student are able to know concept of motion to the rhythm (beats) without / with music	Student are able to show awareness to their body, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	2 x 70 minutes	<ul> <li>a. Cooperative Hoops</li> <li>b. All Aboard</li> <li>c. Starships Line Dance</li> <li>d. Traditional games</li> </ul>
						16 x 70 minutes	

# 5<sup>th</sup> GRADE, 2<sup>nd</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER					AND	
						TIME	
1	Games and sport	Student are able to practice variations and combinations of the basic motion of track and field (jump, and throw) through the modified game/ sports.	Student are able to understand of basic motion of track and field (jump, and throw) in the modified game/ sports.	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	4 x 70 minutes	<ul> <li>a. Sneak Attack</li> <li>b. Secret Handshake</li> <li>c. People Puzzles</li> <li>d. Balloons in a Bag Challenge</li> <li>e. Frogs and Ants</li> <li>f. Cooperative Challenge</li> <li>g. Traditional games</li> </ul>
		Student are able to practice variations and combinations of basic movement patterns based on the movement concept in several of game or sport.	Student are able to understand about the movement concept in several of game or sport.	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression,</li> </ul>	4 x 70 minutes	<ul> <li>a. Team Bowling</li> <li>b. Island Hopping</li> <li>c. Through the Quicksand</li> <li>d. Foam Ball Passover</li> <li>e. Cooperative Games</li> <li>f. Cooperative Skills Challenge Stations</li> </ul>

			defeat and victory in the game, and responsibility	anxiety, and stress states		g. Traditional games
	Student are able to practice variations and combinations of the basic motion to form the modified basic movement of martial art in a game	Student are able to understand about the modified basic movement of martial art in a game	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	1 x 70 minutes	<ul><li>a. Strong Fingers</li><li>b. Traditional games</li></ul>
2 Physical fitness	Student are able to practice aerobic and anaerobic endurance activities for the development of physical fitness	Student are able to understand about aerobic and anaerobic endurance activities for the development of physical fitness	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	4 x 70 minutes	<ul> <li>a. Geography General Space</li> <li>b. Invent A Game</li> <li>c. Loop Da Hoop</li> <li>d. Climb the Mountain</li> <li>e. Cooperative Fitness</li> <li>f. Challenge Stations</li> <li>g. Traditional games</li> </ul>

3	Educational Gymnastic	Student are able to practice a combination of dominant motion patterns to form the skills / basic gymnastics techniques on different tools and motion pattern variations and combinations of static and dynamic dominant position, pedestal and hanger (for example: the pyramid) in small groups	Student are able to understand about the skills / basic gymnastics techniques and motion pattern in small groups	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	2 x 70 minutes	<ul> <li>a. Titanic Challenge</li> <li>b. Slalom Blindfold</li> <li>c. Group Juggling</li> <li>d. The Bus</li> <li>e. Traditional games</li> </ul>
4	Rhythmic activity	Student are able to practice a wide variety of basic movement patterns rhythmic themed regional and national in small groups based on the concept of motion to the	Student are able to understand a basic movement patterns rhythmic based on the concept of motion to the rhythm	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem- solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	1 x 70 minutes	<ul> <li>a. Team Building and Rhythms Dance</li> <li>b. Traditional games</li> </ul>

rhythm (beats), without / with music	(beats), without / with music		
		16 x 70	
		minutes	

# 6<sup>th</sup> GRADE, 2<sup>nd</sup> SEMESTER

NO.	SUBJECT	PSYCHOMOTOR	COGNITIVE	AFFECTIVE	PSYCHOSOCIAL	LESSONS	ACTIVITIES
	MATTER				SKILLS	AND TIME	
1	Games and sport	Student are able to practice variations and combinations of the basic motion of track and field (walk, run, jump, and throwing) with good control through games and sports	Student are able to understand about the basic motion of track and field (walk, run, jump, and throwing) with good control through games and sports	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the game, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states</li> </ul>	4 x 70 minutes	<ul> <li>a. Race for Space</li> <li>b. Secret Handshake</li> <li>c. Frogs and Ants</li> <li>d. People Puzzles</li> <li>e. Balloons in a Bag Challenge</li> <li>f. Cooperative Challenge</li> <li>g. Traditional games</li> </ul>
		Student are able to practice variations and combinations of the basic movement patterns of locomotors, non- locomotors, and manipulative which	Student are able to understand about the basic movement patterns on the concept of motion in a variety of	Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the	• Student are able to develop coping stress, problem-solving, social and interpersonal skills.	4 x 70 minutes	<ul> <li>a. Cooperative Handball</li> <li>b. The Line Games</li> <li>c. Cooperative Games</li> <li>d. Cooperative Skills Challenge Stations</li> <li>e. Traditional games</li> </ul>

		is based on the concept of motion in a variety of sports and games with good control Student are able to practice variations and combinations of the basic motion to form the basis of self-defense movements in the modified games	sports and games with good control Student are able to understand the basic motion to form the basis of self-defense movements.	defeat and victory in the game, and responsibility Student are able to show awareness to their body, discipline, cooperation, tolerance, appreciating the defeat and victory in the	<ul> <li>Student are able to reduce depression, anxiety, and stress states</li> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression</li> </ul>	1 x 70 minutes	a. Strong Fingers b. Traditional games
				game, and responsibility	anxiety, and stress states		
2	Physical fitness	Student are able to measure fitness status using various assessment tools	Student are able to understand fitness status using various assessment tools	Student are able to show awareness to their body, cooperation, and responsibility.	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression,</li> </ul>	4 x 70 minutes	<ul> <li>a. Fitness Fun With Mats</li> <li>b. The Twelve Ways to Fitness</li> <li>c. Fitness Stations</li> <li>d. Heart Rate Monitor 1K</li> <li>e. Create-a-Game</li> <li>f. Traditional games</li> </ul>

					anxiety, and		
3	Educational Gymnastic	Student are able to: e. Practice a range of motion exercises dexterity with consistent, accurate and good control. f. practice variations and combinations of the dominant movement patterns of static and dynamic positions, pedestal and hanger (for example: the pyramid) in a large group	Student are able to: g. Understand a range of motion exercises dexterity with consistent, accurate and good control. h. Understand the dominant movement patterns of static and dynamic positions, pedestal and hanger.	Student are able to show awareness to their body, discipline, cooperation, tolerance, and responsibility	<ul> <li>Student are able to develop coping stress, problem-solving, social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states.</li> </ul>	2 x 70 minutes	<ul> <li>a. Don't Drop the Ball</li> <li>b. Balance Gym</li> <li>c. Group Juggling</li> <li>d. The Bus</li> <li>e. Traditional games</li> </ul>
4	Rhythmic activity	Student are able to practice a combination of basic rhythmic	Student are able to understand a basic rhythmic patterns based	Student are able to show awareness to their body,	• Student are able to develop coping stress, problem-solving,	1 x 70 minutes	<ul><li>a. Create A Line</li><li>Dance</li><li>b. Traditional games</li></ul>

patterns of motion activity themed regional and national in classical choreography that is based on the concept of motion follow by rhythm (knock), without / with music	on the concept of motion follow by rhythm	discipline, cooperation, tolerance, and responsibility	<ul> <li>social and interpersonal skills.</li> <li>Student are able to reduce depression, anxiety, and stress states.</li> </ul>
			16 x 70 minutes

Appendix E

The Lesson Plan Psychosocial-Based Physical Education and Sport (English version example)

