

**A CORRELATIONAL-COMPARATIVE STUDY OF SELF-COMPASSION AND ENGLISH ACADEMIC ACHIEVEMENT ACCORDING TO GENDER OF GRADE 10 STUDENTS AT CHAKKAM KHANATHON SCHOOL IN LAMPHUN PROVINCE, THAILAND**

**John Andrew Maccabi<sup>1</sup>**

**Suwattana Eamoraphan<sup>2</sup>**

**Pisutr Vapiso<sup>3</sup>**

**Abstract:** In this study, self-compassion and English academic achievement were investigated and analyzed among grade ten male and female students. The sample of this study purposively selected 384 former grades 9 Chakkam Khanathon School male and female students out of a total of 594 grade 10 Chakkam Khanathon School students. The study used students' grade 9 national English Ordinary National Educational Test (O-NET) to determine students' English academic achievement. To determine students' level of self-compassion the Self-Compassion Scale Short Form (SCS-SF) was used. Students were directed to self-report their grade 9 English O-NET scores and gender at the time of filling out the SCS-SF.

The findings indicated that the level of grade 10 students' self-compassion was moderate and the level of students' English academic achievement was adequately fair. There was no significant relationship between grade 10 students' self-compassion and students' English academic achievement. Also, there was no significant difference between grade 10 students' self-compassion according to gender. Lastly, there was no significant difference between grade 10 students' English academic achievement according to gender. Recommendations for English teachers and for future research are also provided.

**Keywords:** Self-Compassion, Standardized Assessment.

**Introduction**

Students experience limitations, difficulties and sufferings (emotional pain) as a result of being students, but they also experience limitations, difficulties and sufferings as a consequence of being teenagers and also just because of being human.

---

<sup>1</sup> M.Ed. Candidate in Curriculum and Instruction, Graduate School of Human Sciences, Assumption University, Thailand.

johnmaccabi@gmail.com

<sup>2</sup> Ph.D., Associate Professor, Graduate School of Human Sciences, Assumption University, Thailand.

drsuwattana@yahoo.com

<sup>3</sup> Ph.D., Lecturer, Graduate School of Human Sciences, Assumption University, Thailand  
vapiso@hotmail.com

In addition, Thai high school students within the government sector study under a system that shows very little interest or concern for students' higher level of skills in the cognitive domain and nor are students' learning styles or interests given much weight in the process of learning Thamraksa (2011).

Chakkam Khanathon School is a government high school in Northern Thailand. At Chakkam Khanathon School male and female students are required to study English grammar with a Thai English teacher twice a week or two hours a week. Students are also required to study the skills of listening and speaking and to a lesser degree reading and writing with a native English speaker once a week or 1 hour per week. The only exception to the general English program at Chakkam Khanathon School is if the students are majoring in English and will consequently study four hours with a native English speaker as opposed to the standard one hour. Teachers at Chakkam Khanathon School had witnessed what they perceived to be foreign language classroom anxiety, including students showing a lack of concentration, apathy, tardiness, absence from class, as well as, physical symptoms including depression and nausea.

The main focus of the study set out to discover whether students who reported having a high level of self-compassion would also report having a high level of English academic achievement. It was hoped that if high self-compassion scores were found to be positively related to high English academic achievement scores, that self-compassion exercises could have been implemented into students' daily routine to reduce the anxiety of students, to increase students' attention, concentration and focus and finally to increase students' level of English academic achievement.

### **Research Objectives**

This study sought to address the following five research objectives.

1. To identify the level of self-compassion of grade 10 students at Chakkam Khanathon School in Lamphun Province.
2. To identify the level of the English academic achievement of grade 10 students at Chakkam Khanathon School in Lamphun Province.
3. To determine the relationship between grade 10 students' self-compassion and students' English academic achievement at Chakkam Khanathon School in Lamphun Province.
4. To compare grade 10 students' self-compassion according to gender at Chakkam Khanathon School in Lamphun Province.
5. To compare grade 10 students' English academic achievement according to gender at Chakkam Khanathon School in Lamphun Province.

### **Theoretical Framework**

This study was conducted based upon two theories: self-compassion and standardized assessment.

#### *Self-Compassion*

Based on Dr. Kristin Neff's (Associate Professor in the Educational Psychology Department, University of Texas) work, self-compassion is to have compassion for

oneself as opposed to ignoring, judging, criticizing or fighting against oneself when there is failure, difficulty or personal imperfections.

