

Evaluation of Life Skills Program to Change Learning Attitudes of Former Student-Athletes

Oh-Jung Kwon¹, Tae-Hee Lim², David Michael O'Sullivan^{3*}

¹*Division of Sport Psychology, Korea National Sport University, Republic of Korea*

²*Department of Competition Taekwondo, University of Yongin, Republic of Korea*

³*Division of Sports Science, Pusan National University, Republic of Korea*

*Correspondence to: David Michael O'Sullivan, Department of Sport Science, Pusan National University, Busan, Republic of Korea, Tel: +82-51-510-3745; Fax: +82-51-510-3746; E-mail: davidosullivan@pusan.ac.kr

Abstract

The purpose of this study was to determine changes in learning attitudes caused by participating in a planned life skills program. Thirty-one student-athletes who dropped from their university teams were surveyed using an attitude questionnaire. Statistical significance was set at $p < .05$ and partial eta squared was calculated to explain the effect size between groups. Results showed that according to the time (before and after) between groups, there was an interaction effect on five factors; confidence, interest, goal consciousness, achievement motivation, and focus. The experimental group showed more positive learning attitudes in confidence, interest, goal consciousness, achievement motivation, and focus. Therefore, we recommend a life skills program to be used to help students with difficulties.

Keywords: life skills, former athletes, coping, quality of life, attitudes

Introduction

According to the Korean Ministry of Culture, Sports and Tourism (2016) there are about 100,000 registered student athletes in Korea, which have been selected and fostered from an early age in Elementary school through an athlete-based 'Privileged System'. Although this system can nurture top class professional athletes, its major disadvantage is that it makes normal participation in school classes very difficult due to an excessive training schedule. According to Hong & Ryu (2007), participation in this 'privileged system', from as early as middle school, tends to lead to a decrease academic achievement, which makes it difficult for a former student-athlete to find a career after their time as an athlete. It is reported that from the time of middle school to university there is about a 24% drop out (quitting) rate of student-athletes from their associated athletic field each year, resulting in about only 10% retention rate for the student-athletes by the time they graduate university (Lee, Huh, & Ryu, 2011).

The most frequently reported reasons for drop out are due to various factors, such as high levels of injury from over training, stress, conflicts with coaches and athletes, and even victims of violence within the training setting (Lee et al., 2011). Even after the student-athletes drop out their problems and difficulties do not disappear, they face even more difficulties as a result of having to adapt to a new environment, such as social and cognitive confusion (Kim, 2006). It is reported that student-athletes find it very difficult to adapt from the sporting to a purely academic environment (Lim, Ryu, & Lee, 2010). One of the main reasons for the experience maladjustment is because, suddenly, their main goal has been removed (Lim et al., 2010). Even when the student-athletes come and try to participate well in class, they report a lack of concentration, which leads to them feeling lost (Lim et al., 2010). This sudden change in environment is amplified, as they now have to interact with the other students on a regular basis (Lim, 2013), which leads to a feeling of inferiority and ignorance in comparison with the other students (Choi, 2014). Even though they know that the need to adjust to participating in class they feel overwhelmed as they have less experience of what to do in class and thus feel ignorant (Lim, 2013). As a result the former student-athletes score well below average of 50%, which demotivates them to study harder (Lim, 2013). On average; the

scores of students who demonstrate the effects of transitioning from general to a student-athlete falls significantly from 79.5 to 56 points (Kim, 2011). The main reason they report this significant drop is that they feel that maintaining high academic score is not needed and takes away time from their sporting endeavors.

As life as an athlete-student is constantly in competition to be the best, he/she must find a new role after they retire (Danish, Petitpas, & Hale, 1993; Danish, 1996). During the transition period, the student-athlete must use of various life skills. Life skills have been reported to help student-athletes develop self-control skills to adapt to his/her life after graduation, retirement, or midway absence (Lim & Jang, 2017). It is suggested that by student-athletes learning, life skills, guided by a sports psychologist, can be effective for adapting to school and an active social life (Danish, Forneris, & Wallace, 2008). In 1995, Numerous authors (Danish & Donohue, 1995; Wright, 1996; Granek, 2007) proposed the use of life skills to help people have a proactive attitude toward engaging in a successful lifestyle. Similarly, other researchers (Papacharisis, Goudas, Danish, & Theodorakis, 2005) suggest that life skills which include diverse psychological skills, attitudes, and strategies can help people succeed in their respective environments.