# THE LESSON PLAN PSYCHOSOCIAL-BASED PHYSICAL EDUCATION AND SPORT

# 4<sup>th</sup> grade, 1<sup>st</sup> semester (12 meeting)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	&	MATTER		
	DATE			
1		Games and	1. Opening for Learning	
		sport (1)	a. Making student be in line,	3 minutes
			Presence, and Praying	
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	10
			c. Warming-up	10 minutes
			2. Main of Learning	20
			a. Activity 1: Sneak Attack	20 minutes
			D. Activity 2. Secret	20 minutes
			Activity 2: Holistic	10 minutes
			relayation exercise	10 minutes
			3 Closure for Learning	
			a Cooling-down	5 minutes
			b. Discussion and reflection	•
2		Physical	1. Opening for Learning	
		fitness (1)	a. Making student be in line.	3 minutes
			Presence, and Praying	
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	
			c. Warming-up	10 minutes
			2. Main of Learning	
			a. Activity 1: Geography	20 minutes
			General Space	• • •
			b. Activity 2: Invent A Game	20 minutes
			c. Activity 3: Holistic	10 minutes
			relaxation exercise	
			3. Cooling down	5 minutes
			b Discussion and reflection	5 minutes
3		Educational	1 Opening for Learning	
5		Gymnastic	a Making student be in line	3 minutes
		(1)	Presence, and Praving	5 minutes
		(-)	together.	
			b. Telling the purposes of	
			the learning today	2 minutes
			c. Warming-up	
			2. Main of Learning	10 minutes
			a. Activity 1: Titanic	
			Challenge	20 minutes

		b. Activity 2: Slalom Blindfold	20 minutes
		c. Activity 3: Holistic relaxation exercise	10 minutes
		3 Closure for Learning	10 minutes
		a. Cooling-down	
		b. Discussion and reflection	5 minutes
4	Rhythmic	1. Opening for Learning	
	activity (1)	a. Making student be in line, Presence, and Praying	3 minutes
		b. Telling the purposes of the learning today	2 minutes
		c. Warming-up	10 minutes
		a. Activity 1: Cooperative	20 minutes
		Hoops	
		<ul><li>b. Activity 2: All Aboard</li><li>c. Activity 3: Holistic</li></ul>	20 minutes 10 minutes
		relaxation exercise	
		3. Closure for Learning	- · .
		a. Cooling-down b. Discussion and reflection	5 minutes
5	Games and	1 Opening for Learning	
5	sport (2)	a. Making student be in line,	3 minutes
	• • • •	Presence, and Praying	
		b Telling the purposes of	2 minutes
		the learning today	2 minutes
		c. Warming-up	10 minutes
		2. Main of Learning	20 minutes
		Ants	20 minutes
		b. Activity 2: People Puzzles	20 minutes
		c. Activity 3: Holistic	10 minutes
		Closure for Learning	
		a. Cooling-down	5 minutes
		b. Discussion and reflection	
6	Physical	1. Opening for Learning	
	fitness (2)	a. Making student be in line,	3 minutes
		Presence, and Praying	
		b Telling the purposes of	2 minutes
		the learning today	2 mmutts
		c. Warming-up	10 minutes
		2. Main of Learning	
		a. Activity 1: Loop Da	20 minutes
		Ноор	

		b. Activity 2: Climb the 20 minutes		
		c Activity 3 <sup>.</sup> Holistic 10 minutes		
		relaxation exercise		
		3. Closure for Learning		
		a. Cooling-down 5 minutes		
		b. Discussion and reflection		
7	Games and	1. Opening for Learning		
	sport (3)	a. Making student be in line, Presence, and Praying		
		b. Telling the purposes of 2 minutes		
		c. Warming-up 10 minutes		
		2. Main of Learning		
		a. Activity 1: Cooperative 40 minutes		
		b. Activity 2: Holistic 10 minutes		
		relaxation exercise		
		3. Closure for Learning		
		a. Cooling-down 5 minutes		
8	Physical	0. Discussion and reflection		
0	fitness (3)	a Making student be in line 3 minutes		
		Presence, and Praving		
		together.		
		b. Telling the purposes of 2 minutes		
		the learning today		
		c. Warming-up 10 minutes		
		2. Main of Learning		
		a. Activity 1: 40 minutes		
		Challenge Stations		
		b. Activity 2. Holistic 10 minutes		
		3 Closure for Learning		
		a. Cooling-down 5 minutes		
		b. Discussion and reflection		
9	Games and	1. Opening for Learning		
	sport (4)	a. Making student be in line, 3 minutes		
		Presence, and Praying		
		together.		
		b. Telling the purposes of 2 minutes		
		the learning today		
		2 Main of Learning		
		a. Activity 1. Team Bowling 20 minutes		
		b. Activity 2: Island Hopping 20 minutes		
		c. Activity 3: Holistic 10 minutes		
		relaxation exercise		
		3. Closure for Learning		
		0	Cooling-down	5 minutes
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		d	L Discussion and reflection	5 minutes
10	Educational	1. (	Opening for Learning	
	Gymnastic	6	a. Making student be in line,	3 minutes
	(2)		Presence, and Praying	
			together.	
		1	b. Telling the purposes of	2 minutes
			the learning today	
		(	c. Warming-up	10 minutes
		2. N	Main of Learning	
		a	Activity I: Group	20 minutes
		1	Juggling	20
		b	Activity 2: The Bus	20 minutes
		c	relevation everaise	10 minutes
		3 (	Tosure for Learning	
		J. C	Cooling-down	5 minutes
		h	Discussion and reflection	5 minutes
11	Games and	1 (	Opening for Learning	
	sport (5)		a. Making student be in line,	3 minutes
	1 ()		Presence, and Praying	
			together.	
		1	b. Telling the purposes of	2 minutes
			the learning today	
			c. Warming-up	10 minutes
		2. N	Main of Learning	
		a	Activity 1: Through the	20 minutes
		1	Quicksand	20
		b	D. Activity 2: Foam Ball	20 minutes
		0	Activity 3: Holistic	10 minutes
		U U	relayation exercise	10 minutes
		3 (	Closure for Learning	
		a a	Cooling-down	5 minutes
		b	Discussion and reflection	
12	Games and	1. (	Opening for Learning	
	sport (6)	ä	a. Making student be in line,	3 minutes
			Presence, and Praying	
			together.	
		1	b. Telling the purposes of	2 minutes
			the learning today	10
			c. Warming-up	10 minutes
		2. N	viain of Learning	10 minutas
		a	Games	40 minutes
		h	Activity 2: Holistic	10 minutes
			relaxation exercise	10 minutes
		3. 0	Closure for Learning	
		a	. Cooling-down	5 minutes
		b	Discussion and reflection	

### THE LESSON PLAN PSYCHOSOCIAL-BASED PHYSICAL EDUCATION AND SPORT

### 5<sup>th</sup> grade, 1<sup>st</sup> semester (12 meeting)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	&	MATTER		
	DATE			
1		Games and	1. Opening for Learning	
		sport (1)	a. Making student be in line,	3 minutes
			Presence, and Praying	
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	10
			c. warming-up	10 minutes
			2. Main of Learning	20 minutos
			a. Activity 1. Sheak Atlack	20 minutes
			U. Activity 2. Secret Handshake	20 minutes
			c Activity 3: Holistic	10 minutes
			relaxation exercise	10 minutes
			3 Closure for Learning	
			a. Cooling-down	5 minutes
			b. Discussion and reflection	
2		Physical	1. Opening for Learning	
		fitness (1)	a. Making student be in line,	3 minutes
			Presence, and Praying	
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	
			c. Warming-up	10 minutes
			2. Main of Learning	
			a. Activity 1: Cooperative	40 minutes
			Fitness	10
			b. Activity 2: Holistic	10 minutes
			Closure for Learning	
			a Cooling-down	5 minutes
			b Discussion and reflection	5 minutes
3		Games and	1 Opening for Learning	
C C		sport (2)	a. Making student be in line.	3 minutes
			Presence, and Praying	
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	
			c. Warming-up	10 minutes
			2. Main of Learning	
			a. Activity 1: Team Bowling	20 minutes
			b. Activity 2: Island	20 minutes
			Hopping	1

r	1	r			T
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	sure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
4	Rhythmic	1.	Op	ening for Learning	
	activity (1)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: Starships Line	40 minutes
				Dance	
			b.	Activity 2: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
5	Physical	1.	Op	ening for Learning	
	fitness (2)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1:	40 minutes
				Challenge Stations	
			b.	Activity 2: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
6	Games and	1.	Op	ening for Learning	
	sport (3)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: People	20 minutes
				Puzzles	
			b.	Activity 2: Balloons in a	20 minutes
				Bag Challenge.	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	