According to the theory of self-compassion if teenage students among others, were able to extend to themselves compassion in times of perceived inadequacy, failure, or in times of general suffering (emotional pain) students would have greater emotional well-being, contentment, and positive mind states of happiness and optimism (Neff, 2011). Therefore, by having self-compassion, teenage students' learning, change, and growth could take place in ways that would be healthier because change would be based on understanding rather than misunderstanding, be free from feelings of worthlessness and imperfection or at the other end of the scale a sense of self-worth (in the form of self-esteem, self-confidence or self-efficacy) that is contingent (Neff, 2011).

### *Standardized Assessment*

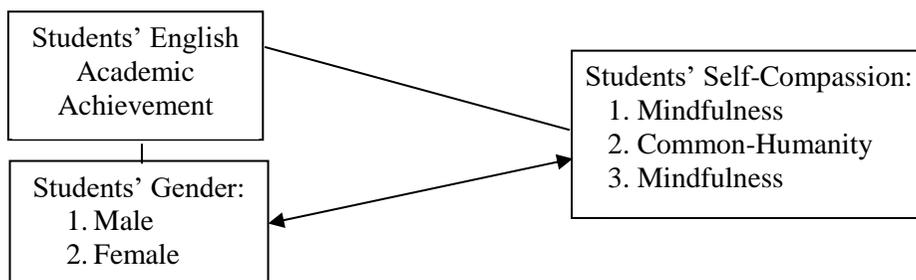
Study pressure is a challenge that teenagers face and part and parcel of studying is assessment. Standardized assessment, which according to Gallagher (2003) Horace Mann conceived of in the mid 1800's is one important and often over-used way students are assessed. In one of its aspects, standardized assessment gives students the same test under the same conditions (such as test duration and evaluation criteria) with the aim of comparing students in respect to the same knowledge and skills that have been taught to all students. As such, standardized assessment has become an accepted and useful tool for evaluating student achievement.

However, standardized assessment does not support all students' styles of learning and the fact that Thailand uses *high-stakes standardized tests* such as the Ordinary National Educational Test (O-NET) for grades 9 and 12 students only adds to the difficulty and study pressure teenage students already experience (Thamraksa, 2011).

Nevertheless, students can choose self-compassion as an important way to help them develop emotional resilience and wellbeing. In addition, since self-compassion lowers anxiety and increases concentration among other benefits, self-compassion stands as an effective means for students to approach academic study and challenges (Neff, 2011).

### **Conceptual Framework**

The conceptual framework for this study is shown in figure 1. It shows the three variables of the research: self-compassion, English academic achievement and gender and their corresponding relationships.



**Figure 1: Conceptual Framework of This Study**

## Procedures

### *Participants*

The sample for this study was purposively selected based on 384 grades 10 students out of a total of 594 grade 10 students who attended grade 9 at Chakkam Khanathon School in the 2014-2015 school year.

### *Instrumentation*

The study employed a quantitative approach that included both descriptive and inferential statistics. The researcher utilized the Self-Compassion Short Form (SCS-SF) questionnaire to measure students' level of self-compassion as constructed by Raes, F., Pommier, E., Neff, K.D., & Van Gucht., D. (2011). *Two Dutch samples were used to construct and cross-validate the factorial structure of the 12 item Self-Compassion Scale-Short form (SCS-SF). The SCS-SF was then validated in a third, English sample. The SCS-SF demonstrated adequate internal consistency (Cronbach's alpha  $\geq 0.86$  in all samples) and a near-perfect correlation with the long form SCS ( $r \geq 0.97$  all samples).*

The 6 subscales, 12 item self-compassion scale is rated on a Likert scale from 1 (almost never) to 5 (almost always) with the total score derived by adding the means of each subscale together. The 6 subscales measure an individual's level of self-kindness, self-judgment, common humanity, isolation, mindfulness and over-identification. As the mean of the self-compassion scores tend to be around 3.0 on the 1-5 Likert scale, Neff suggests interpreting the overall score accordingly. As a rough guide, a score of 12.00-30.00 indicates low self-compassion, 30.01-42.00 indicates moderate self-compassion, and 42.01-60.00 indicates high self-compassion, (see Table 1).