Life skills are based on socio-cognitive learning theory, and occur during the process of self-regulation, based on individual, behavior, and environmental factors (Bandura, 2001; Schunk & Zimmerman, 2007). Self-regulation, an important life skill, is defined as a series of processes that include self-control, self-judgment and self-reaction that aids us in the achievement of our goals (Schunk & Zimmerman, 2007). Karoly (1993) defines self-regulation as a voluntary behavioral management, and "a process of intentionally leading to goal-directed behavior through the control of thought, emotion, and behavior." Similarly, Kane, Marks, Zaccaro, & Blair (1996) also defined it as "the process of changing behavior and perceptions to achieve performance goals." While Botvin & Griffin (2004) referred to it as a "goal-directed behavior as a technique or method of improving psychological structure."

It is suggested that goal-oriented behavior modification needs to be based on systematic content and procedures, such as goal setting, positive thinking, problem solving (Goudas & Giannoudis, 2007), time management (Danish et al., 1993), self-talk, emotional control,

confidence, finding one's strengths and weaknesses (Danish et al., 2008), stress management, confidence, and imitating role models (Hardcastle, Tye, Glassey, & Hagger, 2015).

Life skills research has mainly aimed to investigate the effect of transfer general life skill techniques from their daily life activities to the sporting environment. For example, Camiré, Trudel, & Forneris (2012) used a coaching life skill model, based from Gould & Carson (2008) research, to make it transferable to life. In their research, the athletes reported the transfer of the life skills from the sporting situation to their daily living. Likewise, Goudas & Giannoudis (2007) used a life skills program called SUPER centered on team sports in physical education classes. The students participating in the SUPER centered team sports program reported improved self-perception and knowledge of life skills, which, they stated that it helped them to achieve their goals. Likewise, a similar outcome was shown in 100 adolescents participating in a national golf and life skill enrichment academy, who implemented and evaluated the sport-based life skills in a community service program setting (Brunelle, Danish, & Forneris, 2007). The effects of the Going for the Goals program (O'Hearn & Gatz, 2002) is similar to the SUPER program as it reported that successfully taught life skills can turn negative thoughts into positive thoughts through positive thinking practice. In addition, it teaches how problem-solving skills can prove to be effective in team mediation and for conflict resolution. Correspondingly, researchers such as Lim and Jang (2017) and Lloyd (2012) demonstrated the positive effects on sport performance, positive thinking, change positive habits, goal setting, vigorous efforts, and motivation, by teaching and applying a life skills programs to sports science and physical education department major university students

The main topics researching student-athlete life have focused on the rights of a student-athlete (Hong & Ryu, 2007), adaptation to school life as a student-athlete (Kim, 2011), interference between academic requirements and their training (Lee, 2007), with attempts made to force student-athletes to study more (Im & Won, 2012). One common recommendation in all of these studies is that they clearly emphasize the need for extra attention on the difficulties of student-athletes, whom are transferring to an academic environment by calling for changes in governmental policies. These studies are particularly important because there has almost been no attention given by the department of education to the issue of student-athletes. There are a few studies which study the drop out of student-athletes which focused on understanding the causes and characteristics of dropouts in middle and high school student-athletes (Lim et al., 2010, Lee et al., 2011), the de-socialization process of student-athletes (Cho & Park, 2011), and what path they take after they drop out (Lim et al., 2014). Yang & Chung's (2014) study focus on student-athlete adaptation to a new life after the end of exercise (Yang & Chung, 2014). With the clear difficulties and dangers of drop out and the associated life style adaption highlighted through the research it is time to devise concrete and actionable strategies that can help current and former student-athletes.

Based on the previous literature, we expected that a life skills program may provide various value and opportunities for student athletes who have dropped or transferred out of their sports team. We expected the life skills program will help students develop self-control skills that can help them adapt to a new life transition or learning environment. The purpose of this study was to investigate how the participation of a planned life skill program can help former student-athletes adapt to their learning attitudes in school.