			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
7	Rhythmic	1.	Op	ening for Learning	2
	activity (2)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
			1.	Talling the summary of	2
			D.	the learning to day	2 minutes
			0	Worming up	10 minutos
		2	U. Ma	in of Learning	10 minutes
		2.	3	Activity 1: Create A Line	40 minutes
			u.	Dance	10 minutes
			b	Activity 2 <sup>·</sup> Holistic	10 minutes
			0.	relaxation exercise	10 11114005
		3.	Clo	sure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
8	Games and	1.	Op	ening for Learning	
	sport (4)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
		•	C.	Warming-up	10 minutes
		2.	Ma	in of Learning	40
			a.	Activity I: Cooperative	40 minutes
			h	Activity 2: Holistic	10 minutes
			0.	relaxation exercise	10 minutes
		3.	Clo	sure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
9	Educational	1.	Op	ening for Learning	
	Gymnastic		a.	Making student be in line,	3 minutes
	(1)			Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
			_	the learning today	10
		2	C.	warming-up	10 minutes
		۷.	a	Activity 1: Mine Field	20 minutes
			a. h	Activity 2: Stress Balloon	20 minutes
			0.	Receiving 2. Suess Danoon Baggage	20 minutes
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
10	Games and	1.	Op	ening for Learning	
	sport (5)				

		a. Making student be Presence, and Pray	in line, 3 minutes ing
		b. Telling the purpose the learning today	es of 2 minutes
		c. Warming-up	10 minutes
		2. Main of Learning	tiva 10 minutas
		Challenge.	tive 40 minutes
		b. Activity 2: Holistic	10 minutes
		relaxation exercise	
		3. Closure for Learning	- · ·
		a. Cooling-down	5 minutes
11	Comes and	1 Opening for Learning	
11	sport (self-	a Making student be	in line 3 minutes
	defense) (6)	Presence and Pray	ing 5 minutes
		together.	
		b. Telling the purpose	es of 2 minutes
		the learning today	
		c. Warming-up	10 minutes
		2. Main of Learning	
		a. Activity 1: Strong	Fingers 40 minutes
		b. Activity 2: Holistic	10 minutos
		3 Closure for Learning	10 minutes
		a Cooling-down	
		b. Discussion and refl	ection 5 minutes
12	Games and	1. Opening for Learning	
	sport (7)	a. Making student be	in line, 3 minutes
		Presence, and Pray	ing
		together.	
		b. Telling the purpose	es of 2 minutes
		the learning today	10 minutes
		2 Main of Learning	10 minutes
		a. Activity 1: Coope	rative 40 minutes
		Skills Challenge St	ations
		b. Activity 2: Holistic	10 minutes
		relaxation exercise	
		3. Closure for Learning	<b>_</b> .
		a. Cooling-down	5 minutes
		b. Discussion and refl	ection

### THE LESSON PLAN PSYCHOSOCIAL-BASED PHYSICAL EDUCATION AND SPORT

# 6<sup>th</sup> grade, 1<sup>st</sup> semester (12 meeting)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	&	MATTER		
	DATE			
1		Games and sport (1)	<ol> <li>Opening for Learning         <ol> <li>Making student be in line,             </li> <li>Presence, and Praving</li> </ol> </li> </ol>	3 minutes
			together. e. Telling the purposes of the learning today	2 minutes
			f. Warming-up	10 minutes
			2. Main of Learning	• • •
			c. Activity 1: Race for Space	20 minutes
			d. Activity 2: Frogs and Ants	20 minutes
			e. Activity 3: Holistic	10 minutes
			relaxation exercise	
			3. Closure for Learning	5 minutos
			d Discussion and reflection	5 minutes
2		Physical	1 Opening for Learning	
2		fitness (1)	a Making student he in line	3 minutes
			Presence and Praving	5 minutes
			together.	
			b. Telling the purposes of	2 minutes
			the learning today	
			c. Warming-up	10 minutes
			2. Main of Learning	
			a. Activity 1: Fitness Fun	40 minutes
			With Mats	
			b. Activity 2: Holistic	10 minutes
			relaxation exercise	
			3. Closure for Learning	- · .
			a. Cooling-down	5 minutes
2		Comos and	b. Discussion and reflection	
5		sport $(2)$	a. Making student be in line	3 minutes
		sport $(2)$	a. Making student be in fine, Presence and Praving	Jinnucs
			together	
			b Telling the purposes of	2 minutes
			the learning today	2 111114005
			c. Warming-up	10 minutes
			2. Main of Learning	
			a. Activity 1: Cooperative	20 minutes
			Handball	
			b. Activity 2: The	20 minutes
			Line Game	

			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
4	Physical	1.	Oj	bening for Learning	
	fitness (2)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
		_	C.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: The Twelve	40 minutes
			1	Ways to Fitness	10
			b.	Activity 2: Holistic	10 minutes
		2	CI	relaxation exercise	
		3.	CI	Sure for Learning	- · ,
			a.	Cooling-down	5 minutes
5	Comos and	1	0.	Discussion and reflection	
5	Games and	1.	0j	Moling student he in line	2 minutos
	sport (5)		a.	Presence and Proving	5 minutes
				together	
			h	Telling the purposes of	2 minutes
			0.	the learning today	2 minutes
			C	Warming-un	10 minutes
		2	Ma	in of Learning	10 minutes
			a	Activity 1: People	20 minutes
			•••	Puzzles	20 11114005
			b.	Activity 2: Balloons in a	20 minutes
				Bag Challenge	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
6	Educational	1.	O	pening for Learning	
	Gymnastic		a.	Making student be in line,	3 minutes
	(1)			Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: Balance Gym	20 minutes
			b.	Activity 2: Group	20 minutes
				Juggling	
			C.	Activity 3: Holistic	10 minutes
				relaxation exercise	

		2 Closura for Loorning	
		5. Closure for Learning	5
		a. Cooling-down	5 minutes
		b. Discussion and reflection	
7	Games and sport (4)	<ol> <li>Opening for Learning         <ol> <li>Making student be in line, Presence, and Praying</li> <li>together</li> </ol> </li> </ol>	3 minutes
		b. Telling the purposes of the learning today	2 minutes
		c. Warming-up 2 Main of Learning	10 minutes
		a. Activity 1: Triangle Tag b. Activity 2: Alien	20 minutes 20 minutes
		c. Activity 3: Holistic relaxation exercise	10 minutes
		<ul> <li>3. Closure for Learning</li> <li>a. Cooling-down</li> <li>b. Discussion and reflection</li> </ul>	5 minutes
8	Physical fitness (3)	<ol> <li>Opening for Learning         <ol> <li>Making student be in line, Presence, and Praying</li> <li>tagether</li> </ol> </li> </ol>	3 minutes
		b. Telling the purposes of the learning today	2 minutes
		c. Warming-up 2 Main of Learning	10 minutes
		a. Activity 1: Create a Game b. Activity 2: Holistic	40 minutes
		relaxation exercise 3. Closure for Learning	10 minutes
		<ul><li>a. Cooling-down</li><li>b. Discussion and reflection</li></ul>	5 minutes
9	Games and sport (5)	<ol> <li>Opening for Learning         <ol> <li>Making student be in line, Presence, and Praying</li> </ol> </li> </ol>	3 minutes
		b. Telling the purposes of the learning today	2 minutes
		c. Warming-up 2 Main of Learning	10 minutes
		a. Activity 1: Cooperative Challenge	40 minutes
		b. Activity 2: Holistic relaxation exercise	10 minutes
		<ul><li>3. Closure for Learning</li><li>a. Cooling-down</li><li>b. Discussion and reflection</li></ul>	5 minutes
10	Rhythmic activity (1)	1. Opening for Learning	

