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Submission date: 06-Dec-2019 04:42PM (UTC+0700)

Submission ID: 1228483896

File name: Soni INCOTEPD 2017 development of PSS Awal.pdf (144.87K)

Word count: 5495

Character count: 29671

Development of the Psychosocial Skills Scale and its Relationship with Negative Emotional States of Elementary School Children

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ABSTRACT: The current study aims to develop a Psychosocial Skills Scale (PSS) and examine the relationship between psychosocial skills and negative emotional states of the elementary school children. The first study involved four experts in the educational and psychological field and 745 fourth through sixth-grade at nine elementary school children. The second study involved 810 fourth through sixth-grade at fifteen elementary school children. The scale development process (DeVellis, 2003) was conducted to develop the PSS in the first study. In the second study, the students have completed the Depression Anxiety Stress Scale (DASS) and the valid version of PSS. Exploratory and confirmatory factor, multiple correlations, and Cronbach's coefficient (Alpha) analysis in the first study and Pearson correlation analysis used in the second study. The PSS with four-subscale structure (stress coping, communication, social awareness, and problem-solving skills) were validated and reliable which indicated by a good fit in construct validity, internal validity, and internal consistency/reliability. These results provide some support for using the scale to measure children's psychosocial skills in Yogyakarta, Indonesia. Furthermore, in the second study, Pearson correlation analysis suggested that the relationship between negative emotional state and psychosocial skills is fragile and tended no connection between them.

1 INTRODUCTION

1.1 Background

Psychological and social problems have been found to arise daily life, making it difficult for children to get out of these problems. Our responsibility is that educational programs should base on problems that children may face in their life and imparted through several activities that support them (Tasgin, 2011; Yigiter, 2013). Therefore, many psychosocial skills need to be developed by children to face their daily life problems. Our study found that the children in the fourth to sixth grades had good psychosocial skills, but requires some improvement in their stress coping, communication, social awareness, and problem-solving skills based on teacher perception (Nopembri, Sarvono, Jatmika, & Sugiyama, 2013). Therefore, in this study, we tried to explore some children's psychosocial skills including stress coping, communication, social awareness, and problemsolving skills.

There some reason to explore these specific psychosocial skills of children. The children need to have the stress coping skill to build coping and recovery rapidly, coziness and sustainability (Kar,

2009) and to promote and maintain their physical and psychological well-being (Wagner, Myers & McIninch, 1999; Kadhiravan & Kumar, 2012). Communication skills required for a mutual transfer of feelings and thoughts (Aydin, 2015), express him/herself in related to others (Erdogan & Bayraktar, 2014), and communicate effectively (Hollander, Wood, & Herbert, 2003). Social awareness needed to take empathize mentally and emotionally 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 (Smith, 2006; Cavojová, Sirota, & Belovicová, 2012; CASEL, 2015). Children are necessary to have problem-solving skills because the skill is essential for every part of students' future life, both personal and social life (Gorucu, 2016) and identifying effective solutions to the problem (Thompson, Bhatt, & Watson, 2013).

An instrument to measure the psychosocial skills of children on these specific skills is needed. This scale should be paying attention to the validity and reliability so that it can be used for data collection. Therefore, we strive to develop the scale that based on semantic differential attitudes toward statistics,

especially validation using factor analysis. The psychosocial skill scale (PSS) consisted of four subcategories of stress coping, communication, social awareness, and problem-solving skills scale. The scale considered an indirect measure because no one can directly observe psychosocial skills. The development of psychosocial skills scale follows the guidelines process recommended by DeVellis (2003).

Furthermore, we investigated the correlation between psychosocial skills and negative emotional state of children. We assume that negative emotional states have an inverse relationship with the psychosocial level of children. It is in line with some previous study that shows the existence of these links. The relationship between depression levels and some psychosocial aspects of children has been investigated in several studies (Yasin and Dzulkifli. 2010; Becker-Weidman, Jacobs, Reinecke, Silva, & March, 2010; Moghaddam, Mehrdad, Salehian, & Shirmohammadzadeh, 2012; Tully, Ames, Garcia, and Donohue, 2016). The level of anxiety state of the children is also indicated to be related to some psychosocial skills investigated (Henley, 2005; Almeida, Behlau, & Leite, 2011; Jellesma, 2013). Likewise, the level of stress state seen there is a relationship with psychosocial aspects (Chou, Chao, Yang, Yeh, & Lee, 2011; Parks et al., 2015; Karademir & Tasci, 2015).