Methods and Materials

Participants

Thirty-one former university student-athletes participated in this study. Each of the participants, had experience competing in numerous national taekwondo competitions (22, 71% for Kyorugi and 9, 29% for Poomsae) representing their schools. The 31 former university student-athlete participants were purposefully sampled and allocated into two groups; an experimental group (n = 12) who participated in the life skill program and control group (n = 19). The experimental group had 12 participants as they were the only students that had the time to participant in learning the life skills. All participants continued their university studies majoring in Taekwondo. Prior to the initiation of the study the purpose of the study and what was required of the participants was explained in detail (Table 1).

Survey

The academic attitude questionnaire that was developed by the Korean Educational Development Institute (1992) was used. The questionnaire is composed of 8 sub factors in three categories; concept of academy (superiority 4 items, confidence 5 items), academic attitude (interest 5 items, sense of purpose 5 items, achievement motivation 5 items), academic habits (focus, activeness, and initiative 5 items). All questions were scored on the 5-point Likert score from 1 (not at all) to 5 (very strongly).

Research Plan

In this study, while participating in the program, the experimental group students made their own life skills under the supervision of a qualified sport psychologist. The psychologist examined the student's life skills program to help them improve it and each student in the experimental group met with the psychologist 3 times a week for evaluation and practice. This study was conducted over a period of 16 weeks and the Life Skills program lasted two hours per week. The experiment group had to maintain a journal outlining their progress, and describe how they applied the life skills and plans about their daily and academic life. The 16 week program consisted of various sessions; an orientation (1st week), education (2nd ~ 6th week), application (7th ~ 14th week) and evaluation (15th week). During the orientation phase, the participants received an overview of life skills, an introduction to life skills, and signed an IRB approved consent form.

In the education stage, the participants developed and learned aspects important for the application of life skills program, which included an explanation of psychology, goal setting, self-talk, image, routine, cognitive reconstruction, etc. During the application stage, the students were allocated into pairs and their psychological state was measured. Goal setting, self-talk, and image programs were established for each of pair. Each pair discussed their best and worst-case daily scenarios. In the evaluation stage, the students evaluated their improvement by comparing the student's before and after scores, which

Table 1. Participant Demographics

| | Experimental Group | Control Group |
|-------------------------------|--|---|
| N | Sophomore & Junior : 12 | Sophomore & Junior : 19 |
| Sex (% males) | 63 | 71 |
| Age (years) | 22.24 ± 1.45 | 22.56 ± 2.42 |
| Experience as athlete (years) | 6.87 ± 3.15 | 7.49 ± 3.77 |
| Athletic career | - Former elite player - Top 3 in National tournament - National Team Tryouts | - A former elite player - National tournament prize - National Team Tryouts |

were shown on graphs. The life skills program was based on aspects of the Sport United to Promote Education and Recreation (SUPER) and Going for the Goals (Goal) programs which include goal setting, self-talk, imagery, cognitive restructuring, and self-evaluation skills. Table 2 summarizes the Life Skills Program contents and which research it is based upon.

Data Processing

The data were statistically analyzed using SPSS 21.0 with a level of significance set to $p < 0.05$. The homogeneity of the two groups was tested by an independent t test. Repeated measures ANOVA were applied to investigate the differences between the control and experimental group. Effect sizes were measured using partial eta squared value. The effect size was used to increase confidence in the results, as the number of samples is less influential. Interpretation of the effect size were based on Cohen's (1988) recommendations as the follows; a small effect for < 0.01 , a medium effect < 0.09 , a slightly larger effect for $0.09 \sim .24$, and a large effect size for > 0.25 .

Results

Group Homogeneity

According to the independent samples t test, there was no statistically significant differences between the groups at the start and so the groups were deemed to be homogeneous. There were no statistical differences for the following factors superiority ($t = -.222, p > .05$), confidence ($t = 1.033, p > .05$), interest ($t = .584, p > .05$) ($t = -1.217, p > .05$), motivation ($t = -.129, p > .05$), focus ($t = 1.125, p > .05$), and efficiency ($t = .432, p > .05$).