The *SCS-SF* is composed of 3 subscale items: self-kindness, common humanity and mindfulness, and 3 negative subscale items: self-judgment, isolation and over-identified. The three negative subscales (isolation, self-judgment, and over-identified) were worded negatively in the *SCS-SF*, for example, *When I fail at something important to me I become consumed by feelings of inadequacy*. So that higher scores for the negative subscales: self-judgment, isolation, and over-identification indicate less self-compassion, while lower scores on these dimensions are indicative of more self-compassion. Therefore, it was necessary to reverse score the negative subscale items before calculating the subscale means in total. For example, for the negative subscale items and corresponding questions, a score of 1 was reversed scored to be a 5, a score of 2 was reversed scored to be a 4, a score of 3 remained the same, a score of 4 was reversed scored to be a 2, and a score of 5 was reversed scored to be a 1.

In addition, the same students' self-reported grade 9 English O-NET was used to determine students' level of English academic achievement. The English O-NET consists of multiple choice questions with three or more response options and open-ended questions requiring short constructed responses. The minimum requirement to meet the national standard is 50 out of 100, or 50%. The O-NET scores from eight subjects contributes 20 % and the school-based assessments contribute 80% of the final score as reported by The United Nations Educational, Scientific and Cultural Organization (UNESCO), (2015).

In determining the score and level of English academic achievement of grade 10 students, the standards as set out by The National Institute of Educational Testing Service (NIETS) of Thailand were used (see Table 2). According to NIETS's experienced and well-trained officers (including specialists in examination administration, test development, and research) maintain and monitor the standards of national educational measurement and evaluation including tests analysis of O-NET tests for the third level (secondary grades 1-3).

**Table 1: The Score Ranges for the Levels of Self-Compassion**

Self-Compassion Score	Description	Level of Self-Compassion
12.00 – 30.00	Low Self-Compassion	Low
30.01 – 42.00	Some Self-Compassion	Moderate
42.01 – 60.00	High Self-Compassion	High

**Table 2: Standard for the Levels of English Academic Achievement of Students as Used by NIETS for O-NET Results**

English O-NET Scores	Level of Attainment
90.01-100.0	Excellent
80.01-90.00	Very Good
70.01-80.00	Good
50.01-70.00	Fair
30.01-50.00	Adequately Fair
20.01-30.00	Adequate
10.01-20.00	Fail
00.00-10.00	Abjectly Fail

### Findings

The main findings of this study were as follows:

- The respondents as a whole had a moderate level of self-compassion.
- The respondents as a whole had an adequately fair level of English academic achievement.
- No significant relationship between respondents' self-compassion and English academic achievement was found. Pearson Product Moment Correlation of self-compassion and English academic achievement of grade 10 male and grade 10 female students was  $-.031$  at the significance level of  $.551$  which was bigger than  $0.05$ . The result implied that the research hypothesis was rejected.
- No significant difference in the level of self-compassion according to gender of grade 10 male and grade 10 female was found. The  $t$ -test value between self-compassion scores and gender of grade 10 male and grade 10 female students was  $-1.12$  at the significance level of  $.26$  which is bigger than  $0.05$ . The result implied that the research hypothesis was rejected.
- No significant difference in the level of English academic achievement according to gender of grade 10 male and grade 10 female was found. The  $t$ -test value between self-compassion scores and gender of grade 10 male and grade 10 female

students was 1.91 at the significance level of .07 which is bigger than 0.05. The result implied that the research hypothesis was rejected.

### Summary of the Hypotheses Testing

Research Hypotheses	Statistical Analysis	Level of Significance	Result
1. There is a significant relationship between grade 10 students' self-compassion and grade 10 students' English academic achievement at Chakkam Khanathon School in Lamphun Province at the level of 0.05.	Pearson Product Moment Correlation	.551	No significant relationship
2. There is a significant difference between grade 10 students' self-compassion according to gender at Chakkam Khanathon School in Lamphun Province at the level of 0.05.	2-tailed t-test	.260	No significant difference
3. There is a significant difference between grade 10 students' English academic achievement according to gender at Chakkam Khanathon School in Lamphun Province at the level of 0.05.	2-tailed t-test	.070	No significant difference

### Discussion

#### *There is No Significant Relationship between Students' Self-Compassion and Students' English Academic Achievement*

The results of this study stand in contrast to the findings of past studies regarding self-compassion, and are unexpected based on the results of prior research showing the benefits of self-compassion. This research found no statistically significant relationship between English academic achievement and self-compassion, but several of the variables related to self-compassion were found to predict standardized test scores, including self-kindness, mindfulness, and over-identified. However, the relationships for the first two variables were actually negative, and the third variable, which is negatively related to self-compassion, was found to have a positive influence. Moreover, all of these relationships were weak in that their significance level was bigger than 0.05. These findings are not what one would expect based on the results of prior studies.