1.2 Purposes of the study

This 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.

2 METHOD

2.1 Participants

The educational and psychological experts were involved in reviewing the items of scale in the first study. 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 fourth – sixth 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 1 participated in the study.

Table 1. The characteristics of children participants in the first study.

School	Se	X	A	ge	Grade		
Area	F	M	Mean	SD	4th	5th	6th
Disaster	67	91	10.3	1.08	52	50	56
Urban	92	94	10.5	1.58	59	58	69
Suburban	204	197	10.6	1.13	138	123	140

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

A complete 810 fourth through sixth-grade students (440 girls and 370 boys) from the fifteen elementary schools participated in the second study. The children's ages ranged from 7 to 15 years old (ages: Mean = 10.3, SD = 1.09). Participants in this study described in Table 2.

Table 2. School and children participants in the second study.

Schools		Childre	en in grade	
	4 th	5 th	6 th	N
1	12	15	17	44
2	24	23	15	62
3	16	17	17	50
4	15	9	12	36
5	31	23	20	74
6	11	13	19	43
7	9	11	11	31
8	11	6	15	32
9	14	14	22	50
10	24	19	15	58
11	27	20	26	73
12	18	22	18	58
13	21	31	18	70
14	16	16	18	50
15	33	27	19	79
		10		810

2.2 Procedure

The development of the Psychosocial Skills Scale (PSS) in the first study 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.

2.3 Data collection

The pilot version of PSS included four self-report subscales designed to measure coping with stress, communication, social awareness, and problemsolving 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).

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 second 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.

2.4 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 correlation analysis.

3 RESULTS

3.1 First Study

Determine what to measure. We 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-affectivebehavioral 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. We 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 authors selected four experts from the areas of education and psychology to review the initial item pool. The educational experts of the study consisted of a classroom, PE and sports teacher, and a researcher in education. We 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 authors. The authors 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 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 authors selected items that had been suggested by experts according to their field of expertise. The authors selected ten statements to measure each skill, which summed to 40 items. The valid items in the scale's English version shown in Table 3.

Table 3. The correct version of item statements in Psychosocial Skills Scale

_	social Skills Scale.
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 prob- lems 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 re- laxed and happy.
10	I pray diligently.
Items	Communication Statements
8	I say "please" and "thank you" when I asked for
1	something to someone.
2	The clothes which I wear make others feel comfort-
2	able.
3	I am not cursing/using abusive language in a public
3	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 dif- ferent 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.).
Items	Problem-solving Statements
LUMB	1 10010III-3014IIIg Diatements

I like to solve problems and make decisions

I love to collaborate with 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.
- I like to do something that can be done well.
- I can make difficult decisions easily and be firm on

Administer the items to a development sample. We 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 1).

Evaluation of the items. In this step, the authors 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 authors 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 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 problem-solving, with 45 degrees of freedom and a probability of < 0.001, indicating significant results. Thus, the sample was deemed appropriate for further analysis. 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 problemsolving 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 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. The distribution of the items and the names of each factor, based on the rotated factors, are presented in Table 4.

Table 4. 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
- 20000000	Nonverbal	1, 2, 4, 5, 7, 10
Social Awareness	Cognitive empathy	1, 5, 6
	Emotional empathy	2, 3, 4, 7, 8, 9,
19		10
Problem-solving	Decision-making	1, 2, 3, 4, 5, 6,
	process	7, 8, 9, 10

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. It can see in Table 5.

Table 5. CFA Indexes of the scale a good fit model.

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

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. To examine the instrument's internal consistency/reliability, the authors 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 problem-solving 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 each subscales consist of ten items on coping skills for stress (reactivity to stress, assessment of the situation, and relaxation factors), communication skills (verbal and nonverbal factors), social awareness skills (cognitive and emotional empathy factors), and problem-solving skills (decision-making process factor). The final version of the scale included general information about the respondent's 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.