Effect of Life Skill Program

The mean (M) and the standard deviation (SD) of each group are shown in Table 3. The effect of the life skill program on the change of the learning attitude according to the group and measurement time was examined. For superiority, the mean value of the pre - test ($M = 2.47$) and post - test ($M = 2.57$) increased in the experimental group

whereas the mean value of the control group decreased in the pre - test ($M = 2.52$) and postmortem ($M = 2.48$). However, the interaction between group and time was not statistically significant ($F(1, 29) = 0.124$ (ns)), and similarly at the before and after ($F(1, 29) = 0.33$). For the confidence variable, there was a large increase in the mean value of the pre-test ($M = 2.60$) and post-test ($M = 3.87$) for the experimental group, whereas there was a slight increase for the control group pre-test ($M = 2.34$) and post-test ($M = 2.57$). The interaction was statistically significant with $F(1, 29) = .124$ ($p < .01$), and there were significant differences between the times, $F(1, 31) = 24.415$. Also the effect size was large ($\text{Eta} = 0.278$). For the interest factor, there was a significant increase in the mean value of the pre-test ($M = 2.82$) and post-test ($M = 3.87$) for the experimental group, whereas there was not for the control group pre-test ($M = 2.67$) and post-test ($M = 2.64$). The interaction was statistically significant with $F(1, 29) = 16.364$ ($p < .01$), and $F(1, 29) = 15.093$ ($p < .001$) between the times. The effect size was large ($\text{Eta} = .361$). There was an increase in the students' sense of purpose as the experimental group increased from pre - test ($M = 2.47$) to post-test ($M = 3.70$), however, there was not a significant increase for the control group from pre - test ($M = 2.74$) to post-test ($M = 2.93$). The interaction effect was statistically significant with $F(1, 29) = 13.010$ ($p < 0.01$), and $F(1, 29) = 24.170$ ($p < 0.001$) with a large effect size ($\text{Eta} = 0.31$). For the motivation of achievement score the experimental group increased from pre - test ($M = 2.62$) and post - test ($M = 3.68$), whereas the control group only increased slightly from pre - test ($M = 2.64$) and post - test ($M = 2.77$). The interaction effect was statistically significant as $F(1, 29) = 8.746$ ($p < .01$), and $F(1, 29) = 14.077$ ($p < .001$) and the effect size was slightly large ($\text{Eta} = 0.232$).

For the focus factor, the average value of the pre - test ($M = 2.35$) to post - test ($M = 2.78$) was slightly increased in the control group while the score for the experimental increased significantly from the pre - test ($M = 2.58$) to post - test ($M = 3.72$). The interaction effect was statistically significant with $F(1, 29) = 5.694$ ($p < .05$), and $F(1, 29) = 28.314$ ($p < .001$) and the effect size was slightly larger ($\text{Eta} = 0.164$). For the efficiency factor, the experimental and control group showed slight increases from the mean of the pre- and post-test ($M = 2.32$) and

Table 2. Testing Procedure

| Class | Topic | Evidence | Program Contents |
|-------|--|--|---|
| 1 | ·Orientation ·Understanding Psychological skills training | Weiss (2004) Weiss & Raedeke (2004) Zimmerman et al. (2000) | ·Psychological skills ·Life skills ·Research aims, written consent (IRB ethical approval) |
| 2 | ·Establishing goals | Lim & Jang (2016) Goudas & Giannoudis (2007) Locke & Latham (1985) | ·Theory of setting goals ·SMARTS theory ·Develop and practice goals ·self-affirmation |
| 3 | ·Understanding Life Skills | Goudas & Giannoudis (2007) Weiss & Raedeke (2004) | ·Life skills psychological techniques ·Effect of Life Skills ·Personal Case study presentation and discussion |
| 4 | ·Cognitive Reconstruction ·Self-evaluation | Kim (2012) | ·Evaluating your life skills ·Cognitive reconstruction theory ·Aware Stop Dispute Replace (ASDR) · Personal Case study presentation and discussion |
| 5 | ·Self-talk | Goudas & Giannoudis (2007) Miner et al.(1995) | ·NLP Theory (Cognitive psychology) ·Theory of Self-talk ·Self-talk and positive thoughts ·Developing self-talk for training · Developing self-talk for daily life |
| 6 | ·Imagery | Gould, Damarjian, & Greenleaf (2002) Goudas & Giannoudis (2007) | ·Brain and memory ·Understanding imagery ·Applying imagery ·Developing imagery for competition and daily life |
| 7~14 | ·Program Application | | · Applying life skills during class and daily living, Self-evaluation |
| 15 | ·Evaluation | Goudas et al.(2006) | ·Evaluate the skill skills achievement ·Feedback and evaluation of the life skills |