				a.	Making student be in line,	3 minutes
					Presence, and Praying	
					together.	
				b.	Telling the purposes of	2 minutes
					the learning today	
				c.	Warming-up	10 minutes
			2.	Ma	in of Learning	
				a.	Activity 1: Team	40 minutes
					Building and Rhythms	
					Dance	
				b.	Activity 2: Holistic	10 minutes
					relaxation exercise	
			3.	Clo	sure for Learning	
				a	Cooling-down	5 minutes
				b	Discussion and reflection	
11	G	ames and	1	Or	pening for Learning	
	SI SI	port (self-		ч к	Making student be in line	3 minutes
	d	efense) (6)		и.	Presence and Praving	5 minutes
	u.				together	
				h	Telling the purposes of	2 minutes
				υ.	the learning today	2 minutes
				0	Warming up	10 minutes
			2	U. Ma	in of Learning	10 minutes
			4.	Ivia	A ativity 1: Strong Fingers	10 minutos
				a. h	Activity 1. Strong Fingers	40 minutes
				U.	Activity 2. Holistic	10 minutos
			2	$Cl_{c}$	for Learning	10 minutes
			5.	CIC	Cooling down	
				a. h	Discussion and reflection	5 minutos
12		lomog and	1	U.	Discussion and reflection	5 minutes
12	G	nort (7)	1.	υţ	Malving student have line	2 minutes
	sr	port (7)		a.	Making student be in line,	5 minutes
					Presence, and Praying	
				1	together.	
				b.	I elling the purposes of	2 minutes
					the learning today	10
			~	C.	Warming-up	10 minutes
			2.	Ma	in of Learning	40
				a.	Activity 1: Cooperative	40 minutes
				1	Skills Challenge Stations	10
				b.	Activity 2: Holistic	10 minutes
			•	CI	relaxation exercise	
			3.	Clo	osure for Learning	- · .
				a.	Cooling-down	5 minutes
				b.	Discussion and reflection	

Appendix F

The Lesson Plan Psychosocial and Traditional-Based Physical Education and Sport (English version example)

### THE LESSON PLAN PSYCHOSOCIAL AND TRADITIONAL-BASED PHYSICAL EDUCATION AND SPORT

### 4<sup>th</sup> grade, 2<sup>nd</sup> semester (16 meeting)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	Å	MATTER		
1	DATE	Games and sport (1)	<ul><li>4. Opening for Learning</li><li>d. Making student be in line,</li><li>Presence and Praving</li></ul>	3 minutes
			together. e. Telling the purposes of the learning today f. Warming-up	2 minutes 10 minutes
			<ul> <li>d. Activity 1: Sneak Attack</li> <li>e. Activity 2: Traditional</li> </ul>	20 minutes 20 minutes
			f. Activity 3: Holistic relaxation exercise	10 minutes
			<ul><li>6. Closure for Learning</li><li>c. Cooling-down</li><li>d. Discussion and reflection</li></ul>	5 minutes
2		Physical fitness (1)	<ul> <li>Opening for Learning</li> <li>d. Making student be in line, Presence, and Praying</li> <li>together</li> </ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up	10 minutes
			5. Main of Learning d. Activity 1: Geography General Space	20 minutes
			g. Activity 2: Traditional	20 minutes
			e. Activity 3: Holistic relaxation exercise	10 minutes
			<ul><li>6. Closure for Learning</li><li>c. Cooling-down</li><li>d. Discussion and reflection</li></ul>	5 minutes
3		Educational Gymnastic (1)	<ul><li>4. Opening for Learning</li><li>d. Making student be in line, Presence, and Praying</li></ul>	3 minutes
			together. e. Telling the purposes of the learning today	2 minutes
			f. Warming-up 5. Main of Learning	10 minutes

				d.	Activity 1: Titanic	20 minutes
				h	Challenge Activity 2: Traditional	20 minutes
					Games	20 11111465
				e.	Activity 3: Holistic	10 minutes
					relaxation exercise	
			6.	Clo	osure for Learning	- · .
				C.	Cooling-down	5 minutes
4	I	Rhythmic	Δ	u. On	Discussion and reflection	
	3	activity (1)	1.	d.	Making student be in line, Presence, and Praying	3 minutes
				e.	together. Telling the purposes of the learning today	2 minutes
				f.	Warming-up	10 minutes
			5.	Ma	in of Learning	
				d.	Activity 1: Cooperative Hoops	20 minutes
				e.	Activity 2: Traditional Games	20 minutes
				f.	Activity 3: Holistic	10 minutes
					relaxation exercise	
			6.	Clo	osure for Learning	- · ·
				C.	Cooling-down	5 minutes
5	(	Games and	Δ	u. On	ening for Learning	
5	S	sport (2)	т.	d.	Making student be in line, Presence, and Praving	3 minutes
					together.	
				e.	Telling the purposes of the learning today	2 minutes
				f.	Warming-up	10 minutes
			5.	Ma	in of Learning	
				d.	Activity 1: Team Bowling	20 minutes
				e.	Activity 2: Traditional	20 minutes
				f	Games Activity 3: Holistic	10 minutes
				1.	relaxation exercise	10 minutes
			6.	Clo	osure for Learning	
				c.	Cooling-down	5 minutes
				d.	Discussion and reflection	
6	I	Physical	4.	Op	ening for Learning	2
	1	fitness (2)		d.	Making student be in line,	3 minutes
					riesence, and Praying	
				e.	Telling the purposes of	2 minutes
					the learning today	
				f.	Warming-up	10 minutes
			5.	Ma	in of Learning	

			d.	Activity 1:	Loop Da	20 minutes
				Hoop	1	
			e.	Activity 2:	Traditional	20 minutes
				Games		
			f.	Activity 3: H	Iolistic	10 minutes
				relaxation ex	kercise	
		6.	Clo	osure for Lear	ning	
			c.	Cooling-dow	vn	5 minutes
			d.	Discussion a	nd reflection	
7	Games and	4.	Op	ening for Lea	rning	
	sport (3)		d.	Making stud	dent be in line,	3 minutes
	1			Presence, ar	nd Praying	
				together.	<i>y c</i>	
			e.	Telling the	purposes of	2 minutes
				the learning	today	
			f.	Warming-u	р	10 minutes
		5.	Ma	in of Learnin	g	
			c.	Activity 1: P	People Puzzles	20 minutes
			d.	Activity 2:	Traditional	20 minutes
				Games		
			e.	Activity 3:	Holistic	10 minutes
				relaxation ex	kercise	
		6.	Clo	osure for Lear	ning	5 minutes
			c.	Cooling-dow	vn	
			d.	Discussion a	ind reflection	
8	Physical	4.	Op	ening for Lea	rning	- ·
8	Physical fitness (3)	4.	Op d.	ening for Lea Making stud	rning dent be in line,	3 minutes
8	Physical fitness (3)	4.	Op d.	ening for Lea Making stud Presence, ar	rning dent be in line, nd Praying	3 minutes
8	Physical fitness (3)	4.	Op d.	ening for Lea Making stud Presence, ar together.	rning dent be in line, nd Praying	3 minutes
8	Physical fitness (3)	4.	Op d. e.	ening for Lea Making stud Presence, ar together. Telling the p	rning dent be in line, nd Praying purposes of	3 minutes 2 minutes
8	Physical fitness (3)	4.	Op d. e.	ening for Lea Making stud Presence, ar together. Telling the p the learning	rning dent be in line, nd Praying purposes of today	3 minutes 2 minutes
8	Physical fitness (3)	4.	Op d. e. f.	ening for Lea Making stud Presence, ar together. Telling the j the learning Warming-uj	rning dent be in line, nd Praying purposes of today p	3 minutes 2 minutes 10 minutes
8	Physical fitness (3)	<ul><li>4.</li><li>5.</li></ul>	Op d. e. f. Ma	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up tin of Learning	rning dent be in line, nd Praying purposes of today p g	3 minutes 2 minutes 10 minutes
8	Physical fitness (3)	4.	Op d. e. f. Ma c.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1:	rning dent be in line, nd Praying purposes of today p g totions	<ul><li>3 minutes</li><li>2 minutes</li><li>10 minutes</li><li>20 minutes</li></ul>
8	Physical fitness (3)	4.	Op d. e. f. Ma c.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up tin of Learning Activity 1: Challenge St Activity 2:	rning dent be in line, nd Praying purposes of today p g tations Traditional	3 minutes 2 minutes 10 minutes 20 minutes
8	Physical fitness (3)	4. 5.	Op d. f. Ma c. d.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2:	rning dent be in line, nd Praying purposes of today p g tations Traditional	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes
8	Physical fitness (3)	4. 5.	Op d. e. f. Ma c. d.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: E	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes
8	Physical fitness (3)	4.	Op d. f. Ma c. d. e.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: F relaxation ex	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes
8	Physical fitness (3)	4. 5.	Op d. f. Ma c. d. e.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation exposure for Lear	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic cercise ning	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes
8	Physical fitness (3)	<ul><li>4.</li><li>5.</li><li>6.</li></ul>	Op d. e. f. Ma c. d. e. Cld e	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation ex osure for Lear	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes
8	Physical fitness (3)	<ul><li>4.</li><li>5.</li><li>6.</li></ul>	Op d. e. f. Ma c. d. e. Clo e. f	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation ex posure for Lear Cooling-dow Discussion a	rning dent be in line, nd Praying purposes of today g tations Traditional Holistic cercise ning yn	<ul> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> </ul>
8	Physical fitness (3) Games and	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. d. e. Clo e. f. Or	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: F relaxation ex osure for Lear Cooling-dow Discussion a	rning dent be in line, nd Praying purposes of today g tations Traditional Holistic tercise ning yn und reflection rning	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes
8	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. Ma c. d. e. Cla e. f. Op d.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning vn and reflection rning dent be in line.	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes 3 minutes
8	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. d. e. c. d. e. f. Clo e. f. Op d.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: F relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud Presence. ar	rning dent be in line, ad Praying purposes of today p g tations Traditional Holistic kercise ning vn and reflection rning dent be in line, ad Praying	<ul> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> </ul>
8	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. Ma c. d. e. Cla e. f. Op d.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: F relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud Presence, ar together.	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning vn and reflection rning dent be in line, nd Praying	3 minutes 2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes 3 minutes
8	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. Ma c. d. e. f. Clo e. f. Op d. e.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: F relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud Presence, ar together. Telling the p	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning vn and reflection rning dent be in line, nd Praying purposes of	<ul> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> </ul>
9	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. Ma c. d. e. f. Op d. e. e.	ening for Lea Making stud Presence, ar together. Telling the j the learning Warming-uj in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud Presence, ar together. Telling the j the learning	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning vn ind reflection rning dent be in line, nd Praying purposes of today	<ul> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> </ul>
9	Physical fitness (3) Games and sport (4)	<ul><li>4.</li><li>5.</li><li>6.</li><li>4.</li></ul>	Op d. e. f. Ma c. d. e. f. Op d. e. f. Op d. f.	ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up in of Learning Activity 1: Challenge St Activity 2: Games Activity 3: H relaxation ex osure for Lear Cooling-dow Discussion a ening for Lea Making stud Presence, ar together. Telling the p the learning Warming-up	rning dent be in line, nd Praying purposes of today p g tations Traditional Holistic tercise ning vn ind reflection rning dent be in line, nd Praying purposes of today p	<ul> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> </ul>