For example, according to Goleman (1995), research has shown that people who are mindful tend to be better at guiding their thinking and actions, and Flinton (1998) reported on a study of adolescent boys attending a camp for juvenile delinquents who experienced significant reductions in anxiety and greater feelings of internal control after engaging in a meditation program that included a mindfulness component. Also,

Neff (2011) reported on various studies indicating that those who are more self-compassionate are better able to regulate their emotions and deal with challenges, and they have lower levels of the stress hormone cortisol.

Similarly, in another study, Terry et al. (2012) found that among high school graduates, those with higher scores on measures of self-compassion treated themselves more gently, recognized that their difficult situations were part of the human condition, and were able to face their feelings with equanimity, and as a result, they were less self-critical, less likely to suffer from depression, and more likely to express satisfaction with their social lives. From the findings of past research, it would be expected that self-compassion would be positively related to English academic achievement. However, the findings of this study suggest that self-compassion is not related to English academic achievement, and that some aspects of self-compassion may actually have a slightly negative effect on achievement.

While more research would be required to determine why the findings of this research diverged from what would be expected based on the results of past studies there are however a number of possibilities why the findings diverged from what would be expected. For instance, students with greater self-compassion may place a greater value on things other than academic achievement, such as happiness, meaning, and connection with others, or they may not be inclined to pressure themselves into working as hard to achieve English language proficiency. It is also possible that different measures used to assess aspects of self-compassion and academic achievement may contribute to the divergent findings with regard to this relationship. In addition, other factors may affect the relationship between self-compassion and academic achievement including aspects of culture and educational strategy. In particular, teaching methods and assessments that are more student-centered or based on higher-order thinking might yield different results with regard to English academic achievement. However, further studies would be needed to explore these possibilities.

In conclusion, the results of this study diverge from the findings of past studies regarding the benefits of self-compassion and the expectation therefore that self-compassion would also benefit students' English academic achievement. Nevertheless, the results of this study are however surprisingly expected and consistent with Thamraksa's reported findings on the Thai education system. In particular, Thamraksa (2011) found, that the Thai education system emphasizes rote learning and almost always emphasizes the convergent thinking skills of remembering and understanding with a teacher-centered orientation that creates passive and dependent learners of which standardized testing is an integral part.

Consequently, the Thai education system may therefore account to whatever degree for the moderate level scores for students' self-compassion on the SCS-SF which requires independent thinking and higher thinking skills to answer such as reflection, in addition to, students' English academic achievement scores which also achieved only an adequately fair level.

#### *There is No Significant Difference between Students' Self-Compassion according to Gender*

The research found no differences in self-compassion according to gender. The results stand in contrast to those of a recent meta-analysis conducted by Yarnell,

Stafford, Neff, Reilly, Knox, and Mullarkey (2015), which found slightly higher average of self-compassion in males than females.

It should be noted that although self-compassion did not vary overall by gender, there were gender differences in two self-compassion variables, common humanity and self-judgment, with boys scoring slightly higher for common humanity, which is positively related to self-compassion and girls scoring slightly higher for self-judgment, which is negatively related to self-compassion. However, more research would be required to determine the reasons for these differences.

Furthermore, gender differences in both English academic achievement and self-compassion may vary from one culture or school system to the next. The fact that research conducted in other nations has found gender differences, while this study did not (with the exceptions of slight differences in common humanity and self-judgment) suggests that factors unique to the Thai culture or the Thai school system may play a pivotal role in reducing gender differences in levels of both self-compassion, as well as, English academic achievement in students.

Lastly, the fact that there was no significant difference between self-compassion scores according to gender or English academic achievement scores according to gender can likewise be made sense of in light of Thamraksa's findings that the Thai education system does not lend itself to students' individual styles of learning which as reported by past studies are partly gender related. However, further research would be required to determine the relationship between the Thai education system which is creating what Thamraksa (2011) describes as *passive recipients* who lack the skills to think analytically, critically and reflectively and Thai students' gender.

#### *There is No Significant Difference between Students' English Academic Achievement according to Gender*

As mentioned previously, this research also found no significant differences between students' English academic achievement according to gender. As previously indicated these findings stand in contrast to the findings of other researchers that did find there are gender differences in English language achievement among students learning English as a second language (Abdullahi & Bichi, 2015; Karthigeyan & Nirmala, 2012).