Table 3. Interaction effect verification result

| Variables | Group | Pre | Post | Source | F-value | Effect Size |
|------------------------|-------|----------|----------|--------------|---------|-------------|
| Superiority | EG | 2.47±.64 | 2.57±.84 | time | .033 | .001 |
| | CG | 2.52±.57 | 2.48±.60 | time × group | .124 | .004 |
| Confidence | EG | 2.60±.91 | 3.87±.27 | time | 24.415* | .447 |
| | CG | 2.34±.52 | 2.57±.64 | time × group | 11.176* | .278 |
| Interest | EG | 2.82±.79 | 3.87±.31 | time | 15.093* | .342 |
| | CG | 2.67±.66 | 2.64±.58 | time × group | 16.364* | .361 |
| Sense of Purpose | EG | 2.47±.70 | 3.70±.38 | time | 24.170* | .455 |
| | CG | 2.74±.52 | 2.93±.50 | time × group | 13.010* | .310 |
| Achievement motivation | EG | 2.62±.52 | 3.68±.42 | time | 14.077* | .327 |
| | CG | 2.64±.54 | 2.77±.55 | time × group | 8.746* | .232 |
| Focus | EG | 2.58±.73 | 3.72±.26 | time | 28.314* | .494 |
| | CG | 2.35±.45 | 2.78±.68 | time × group | 5.694* | .164 |
| Activeness | EG | 2.32±.64 | 2.35±.52 | time | .637 | .022 |
| | CG | 2.50±.71 | 2.73±.68 | time × group | .347 | .012 |
| Efficiency | EG | 2.68±.63 | 2.77±.82 | time | .350 | .012 |
| | CG | 2.58±.67 | 2.67±.77 | time × group | .001 | .000 |

* p<.05, post independent samples t test, EG: Experimental group, CG: Control group

postmortem (M = 2.35) for the experimental and pre-test (M = 2.50) to post-test (M = 2.73). There were no statistical interaction effects with F (1, 29) = 0.347 (ns), and the F (1, 29) = 0.637 (ns). Lastly, in the initiate factor, there was a slight increase in the mean value of the pre-test (M = 2.68) and post-test (M = 2.77) for the experimental group and the control group from re-test (M = 2.58) and post-test (M = 2.67). The interaction effects were not statistically significant with F (1, 29) = .001 (ns), and the F (1, 29) = 350 (ns).

Comparison of groups according to time

The results of the independent sample show each of the interaction effects of the specific factors. There were statistically significant differences between the two groups between the pre and posttest for achievement motivation (T = 4.880, p <.01), self-efficacy (t = 6.618, p <.01), interest factor (t = 6.744, p <.01) and focus factor (t = 4.568, p <.01).

Intra-group differences according to time

The results of the paired samples t-test pre-test and the post-test test are displayed in Table 4. The confidence scores in the experimental group showed statistically significant difference (t = -4.791, p <.01) in the pre and post measures, whereas the control group did not show any significant difference (-1.278, not significant (n.s.)). Likewise, for the interest factor scores, there was no statistically significant difference between the experimental group and the post-test (t = -5.285, p <.01), whereas the control group showed no significant difference (.125, n.s.). For the sense of purpose scores of the experimental group showed statistically significant difference (t = -5.014, p <.001) in the pre and post measures, whereas the control group did not show any significant difference (1.115, n.s.). In addition, for achievement motivation factor, there was a statistically significant difference (p <.001) between the pretest and posttest measures in the experimental group (t = -4.865, p <.001), whereas the control group did not show any significant difference (.599, ns). Finally, for focus, there were statistically significant differences (p <.001) between the experimental (t = -4.898, p <.001) and control group (2.366, p <.05). The Figure 1 shows the results of the life skill program for the pre and post testing.