3.2 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 ($\mathbf{r} = -0.065$, $\mathbf{p} = 0.032$), social awareness ($\mathbf{r} = -0.083$, $\mathbf{p} = 0.009$), and problem-solving ($\mathbf{r} = -0.058$, $\mathbf{p} = 0.049$) but not between depression and stress coping ($\mathbf{r} = -0.045$, $\mathbf{p} = 0.098$). There is 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 6.

Table 6. Summary of Pearson correlation analysis.

Variables	Coping		Social	Problem-
variables	Stress	Communication	Awareness	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

4 DISCUSSION

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 develop-

mentally 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 based on the premise that there are three levels of communication: logical (words), para-verbal (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 & Tasci, 2015; Yigiter, 2013; Thompson, Bhatt, & Watson, 2013).

This study found that depression state among the children 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 problemsolving. Therefore, a reduction in depression should follow 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 et al., 2010). However, a study by Tully et al. (2016) reported different findings. Specifically, a positive correlation between

social awareness and depression by the level of cognitive empathy 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 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 concluded 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. 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 (Park et al., 2015) and that the presence of stress and having old problems predicted excellent problem-solving skills (Karademir & Tasci, 2015).

5 CONCLUSION

In the first study, the PSS (coping with stress, communication, social awareness, and problemsolving) 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. 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 authors did not analyze the correlations between the PSS factors and the factors of other scales.

A fragile relationship between negative emotional state and psychosocial skills of children 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 psy-

chosocial skills of children 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.

ACKNOWLEDGEMENTS

The authors would like to thanks to the experts and elementary school children who were involved in this study. This work was supported by JSPS KAKENHI Grant Number JP24500704.

6 REFERENCES

- Almeida, A.A.F., Behlau, M., & Leite, J.R. 2011. Correlation between anxiety and communicative performance. Revista da Sociedade Brasileira de Fonoaudiologia 16(4): 384-389. doi:10.1590/S1516-80342011000400004
- Aslam, N., & Tariq, N. 2010. Trauma, depression, anxiety, and stress among individuals living in earthquake affected and unaffected areas. Pakistan Journal of Psychological Research 25: 131-148.
- Becker-Weidman, E.G., Jacobs, R.H., Reinecke, M.A., Silva, S.G., & March, J.S. 2010. Social problem-solving among adolescents treated for depression. *Behaviour Research Therapy* 48(1): 11–18. doi:10.1016/j.brat.2009.08.006
- Blair, R.J. 2005. Responding to the emotions of others: dissociating forms of empathy through the study of typical and psychiatric populations. *Consciousness and Cognition* 14: 698-718. doi:10.1016/j.concog.2005.06.004
- Carpenter, B.N. 1992. Issues and advances in coping research. In B. N. Carpenter (Ed.), Personal coping: theory, research, and application: 1-13. Westport, CT: Praeger.
- Cavojová, V., Sirota, M., & Belovicová. 2012. Slovak validation of the basic empathy scale in pre-adolescents. Studia Psychologica 54(3): 195-208.
- Chou, P., Chao, Y.Y., Yang, H., Yeh, G., & Lee, T.S. 2011. Relationships between stress, coping and depressive symptoms among overseas university preparatory Chinese students: A cross-sectional study. BMC Public Health 11(352): 1-7.
- Collaborative for Academic, Social, Emotional Learning (CA-SEL). (2015). Social and Emotional Learning Core Competencies. Chicago, IL: Author.
- Cotton, K. 2001. Developing empathy in children and youth. School Improvement Research Series Close Up # 13. Retrieved from http://www.nwrel.org/scpd/sirs/7/cu13.html
- DeVellis, R.F. 2003. Scale development: Theory and applications second edition. Thousand Oaks, California: Sage Publication. Inc.
- Erdogan, T., & Bayraktar, G. 2014. Effects of sports on communication skills: A research on teacher candidates. Research on Humanities and Social Sciences 4(2): 68-74.
- Gorucu, A. 2016. The investigation of the effects of physical education lessons planned in accordance with cooperative learning approach on secondary school students' problem solving skills. *Educational Research and Reviews* 11(10): 998-1007. doi:10.5897/ERR2016.2756
- Henley, R. 2005. Helping children overcome disaster trauma through post emergency psychosocial sports program. Boezingenstrasse: Swiss Academy for Development.
- Hollander, D.B., Wood, R.J., & Herbert, E.P. 2003. Protecting students against substance abuse behaviors: Integrating personal and social skills into physical education. *Journal*