			d.	Activity 1: Through the	20 minutes
			e.	Activity 2: Traditional	20 minutes
			f	Games	10 minutes
			1.	relaxation exercise	10 minutes
		6.	Clo	osure for Learning	
			g.	Cooling-down	5 minutes
-			h.	Discussion and reflection	
10	Educational Gymnastic (2)	4.	Op d.	Making student be in line, Presence, and Praying	3 minutes
			e.	together. Telling the purposes of the learning today	2 minutes
			f.	Warming-up	10 minutes
		5.	Ma	ain of Learning	• • •
			d.	Activity 1: The Bus	20 minutes
			e.	Activity 2: Traditional	20 minutes
			f	Activity 3 <sup>·</sup> Holistic	10 minutes
			1.	relaxation exercise	10 minutes
		6.	Clo	osure for Learning	
			c.	Cooling-down	5 minutes
			d.	Discussion and reflection	
11	Games and	4.	Op	ening for Learning	
	sport (5)		a.	Making student be in line,	3 minutes
				together	
				together.	
			e.	Telling the purposes of	2 minutes
			e.	Telling the purposes of the learning today	2 minutes
			e. f.	Telling the purposes of the learning today Warming-up	2 minutes 10 minutes
		5.	e. f. Ma	Telling the purposes of the learning today Warming-up in of Learning	2 minutes 10 minutes
		5.	e. f. Ma d.	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and	<ul><li>2 minutes</li><li>10 minutes</li><li>20 minutes</li></ul>
		5.	e. f. Ma d.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional	2 minutes 10 minutes 20 minutes
		5.	e. f. Ma d. e.	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games	<ul><li>2 minutes</li><li>10 minutes</li><li>20 minutes</li><li>20 minutes</li></ul>
		5.	e. f. Ma d. e. f.	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic	2 minutes 10 minutes 20 minutes 20 minutes 10 minutes
		5.	e. f. Ma d. e. f.	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise	2 minutes 10 minutes 20 minutes 20 minutes 10 minutes
		5.	e. f. Ma d. e. f. Clo	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning	2 minutes 10 minutes 20 minutes 20 minutes 10 minutes
		5.	e. f. Ma d. e. f. Clo c.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> </ul>
		5.	e. f. Ma d. e. f. Clo c. d.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection	2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes
12	Rhythmic	<ul><li>5.</li><li>6.</li><li>1.</li></ul>	e. f. Ma d. e. f. Clo c. d. Opp	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection	2 minutes 10 minutes 20 minutes 20 minutes 10 minutes 5 minutes
12	Rhythmic activity (2)	<ul><li>5.</li><li>6.</li><li>1.</li></ul>	e. f. Ma d. e. f. Clo c. d. Op a.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection pening for Learning Making student be in line, Presence and Praving	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> </ul>
12	Rhythmic activity (2)	<ul><li>5.</li><li>6.</li><li>1.</li></ul>	e. f. Ma d. e. f. Clo c. d. Op a.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection pening for Learning Making student be in line, Presence, and Praying together	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> </ul>
12	Rhythmic activity (2)	<ul><li>5.</li><li>6.</li><li>1.</li></ul>	e. f. Ma d. e. f. Clo c. d. Op a. b.	Telling the purposes of the learning today Warming-up ain of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection pening for Learning Making student be in line, Presence, and Praying together. Telling the purposes of	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> </ul>
12	Rhythmic activity (2)	<ol> <li>5.</li> <li>6.</li> <li>1.</li> </ol>	e. f. Ma d. e. f. Clo c. d. Op a. b.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection Discussion and reflection Dening for Learning Making student be in line, Presence, and Praying together. Telling the purposes of the learning today	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> </ul>
12	Rhythmic activity (2)	5. 6. 1.	e. f. Ma d. e. f. Clo c. d. Op a. b. c.	Telling the purposes of the learning today Warming-up an of Learning Activity 1: Frogs and Ants Activity 2: Traditional Games Activity 3: Holistic relaxation exercise osure for Learning Cooling-down Discussion and reflection Discussion and reflection Dening for Learning Making student be in line, Presence, and Praying together. Telling the purposes of the learning today Warming-up	<ul> <li>2 minutes</li> <li>10 minutes</li> <li>20 minutes</li> <li>20 minutes</li> <li>10 minutes</li> <li>5 minutes</li> <li>3 minutes</li> <li>2 minutes</li> <li>10 minutes</li> </ul>

		a. Activity 1: Starships Line 20 minut
		b. Activity 2: Traditional 20 minut
		Games
		c. Activity 3: Holistic 10 minut
		relaxation exercise
		3. Closure for Learning
		a. Cooling-down 5 minutes
12	0 1	b. Discussion and reflection
13	Games and	4. Opening for Learning d Making student ha in line 2 minute
	sport (0)	Presence, and Praying
		together.
		e. Telling the purposes of 2 minutes
		the learning today
		f. Warming-up 10 minut
		5. Main of Learning
		Games
		d Activity 2: Traditional 20 minut
		Games
		e. Activity 3: Holistic 10 minut
		relaxation exercise
		6. Closure for Learning
		c. Cooling-down 5 minutes
		d. Discussion and reflection
14	Games and	1. Opening for Learning
	sport (7)	a. Making student be in line, 3 minute
		Presence, and Praying
		together.
		b. Telling the purposes of 2 minutes
		the learning today
		c. warming-up 10 minut
		a Activity 1: Cooperative 20 minut
		Challenge
		b. Activity 2: Traditional 20 minut
		Games
		c. Activity 3: Holistic 10 minut
		relaxation exercise
		3. Closure for Learning
		a. Cooling-down 5 minutes
		b. Discussion and reflection
15	Physical	1. Opening for Learning
	titness (4)	a. Making student be in line, 3 minutes
		Presence, and Praying
		b Talling the nurnesses of 2 minutes
		the learning today
		c. Warming-up 10 minut
L		