Discussion

The purpose of this study was to investigate the changes in the attitudes of students who participated in a planned life skills program. A purposive sampling method was used to select 31 student athletes

Table 4. Paired samples t test

| Variables | Pre-Post t value | |
|------------------------|------------------|---------|
| | Life Skills | Control |
| Superiority | -.324 | .141 |
| Confidence | -4.791* | -1.27 |
| Interest | -5.285* | .125 |
| Sense of purpose | -5.014* | -1.115 |
| Achievement Motivation | -4.865* | -.599 |
| Focus | -4.898* | -2.366* |
| Activeness | -.164 | -1.015 |
| Efficiency | -.322 | .540 |

Significance Level. *p<.05

who were dropped or quit from the school's sports team. Each of the participants carried out a questionnaire on academic attitudes before and after the program. The results of this study highlight the effectiveness of the life skills program to positively affect learning attitudes of the participants. There were significant interactions between the life skills and control group for self - confidence, interest, goal consciousness, achievement motivation, and focus factor according to time. These results are consistent with the findings of Goudas & Giannoudis (2007) who show that improved self-confidence and knowledge of life skills of students participating in the abbreviated version of SUPER program. Similarly, in Brunelle et al. (2007) the application of a life skills program showed improvement in social responsibility, goal setting and social curiosity of youth. Furthermore, Lim & Jang, (2017) report that participating in a life skills program helped the participants to be more motivated to have positive thoughts, provide opportunities for change, and to strive more toward their goals.

In comparison to international research which dates back to 2002 for the Going for the Goals program (O'Hearn & Gatz, 2002), life skill research programs have only begun to be performed recently (Chung, 2011; Kwon, 2017) with a case study on application (Lim & Jang, 2017). For this reason, the life skills program used in this study was based on the SUPER (Goudas & Giannoudis, 2007) and Going for Goals program (O'Hearn & Gatz, 2002), and then altered to consider the nuances of Korean culture, such as Confucianism. The program was similar and consisted of the following phases; orientation, education, application and evaluation for 16 weeks. This study verifies the generalizability and transferability of the life skills program to different environments and cultures. However, if one wants to replicate the results in different countries the worksheets must be translated and test for validity and reliability in their corresponding country.