The divergent findings may be the result of the small sample of this study. Other factors that may have caused the divergent findings may include the cultural differences between the participants of the various studies, the level of students' intelligence quotient in the various studies, the form of assessment the various sample students was assessed by, and the way the Thai school system teaches English compared to the approaches used by schools in other nations.

Moreover, the greater implication of the divergent findings of this study suggests that gender differences may result more from environmental factors than from biological ones. However, this could only be determined by conducting a multinational research that would enable cross-cultural comparisons. Therefore, as aforementioned, it is possible that the participants in this study or the school system that provides their education differ in critical ways from other students or school systems, and that these differences influenced the findings of this study.

## Recommendations

### *Recommendations for Teachers of English as a Second Language*

The findings of this research also have a number of implications for those involved in educational management and teaching at Chakkam Khanathon School. First, although self-compassion does not appear to contribute to scores on standardized tests, it provides a number of benefits in terms of emotional coping and challenge management that make it a useful trait to cultivate in students.

Incidentally, given that most aspects of self-compassion are not related to standardized test scores and those that do predict these scores to some extent show a negative association, it is possible that self-compassion has an adverse effect on English academic achievement. On the other hand, it is also possible that self-compassion contributes to learning in ways not indicated by standardized test scores.

Nonetheless, the implementation of self-compassion exercises in classes may have its own inherent challenges since self-compassion (mindfulness, common-humanity, and self-kindness) requires thinking skills higher than the Thai education system emphasizes which according to Thamraksa (2011) creates students who merely listen, memorize, and absorb the information that is transferred by the *righteous guru* teacher.

Lastly, and most importantly, if the results of this study can be attributed to the teacher-centered orientation of education and to the hierarchical pattern of society in Thailand as Thamraksa (2011) has shown, teachers would do well therefore to move towards a more student-centered classroom wherein the teacher is no longer the authority and expert who possesses all knowledge to teacher as facilitator who instead supports students to become *active participants* in the learning process rather than being passive recipients of knowledge.

### *Recommendations for Future Research*

This study had several limitations that could be addressed by future research. First, it was confined to a single high school within a single nation. Therefore, it did not provide insights into the contributions that cultural and school-level factors may have made to self-compassion, academic achievement, and gender differences. To determine whether culture and school system factors play a role in outcomes related to self-compassion, academic achievement, and gender it would require conducting a similar study on a much larger scale, including multiple nations so that cross-national and school system comparisons could be made.

Another limitation of this research was the reliance on standardized test scores as a measure of student learning. Standardized tests have been criticized as a means to assess learning outcomes due to their failure to promote higher-order thinking processes such as critical thinking, analysis, application, and creativity (Thamraksa, 2011), and other methods of assessment may provide better insights into the degree to which students' have achieved English language proficiency. Therefore, standardized test scores may not necessarily indicate whether students can use language effectively in every situation and apply it to higher-order thinking processes.

Therefore, it would be useful to conduct a study using other forms of performance-based learning outcome assessments such as the ability to converse

fluently in English, the application of the English language to critical thinking exercises, or success in using English within real-world contexts (such as workplaces). However, it would be more difficult to develop quantitative, objective, comparable measures for performance-based assessments, so conducting such a study would be challenging.

## References

- Abdullahi, S., & Bichi, A. A. (2015). Gender issue in students' academic achievement in English language. *Kano Journal of Educational Studies*, 4(1), 31-38. Retrieved April 2016, from <https://www.researchgate.net/publication/>.
- Anderson, L. W. (Ed.), Krathwohl, D. R. (Ed.), Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (Complete edition). New York: Longman.
- Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). Taxonomy of educational objectives: The classification of educational goals. *Handbook I: cognitive domain*. New York, Toronto: Longmans, Green.
- Erikson, E. H. (1950). *Childhood and Society*. New York: Norton. Retrieved April 2016, <http://onlinelibrary.wiley.com/>.
- Flinton, C. A. (1998). *The effects of meditation techniques on anxiety and locus of control in juvenile delinquents*. California Institute of Integral Studies, USA, Dissertation Abstracts International: Section B: The Sciences & Engineering. 59 (2-B): p. 871.
- Gallagher, C. J. (2003). Reconciling a tradition of testing with a new learning paradigm. *Educational Psychology Review*, 15(1), pp. 83-99.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. (6th Ed.). New York: Bantam Books.
- Karthigeyan, K., & Nirmala, K. (2012). Academic achievement in English: An analysis through gender lens. *MIER Journal of Educational Studies, Trends & Practices*, 2(2), 144-157.
- Krathwohl, D. R. (2002). A revision of bloom's taxonomy: An overview. *Theory into Practice*, 41 (4), 212-218.
- Kuperminc, G. P., Leadbeater, B. J., Emmons, C., and Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science*. 1(2), pp. 76-88.
- Lasley, T. J., Matczynski, T. J., and Rowley, J. B. (2002). *Instructional models: Strategies for teaching in a diverse society*. Belmont, California: Wadsworth/Thomson Learning.
- Lee, K. (2007). Online collaborative case study learning. *Journal of College Reading and Learning*, 37, pp. 82-100.
- Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250.
- Neff, K. D., Hsieh, Y. P., & DeJitterat, H. K. (2005) Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4, pp. 263 – 287. Retrieved January 20, 2015, from <http://self-compassion.org/>