- of Physical Education, Recreation, & Dance 74(5): 45-48. doi:10.1080/07303084.2003.10608485
- Jellesma, F.C. 2013. Stress and yoga in children. Journal of Yoga and Physical Therapy 3: 1-3. doi:10.4172/2157-7595.1000136
- Kadhiravan, S. & Kumar, K. 2012. Enhancing stress coping skills among college students. *Journal of Arts, Science & Commerce* III 4(1): 49-55.
- Kar, N. 2009. Psychological impact of disaster on children: Review of assessment and interventions. World Journal of Pediatric 5: 5-11. doi: 10.1007/s12519-009-0001-x.
- Karademir, T & Tasçi, M. 2015. Examination of problem solving skills of volleyball trainers. *Journal of Sport and Social Sciences* 2(1): 1-8.
- Lovibond, S.H., & Lovibond, P.F. 1995. Manual for the depression anxiety stress scales second edition. Sydney: Psychology Foundation.
- Moghaddam, J.B., Mehrdad, H., Salehian, M.H., & Shirmohammadzadeh, M. 2012. Effects of different exercise on reducing male students depression. *Annals of Biological Research* 3: 1231-1235.
- Nopembri, S., Saryono, Jatmika, H.M., & Sugiyama, Y. 2013. The opinions of physical education teachers on the psychosocial skills of elementary students in the Yogyakarta area. The 7th Asian-South Pacific Association of Sports Psychology International Congress (August 7-10, 2013). Tokyo, Japan: Asian-South Pacific Association of Sports Psychology (ASPASP).
- Park, K.H., Kim, D.H., Kim, S.K., Yi, Y.H., Jeong, J.H., Chae, J., Hwang, J., & Roh, H. 2015. The relationships between empathy, stress and social support among medical students. *International Journal of Medical Education* 6: 103-108. doi:10.5116/ijme.55e6.0d44
- Preja, C.A. 2013. Verbal and non-verbal communication in sport culture. Palestrica of the Third Millennium-Civilization and Sport 14(3): 239-243.
- Smith, A. 2006. Cognitive empathy and emotional empathy in human behavior and evolution. *The Psychological Record* 56: 3-12.
- Tasgin, Ö. 2011. Examining Problem Solving Skills of Physical Education and Sport Students from Several Factors. Collegium Antropologicum 2: 325–328.
- Thompson, D., Bhatt, R., & Watson, K. 2013. Physical activity problem-solving inventory for adolescents: development and initial validation. *Pediatric Exercise Science* 25: 448-467. doi:10.1123/pes.25.3.448
- Tully, E., Ames, A. M., Garcia, S. E., & Donohue, M. R. 2016.
 Quadratic associations between empathy and depression and the moderating influence of dysregulation. Paper 144.
 Georgia State University: Psychology Faculty Publications.
- Wagner, E.F., Myers, M.G., & McIninch, J.L. 1999. Stress-coping and temptation-coping as predictors of adolescent substance use. *Addictive Behaviors* 24(6): 769–779. doi: 10.1016/S0306-4603(99)00058-1.
- Yasin, M.A.S.M. & Dzulkifli, M.A. 2010. The Relationship between Social Support and Psychological Problems among Students. *International Journal of Business and Social Science* 1(3): 110-116.
- Yigiter, K. 2013. The examining problem solving skills and preferences of Turkish university students in relation to sport and social activity. *Educational Research Interna*tional 1(3): 34-40.
- Zhou, M. & Ee, J. 2012. Development of the Social Emotional Competence Questionnaire (SECQ). The International Journal of Emotional Education 4(2): 27-42.

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