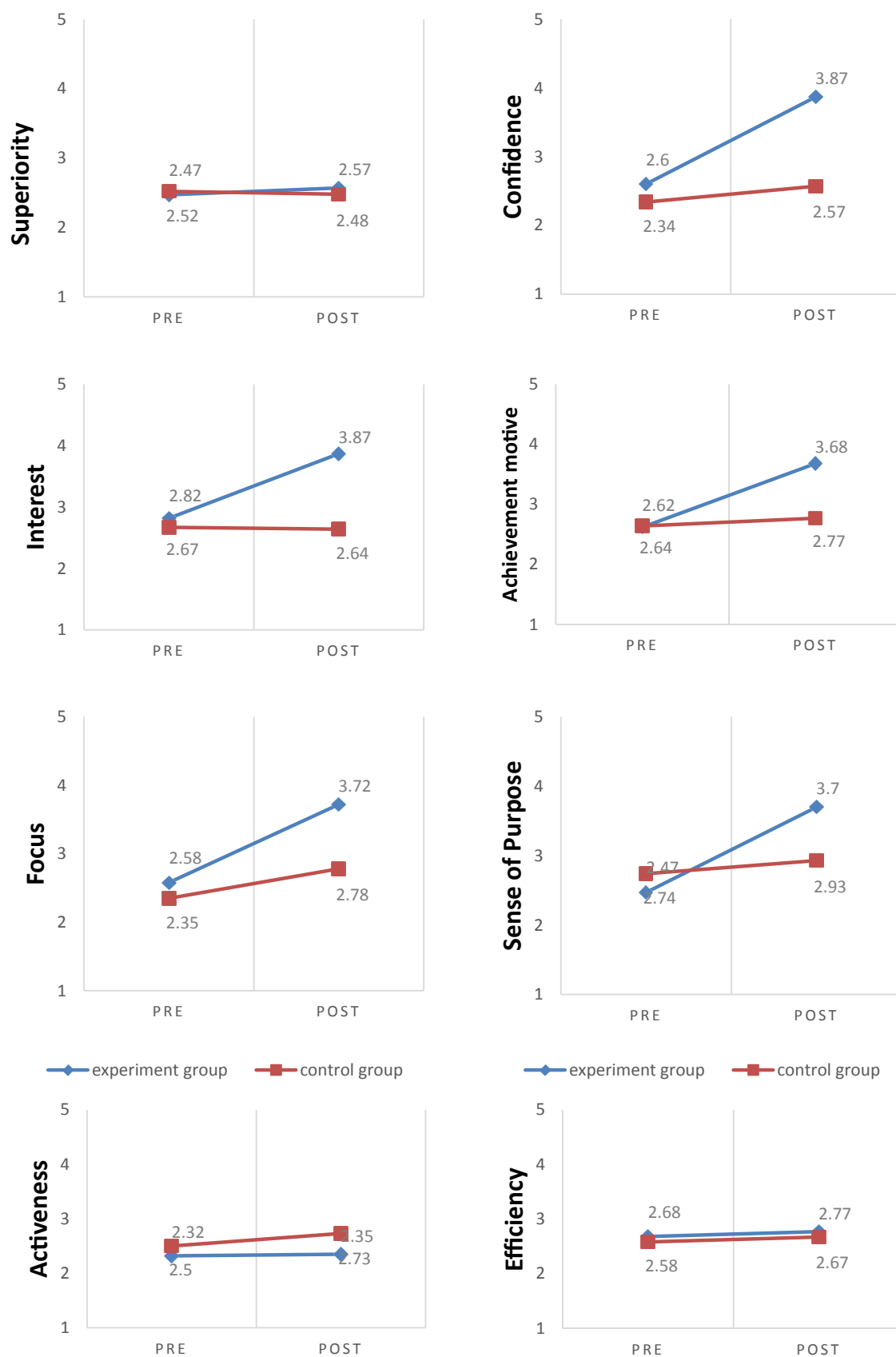


Figure 1. Psychological factors before and after the participation in the Life Skills Program

In this study, we replaced the use of worksheets with using researcher-generated class logs, goal setting sheets, and self-examination checklists as the original provided worksheets developed by Danish and associates (1993) have not been translated and tested in Korea. The class logs, goal setting worksheets are meaningful for achieving research goals, but are not sufficient to fully and effectively teach life skills. Future studies, should test and develop worksheets for learning and applying life skills for different cultures, languages, sports and academic environments.

The life skills used in this study, were goal setting, self-talk, imagery, cognitive restructuring, and self-check, and shown in previous research that they are core physiological characteristics that are needed to help an athlete reach their optimum performance level in taekwondo (Lim & Jang, 2016; Lim & O'Sullivan, 2016). The transfer of life skills to apply in daily life for athletes has been shown for a competition and the training environment (Danish & Nellen, 1997). This means that the socio-psychological factors learned in sports field can be transferred or expanded to various environments, (Chung, Lee, Lee, & Chung, 2009; Jacobs & Wright, 2016) and that the psychological factors can be linked to life skills rather than confining them to competitions and training.

Even though life skills acquired during sports are assumed to transferable to our daily lives, it is hard to verify and single out the transfer effect of the life skills program due to various other influencing factors. Future studies, should explore diverse research methods to help increase the effectiveness of generalizing life skills. For example, longer follow up times in longitudinal research design, including qualitative research method approaches, such as in-depth interviews and observations of the participants, interviews with their peers and family, should help solidify a more effective way to help generalization of life skills.

Conclusion

This study shows that for the student-athletes who have left the university team, the Life Skills program played a major role as a guideline for improving their attitude of academic learning and reduced the negative side effects experienced. The Life Skills Program improved the student-athletes learning attitude, measured in terms of confidence, interest, sense of purpose, achievement motivation, and focus, which helped the student-athletes to have a more positive attitude to life.