		2	Ma	in of Learning	
			a	Activity 1. Cooperative	20 minutes
				Fitness	
			b	Activity 2: Traditional	20 minutes
			0.	Games	20 111114005
			с	Activity 3. Holistic	10 minutes
			•.	relaxation exercise	10 mmates
		3	Clo	sure for Learning	
		5.	a cr	Cooling-down	5 minutes
			u. h	Discussion and reflection	5 minutes
16	Games and	1	Or	ening for Learning	
10	sport (8)	1.	op a	Making student be in line	3 minutes
	sport (0)		а.	Presence and Praving	5 minutes
				together	
			h	Telling the purposes of	2 minutes
			υ.	the learning today	2 minutes
			0	Warming up	10 minutes
		2	U. Ma	warning-up vin of Learning	10 minutes
		2.	1110	Activity 1: Cooperative	20 minutes
			а.	Skill Challenge Stations	20 minutes
			h	Activity 2: Traditional	20 minutes
			υ.	Comos	20 minutes
			~	A ativity 2: Haliatia	10 minutos
			C.	Activity 5. Holistic	10 minutes
		2	CL	Telaxation exercise	
		3.		Sure for Learning	5
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	

### THE LESSON PLAN PSYCHOSOCIAL AND TRADITIONAL-BASED PHYSICAL EDUCATION AND SPORT

# 5<sup>th</sup> grade, 2<sup>nd</sup> semester (16 meeting)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	&	MATTER		
	DATE			
1		Games and sport (1)	<ul> <li>4. Opening for Learning         <ul> <li>d. Making student be in line,             Presence, and Praying             tagether</li> </ul> </li> </ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up 5 Main of Learning	10 minutes
			d. Activity 1: Sneak Attack e. Activity 2: Traditional	20 minutes 20 minutes
			f. Activity 3: Holistic relaxation exercise	10 minutes
			<ul><li>6. Closure for Learning</li><li>c. Cooling-down</li><li>d. Discussion and reflection</li></ul>	5 minutes
2		Physical fitness (1)	<ul> <li>Opening for Learning</li> <li>d. Making student be in line, Presence, and Praying</li> <li>together</li> </ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up	10 minutes
			c. Activity 1: Geography General Space	20 minutes
			d. Activity 2: Traditional Games	20 minutes
			e. Activity 3: Holistic relaxation exercise	10 minutes
			<ul><li>6. Closure for Learning</li><li>c. Cooling-down</li><li>d. Discussion and reflection</li></ul>	5 minutes
3		Games and sport (2)	<ul><li>4. Opening for Learning</li><li>d. Making student be in line, Presence, and Praying</li></ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up 5. Main of Learning	10 minutes

			d.	Activity 1: Team Bowling	20 minutes
			e.	Activity 2: Traditional	
				Games	20 minutes
			f.	Activity 3: Holistic	
				relaxation exercise	10 minutes
		6.	Cle	osure for Learning	
			c.	Cooling-down	
			d.	Discussion and reflection	5 minutes
4	Rhythmic	4.	Op	ening for Learning	
	activity (1)		d.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			e.	Telling the purposes of	2 minutes
				the learning today	
			f.	Warming-up	10 minutes
		5.	Ma	ain of Learning	
			c.	Activity 1: Team	20 minutes
				Building and Rhythms	
				Dance	
			d.	Activity 2: Traditional	20 Minutes
			_	Games	10
			e.	Activity 3: Holistic	10 minutes
		6	CI	relaxation exercise	
		6.	CI	Cooling down	5 minutes
			C.	Cooling-down	5 minutes
5	Dhysical	Λ	<u>u</u> .	Discussion and reflection	
5	fitness (2)	4.	- d	Making student he in line	2 minutes
	nuless (2)		u.	Presence and Proving	5 minutes
				together	
			ρ	Telling the purposes of	2 minutes
			С.	the learning today	2 minutes
			f	Warming-up	10 minutes
		5	M:	ain of Learning	10 minutes
		5.	c	Activity 1. Loop Da Hoop	20 minutes
			d.	Activity 2: Traditional	20 minutes
				Games	
			e.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		6.	Cle	osure for Learning	
			c.	Cooling-down	5 minutes
			d.	Discussion and reflection	
6	Games and	4.	Op	bening for Learning	
	sport (3)		d.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			e.	Telling the purposes of	2 minutes
				the learning today	
			f.	Warming-up	10 minutes
		5.	Ма	ain of Learning	