- Neff, K. D. (2009). Self-compassion. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior*. pp. 561-573. New York, New York: The Guilford Press.
- Neff, K. (2011). *Self-compassion: Stop Beating Yourself Up and Leave Insecurity Behind*. New York: William Morris.
- Neff, K. D. (n.d.). *Scales for Researchers*. Retrieved July 2014, from <http://self-compassion.org/self-compassion-scales-for-researchers/>
- Neff, K. D. (2016). *Definition and Three Elements of Self-compassion*. Retrieved February 2016, from <http://self-compassion.org/the-three-elements-of-self-compassion-2/>.
- The National Institute of Educational Testing Service (Public Organization) Thailand Retrieved April 22, 2016 from <http://www.niets.or.th/>.
- The Organization for Economic Co-operation and Development [OECD]. (2013). *Asian countries top OECD's latest PISA survey on state of global education*. Retrieved May 22, 2014, from <http://oecd.nlmission.org/news/2013/12/asian-pisa.html>
- Presley, P., Gaskins, I. W., Solic K. and Collins S. (2006). Article: A portrait of Benchmark School: How a school produces high achievement in students who previously failed. *Journal of Educational Psychology*, 98(2), 282-306.
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy*. 18, pp. 250-255.
- Ramnath, S. (2010). The culture conundrum: Classroom challenges in the Asian millennium. *Scholar Journal*, 2(1), pp.116-121.
- Roweton, W. E. (1995), Erikson, E. H. (1993, originally published in 1950). Childhood and society. *Psychology in the Schools*. 32(3). P.243. Retrieved February 16, 2016, from <http://onlinelibrary.wiley.com/doi/>
- Terry, M.L., Leary, M. R., and Mehta, S. (2012): Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity*. Retrieved June 3, 2015, from <http://self-compassion.org/wp-content/uploads/publications/Homesickness.pdf>
- Thamraksa, C. (2011). *Student-centered learning: Demystifying the myth*. Retrieved June 9, 2015, from [http://www.bu.ac.th/knowledgecenter/epaper/jan\\_june2004/chutima.pdf](http://www.bu.ac.th/knowledgecenter/epaper/jan_june2004/chutima.pdf).
- The Organisation for Economic Co-operation and Development [OECD], (2012). *Education indicators in focus: How does class size vary around the world?* Retrieved August 9, 2013, from <http://www.oecd.org/edu/skills-beyond-school/EDIF%202012--N9%20FINAL.pdf>
- The Psychology Notes HQ (2015). *Erik Erikson's theory of development*. Retrieved July 4, 2014 from <http://www.psychologynoteshq.com/erikerikson/>.
- The United Nations Educational, Scientific and Cultural Organization (UNESCO), (2015). *Thailand: Ordinary National Educational Test*. Retrieved from <http://www.uis.unesco.org/nada/en/index.php/catalogue/86>
- The World Bank. (2015). *School enrollment, tertiary (% gross)*. Retrieved August 4, 2015 from <http://data.worldbank.org/indicator/SE.TER.ENRR>.

- Valkenberg, V., and Holden, L.K. (2004). Teaching methods in the affective domain. *Radiologic Technology*, 75(5), 347-355.
- Vanichseni, S. and Associates, (2012). *Thailand K-12 Education System Progress and Failure*. Retrieved from <http://www.air.or.th/AIR/>.
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. *Self and Identity*, 14(5), 499-520.
- Yu, J. U. and Kim, J. W. (2010). Patterns of Interactions and Behaviors: Physical Education in Korean Elementary, Middle, and High Schools. *SD Journal of Research in Health, Physical Education*, 5(1), pp. 26-32.