d. Activity 1: Pe	eople Puzzles   20 minutes
e. Activity 2: T	raditional 20 minutes
Games	
f Activity 3. He	olistic 10 minutes
relaxation exe	ercise
6 Closure for Learn	ing
o. Cooling down	n 5 minutos
	II 5 IIIIIutes
d. Discussion an	id reflection
Games and 4. Opening for Lear	ning
sport (4) d. Making stude	ent be in line, 3 minutes
Presence, and	d Praying
together.	
e. Telling the p	urposes of 2 minutes
the learning t	today
f. Warming-up	10 minutes
5. Main of Learning	
c. Activity 1: Th	nrough The 20 minutes
Quicksand	
d Activity 2: T	raditional 20 minute
Games	
e Activity 2: H	olistic 10 minute
relevation ave	arcise
Telaxation ext	
6 Closure for Learn	ino
6. Closure for Learn	n 5 minutos
6. Closure for Learn c. Cooling-down d. Discussion or	n 5 minutes
6. Closure for Learn c. Cooling-down d. Discussion ar	n 5 minutes nd reflection
6. Closure for Learn         c. Cooling-down         d. Discussion and         8       Educational         4. Opening for Learn         Commention         d. Making study	n 5 minutes nd reflection ning art he in line 2 minutes
6. Closure for Learn         c. Cooling-down         d. Discussion and         8       Educational         Gymnastic       d. Making stude         (1)       Discussion and	n 5 minutes nd reflection ning ent be in line, 3 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making stude Presence, and	n 5 minutes nd reflection 5 minutes ning ent be in line, 3 minutes
8       Educational       6. Closure for Learn         8       Educational       4. Opening for Learn         (1)       Presence, and         Together.       Together.	n 5 minutes nd reflection 5 ning ent be in line, 3 minutes d Praying 2 - i - t
6. Closure for Learn c. Cooling-down d. Discussion and B8Educational Gymnastic (1)4. Opening for Learn d. Making study together. e. Telling the p	n 5 minutes nd reflection ning ent be in line, d Praying urposes of 2 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion an 4. Opening for Lear d. Making stude together. e. Telling the p the learning to c. We with	n 5 minutes nd reflection 5 ning ent be in line, 3 minutes d Praying 2 minutes today 10 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making stude Presence, and together. e. Telling the p the learning the f. Warming-up	n 5 minutes nd reflection 5 minutes ning ent be in line, 3 minutes d Praying 2 minutes today 10 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making stude (1)8Educational Gymnastic (1)4. Opening for Learn d. Making stude together. e. Telling the p the learning the f. Warming-up 5. Main of Learning	n 5 minutes nd reflection 5 minutes ning ent be in line, 3 minutes d Praying 2 minutes today 10 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making study Presence, and together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T	ing n5 minutesnd reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutes10 minutesitanic20 minutes
6. Closure for Learn c. Cooling-down d. Discussion and B8Educational Gymnastic (1)(1)4. Opening for Learn d. Making study together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge	ing n5 minutesnd reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutes10 minutes10 minutes
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8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making study Presence, and together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge e. Activity 2: T Games f. Activity 3: Har relaxation exect 6. Closure for Learn	and nd reflection5 minutesad reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutes10 minutes10 minutesraditional olistic ercise ing20 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn d. Making study Presence, and together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge e. Activity 2: T Games f. Activity 3: He relaxation exect 6. Closure for Learn c. Cooling-down	and nd reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutes10 minutes10 minutesraditional olistic ercise ing n20 minutes5 minutes5 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge e. Activity 2: T Games f. Activity 3: Har relaxation exect 6. Closure for Learn c. Cooling-down d. Discussion and	and nd reflection5 minutesad reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutesurposes of today2 minutesitanic20 minutesraditional olistic ercise ing n20 minutesof stic ercise ing n10 minutes5 minutes
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8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and 4. Opening for Learn together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge e. Activity 2: T Games f. Activity 3: He relaxation exect 6. Closure for Learn c. Cooling-down d. Discussion and 99Games and sport (5)4. Opening for Learn d. Making stude	and n5 minutesad reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutesurposes of today2 minutesitanic20 minutesraditional olistic ercise ing n5 minutesof reflection5 minutesning ent be in line,3 minutes
8Educational Gymnastic (1)6. Closure for Learn c. Cooling-down d. Discussion and (1)8Educational Gymnastic (1)4. Opening for Learn d. Making study Presence, and together. e. Telling the p the learning the f. Warming-up 5. Main of Learning d. Activity 1: T Challenge e. Activity 2: T Games f. Activity 3: Her relaxation exect 6. Closure for Learn c. Cooling-down d. Discussion and 99Games and sport (5)4. Opening for Learn d. Making study Presence, and c. Cooling-down d. Making study Presence, and c. Making study Presence, and c. Cooling-down	and n5 minutesad reflection5 minutesning ent be in line, d Praying3 minutesurposes of today2 minutesurposes of today2 minutes20 minutes10 minutesraditional olistic ercise ing n20 minutesolistic ercise ing n10 minutesof reflection ning ent be in line, d Praying3 minutes
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			1
		c. Activity 1: Frogs and Ants	20 minutes
		d. Activity 2: Traditional	20 minutes
		Games	
		Activity 3: Holistic	10 minutes
		e. Activity 5. Holistic	10 minutes
		relaxation exercise	
		6. Closure for Learning	
		c. Cooling-down	5 minutes
		d. Discussion and reflection	
10	Physical	1. Opening for Learning	
	fitness (3)	a. Making student be in line,	3 minutes
		Presence, and Praving	
		together	
		b Telling the nurnoses of	2 minutes
		the learning today	2 minutes
		Warming wa	10 minutes
		c. warming-up	10 minutes
		2. Main of Learning	•
		a. Activity 1: Cooperative	20 minutes
		Fitness	
		b. Activity 2: Traditional	20 Minutes
		Games	
		c. Activity 3: Holistic	10 minutes
		relaxation exercise	
		3 Closure for Learning	
		a Cooling-down	5 minutes
		b Discussion and reflection	5 minutes
11	Comos on	0. Discussion and reflection	
11	Games and	4. Opening for Learning	2
	sport (self	d. Making student be in line,	3 minutes
	defense) (	b) Presence, and Praying	
		together.	
		e. Telling the purposes of	2 minutes
		the learning today	
		f. Warming-up	10 minutes
		5. Main of Learning	
		c. Activity 1: Strong Fingers	20 minutes
		d. Activity 2: Traditional	20 Minutes
		Games	
		e Activity 3: Holistic	10 minutes
		relevation everaise	10 minutes
		6 Closure for Learning	
		0. Closure for Learning	5
		c. Cooling-down	5 minutes
		d. Discussion and reflection	
12	Education	al 1. Opening for Learning	
	Gymnastie	a. Making student be in line,	3 minutes
	(2)	Presence, and Praying	
		together.	
		b. Telling the purposes of	2 minutes
		the learning today	
		c. Warming-un	10 minutes
		2. Main of Learning	
1		6	1

				ล	Activity 1: Group	20 minutes
				u.	Iugoling	20 minutes
				h	Activity 2. Traditional	20 minutes
				υ.	Games	10 minutes
				c	Activity 3: Holistic	10 minutes
				U.	relevation evercise	
			2	Clo	sure for Learning	5 minutos
		-	5.	010	Cooling down	5 minutes
				a. h	Discussion and reflection	
12	G	mag and /	1	$\frac{0}{\Omega n}$	Discussion and reflection	
15	Ua	$\frac{1}{2}$	4.	J	Molying student he in line	2 minutos
	spo	511(7)		u.	Drasanaa and Draving	5 minutes
					flesence, and flaying	
				0	Talling the purposes of	2 minutos
				U.	the learning today	2 minutes
				f	Warming up	10 minutes
		4	5	1. Ma	in of Learning	10 minutes
		-	5.	c Ivia	Activity 1: Cooperative	40 minutes
				<b>U</b> .	Games	+0 minutes
				d	Activity 2. Traditional	20 minutes
				u.	Games	20 minutes
				е	Activity 3. Holistic	10 minutes
					relaxation exercise	
		e	6.	Clo	sure for Learning	
				c.	Cooling-down	5 minutes
				d.	Discussion and reflection	
14	Ga	imes and	1.	Ope	ening for Learning	
	spe	ort (8)		a.	Making student be in line,	3 minutes
	-	. ,			Presence, and Praying	
					together.	
				b.	Telling the purposes of	2 minutes
					the learning today	
				c.	Warming-up	10 minutes
		2	2.	Ma	in of Learning	
				a.	Activity 1: Cooperative	40 minutes
					Challenge	
				b.	Activity 2: Traditional	20 minutes
					Games	
				c.	Activity 3: Holistic	10 minutes
			•		relaxation exercise	
		-	3.	Clo	sure for Learning	_ · .
				a.	Cooling-down	5 minutes
15			1	D.	Discussion and reflection	
15	Ph	ysical	1.	Ope	Making student he in line	2 minutos
	III	ness (4)		a.	Iviaking student be in line,	5 minutes
					riesence, and Praying	
				h	Talling the purposes of	2 minutos
				υ.	the learning today	$\angle$ minutes
				0	Worming up	10 minutos
1				U.	wanning-up	10 minutes

		2	١4.	in aftermine	
		Ζ.	Ma	in of Learning	
			a.	Activity 1: Challenge	
				Stations	20 minutes
			b.	Activity 2: Traditional	
				Games	20 minutes
			c.	Activity 3: Holistic	
				relaxation exercise	10 minutes
		3.	Clo	osure for Learning	
			a.	Cooling-down	
			b.	Discussion and reflection	5 minutes
16	Games and	1.	Op	ening for Learning	
	sport (9)		a.	Making student be in line,	3 minutes
	1 ()			Presence, and Praving	
				together	
			b	Telling the purposes of	2 minutes
			0.	the learning today	
			C	Warming-un	10 minutes
		2	Ma	vin of Learning	10 minutes
		2.	3	Activity 1: Cooperative	20 minutes
			u.	Skills Challenge Stations	20 minutes
			h	Activity 2: Traditional	20 minutes
			0.	Games	20 minutes
			C	Activity 3: Holistic	10 minutes
			U.	Activity 5. Holistic	10 minutes
		2			
		3.	CIG	osure for Learning	- · .
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	

### THE LESSON PLAN PSYCHOSOCIAL AND TRADITIONAL-BASED PHYSICAL EDUCATION AND SPORT

# 6<sup>th</sup> grade, 2<sup>nd</sup> semester (16 meetings)

MEETING	DAY	SUBJECT	ACTIVITIES	TIME
	&	MATTER		
	DATE			
1		Games and sport (1)	4. Opening for Learning g. Making student be in line, Presence, and Praying	3 minutes
			h. Telling the purposes of the learning today	2 minutes
			i. Warming-up 5. Main of Learning	10 minutes
			f. Activity 1: Race for Space g. Activity 2: Traditional	20 minutes 20 minutes
			h. Activity 3: Holistic relaxation exercise	10 minutes
			<ul> <li>6. Closure for Learning</li> <li>e. Cooling-down</li> <li>f. Discussion and reflection</li> </ul>	5 minutes
2		Physical fitness (1)	<ul> <li>4. Opening for Learning         <ul> <li>d. Making student be in line, Presence, and Praying</li> <li>together</li> </ul> </li> </ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up	10 minutes
			<ul> <li>Main of Learning</li> <li>c. Activity 1: Fitness Fun</li> <li>With Mats</li> </ul>	20 minutes
			d. Activity 2: Traditional Games	20 minutes
			e. Activity 3: Holistic relaxation exercise	10 minutes
			<ul><li>6. Closure for Learning</li><li>c. Cooling-down</li><li>d. Discussion and reflection</li></ul>	5 minutes
3		Games and sport (2)	<ul><li>4. Opening for Learning</li><li>d. Making student be in line, Presence, and Praying</li></ul>	3 minutes
			e. Telling the purposes of the learning today	2 minutes
			f. Warming-up 5. Main of Learning	10 minutes

			d.	Activity 1: Cooperative Handball	20 minutes
			e.	Activity 2: Traditional	20 minutes
				Games	
			t.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		6.	Clo	osure for Learning	
			C.	Cooling-down	5 minutes
4		4	d.	Discussion and reflection	
4	Physical	4.	0	pening for Learning	2
	fitness (2)		a.	Presence, and Praying	3 minutes
				together.	
			e.	Telling the purposes of	2 minutes
				the learning today	
			f.	Warming-up	10 minutes
		5.	Ма	ain of Learning	
			C.	Activity 1: The Twelve	20 minutes
				Ways to Fitness	
			d.	Activity 2: Traditional Games	20 minutes
			e.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		6.	Clo	osure for Learning	
			c.	Cooling-down	5 minutes
			d.	Discussion and reflection	
5	Games and	4.	0	pening for Learning	
	sport (3)		d.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			e.	Telling the purposes of	2 minutes
			0	the learning today	
		~	t.	Warming-up	10 minutes
		5.	Ma	ain of Learning	20
			d.	Activity 1: Frogs and Ants	20 minutes
			e.	Activity 2: Traditional	20 minutes
			£	A ativity 2: Haliatia	10 minutos
			1.	Activity 3. Holistic	10 minutes
		6	Cl	relaxation exercise	
		0.	CI C	Cooling down	5 minutes
			с. d	Discussion and reflection	Jinnutes
6	Educational	Δ	u. ()	nening for Learning	
	Gymnastic	<b>-7</b> .	d	Making student he in line	3 minutes
	(1)		ч.	Presence, and Praving	2
	(-)			together.	
			e.	Telling the purposes of	2 minutes
			- /	the learning today	
			f.	Warming-up	10 minutes
		5.	Ma	ain of Learning	

		d. Activity 1: Don't Drop the	20 minutes
		Ball	
		e. Activity 2: Traditional	20 minutes
		Games	
		f. Activity 3: Holistic	10 minutes
		relaxation exercise	
		6. Closure for Learning	
		c. Cooling-down	5 minutes
		d. Discussion and reflection	
	Games and	4. Opening for Learning	2
	sport (4)	d. Making student be in line,	3 minutes
		together	
		a Telling the purposes of	2 minutes
		the learning today	2 minutes
		f Warming-up	10 minutes
		5. Main of Learning	
		d. Activity 1: The Line	20 minutes
		Games	
		e. Activity 2: Traditional	20 minutes
		Games	
		f. Activity 3: Holistic	10 minutes
		relaxation exercise	
		6. Closure for Learning	- · ,
		c. Cooling-down	5 minutes
8	Physical	d. Discussion and reflection	
0	fitness (3)	d Making student be in line	3 minutes
		Presence, and Praving	5 minutes
		together.	
		e. Telling the purposes of	2 minutes
		the learning today	
		f. Warming-up	10 minutes
		5. Main of Learning	
		c. Activity 1: Fitness	20 minutes
		Stations	20.11
		d. Activity 2: I raditional	20 Minutes
		e Activity 3: Holistic	10 minutes
		relaxation exercise	10 minutes
		6 Closure for Learning	
		c. Cooling-down	5 minutes
		d. Discussion and reflection	
9	Games and	4. Opening for Learning	
	sport (5)	d. Making student be in line,	3 minutes
		Presence, and Praying	
		together.	
		e. I elling the purposes of	2 minutes
		the learning today	10
1		I. warming-up	10 minutes

		5.	Ma	ain of Learning	
			c.	Activity 1: People	20 minutes
				Puzzles	
			d.	Activity 2: Traditional	20 minutes
				Games	
			e.	Activity 3: Holistic	
				relaxation exercise	10 minutes
		6.	Clo	osure for Learning	
			c.	Cooling-down	5 minutes
			d.	Discussion and reflection	
10	Games a	and 4.	0	pening for Learning	
	sport (se	elf-	d.	Making student be in line,	3 minutes
	defense	(6)		Presence, and Praying	
				together.	
			e.	Telling the purposes of	2 minutes
				the learning today	
			f.	Warming-up	10 minutes
		5.	Ma	ain of Learning	
			c.	Activity 1: Strong Fingers	20 minutes
			d.	Activity 2: Traditional	20 minutes
				Games	
			e.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		6.	Clo	osure for Learning	
			c.	Cooling-down	5 minutes
			d.	Discussion and reflection	
11	Education	onal 1.	0	pening for Learning	
	Gymnas	tic	a.	Making student be in line,	3 minutes
	(2)			Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	ain of Learning	
			a.	Activity 1: Group Juggling	20 minutes
			b.	Activity 2: Traditional	20 minutes
				Games	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
12	Games a	and 4.	0	pening for Learning	
	sport (7)	)	d.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			e.	Telling the purposes of	2 minutes
				the learning today	
			f.	Warming-up	10 minutes
		5.	Ma	ain of Learning	

			c.	Activity 1: Cooperative	20 minutes
			L	Games	20
			a.	Activity 2: Traditional	20 minutes
			e	Activity 3: Holistic	10 minutes
			<b>U</b> .	relaxation exercise	10 minutes
		6	Clo	sure for Learning	
		0.	c	Cooling-down	5 minutes
			d.	Discussion and reflection	5 minutes
13	Rhythmic	1	Cr	pening for Learning	
10	activity (1)	1.	8	Making student be in line	3 minutes
	weeling (1)			Presence, and Praving	2
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: Create A Line	20 minutes
				Dance	
			b.	Activity 2: Traditional	20 minutes
				Games	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
	<u> </u>	-	<u>b.</u>	Discussion and reflection	
14	Games and	Ι.	Oţ	bening for Learning	2
	sport (8)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
			h	Talling the nurnesses of	2 minutos
			υ.	the learning today	2 minutes
			0	Warming up	10 minutes
		2	U. Ma	via anning-up	10 minutes
		4.	1v1a	Activity 1: Cooperative	20 minutes
			u.	Challenge	20 minutes
			b	Activity 2: Traditional	20 minutes
			0.	Games	20 111114005
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
15	Physical	1.	Op	pening for Learning	
	fitness (4)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes

		2	M	in of Learning	
		۷.	IVIa	in of Learning	20
			a.	Activity I: Create-a-Game	20 minutes
			b.	Activity 2: Traditional	20 minutes
				Games	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3.	Clo	osure for Learning	
			a.	Cooling-down	5 minutes
			b.	Discussion and reflection	
16	Games and	1.	Oj	pening for Learning	
	sport (9)		a.	Making student be in line,	3 minutes
				Presence, and Praying	
				together.	
			b.	Telling the purposes of	2 minutes
				the learning today	
			c.	Warming-up	10 minutes
		2.	Ma	in of Learning	
			a.	Activity 1: Cooperative	20 minutes
				Skills Challenge Stations	
			b.	Activity 2: Traditional	20 minutes
				Games	
			c.	Activity 3: Holistic	10 minutes
				relaxation exercise	
		3 Closure for Learning			
		5.	a	Cooling-down	5 minutes
			b.	Discussion and reflection	e minutes