References

- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Botvin, G. J., & Griffin, K. W. (2004). Life skills training: Empirical findings and future directions. *Journal of primary prevention*, 25(2), 211-232.
- Brunelle, J., Danish, S. J., & Forneris, T. (2007). The impact of a sport-based life skill program on adolescent prosocial values. *Applied developmental science*, 11(1), 43-55.
- Camiré, M., Trudel, P., & Forneris, T. (2012). Coaching and transferring life skills: Philosophies and strategies used by model high school coaches. *The sport psychologist*, 26(2), 243-260.
- Cho, I. Y., & Park, B. K. (2011). Desocialization of Girls High School Gymnasts. *Journal of Coaching Development*, 13(2), 71-79.
- Choi, B. H. (2014). An Effect of Digital Storytelling on Mathematical Disposition, Attitude, and Achievement in Mathematics Instruction for Sixth Graders. Unpublished doctoral dissertation, Korea National University of Education, Chung-Buk, Korea.
- Chung, C. H., Lee, Y. H., Lee, H. S., & Chung, Y. C. (2009). *Sports Psychology*. Seoul: Medilife.
- Chung, Y. S. (2011). Constructs of Life Skills Through Taekwondo Practice and the Development of Its Measurement Scale(TLSS). *The Korean Journal of Physical Education*, 50(3), 227-237.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Danish, S. J. (1996). Interventions for enhancing adolescents' life skills. *The Humanistic Psychologist*, 24(3), 365-381.
- Danish, S. J., & Donohue, T. (1995). Understanding media's influence on the development of antisocial and prosocial behavior. *Preventing violence in America*, 4, 133-155.
- Danish, S. J., & Nellen, V. C. (1997). New roles for sport psychologists: Teaching life skills through sport to at-risk youth. *Quest*, 49(1), 100-113.
- Danish, S. J., Forneris, T., & Wallace, I. (2008). Sport-Based Life Skills Programming in the Schools. *Journal of Applied School Psychology*, 21(2), 41-62.
- Danish, S. J., Petitpas, A. J., & Hale, B. D. (1993). Life development intervention for athletes: Life skills through sports. *Counseling Psychologist*, 21, 352-385.
- Danish, S. J., Tayer, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. *World Leisure Journal*, 46(3), 38-49.
- Goudas, M., & Giannoudis, G. (2007). A team-sports-based life-skills program in a physical education context. *Learning and Instruction*, 18, 528-536.
- Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport & Exercise Psychology*, 1, 58-78.
- Granek, L. (2007). "You're a Whole Lot of Person"—Understanding the Journey Through Anorexia to Recovery: A Qualitative Study. *The Humanistic Psychologist*, 35(4), 363-385.
- Hardcastle, S. J., Tye, M., Glassey, R., & Hagger, M. S. (2015). Exploring the perceived effectiveness of a life skills development program for high-performance athletes. *Psychology of Sport and Exercise*, 16, 139-149.
- Hong, D. K., & Ryu, T. H. (2007). Student Athletes in Terms of Human Rights: An Educational Discourse. *Korean Journal of Sport Pedagogy*, 14(4), 131-154.
- Im, S. C., & Won, Y. S. (2012). The Practical Process of Making Student-athletes Study by High School Athletic Club Director. *Korean Journal of Sociology of Sport*, 25(3), 115-135.
- Jacobs, J. M., & Wright, P. M. (2016). An alternative application of imagery in youth sport: Promoting the transfer of life skills to other contexts. *Journal of Sport Psychology in Action*, 7(1), 1-10.
- Kane, T. D., Marks, M. A., Zaccaro, S. J., & Blair, V. (1996). Self-efficacy, personal goals, and wrestlers' self-regulation. *Journal of Sport and Exercise Psychology*, 18(1), 36-48.
- Karoly, P. (1993). Mechanisms of self-regulation: A systems view. *Annual review of psychology*, 44(1), 23-52.
- Kim, D. H. (2011). The process of adjustment to the school lives from a normal student to a student athlete. *Korean Journal of Sport Pedagogy*, 18(1), 71-90.
- Korean Educational Development Institute. (1992). A Development of New Evaluation System for a quality School Mathematics Education. research data RM 92-5-2.
- Kwon, O. J. (2017). Exploring the life skills of drop-out elite athletes. *Korea Institute of Sport Science*, 28(3), 724-738.
- Lee, G. I., Huh, C. H., & Ryu, T. H. (2011). The Exploration on Dropped Causes of Drop-out Student Athletes and Ways of Improving Their Problems. *Korea Institute of Sport Science*, 22(3), 2189-2202.
- Lee, H. G. (2007). The Experience Process of the Student-athletes who Perform both Study and Sport: Redefining Self. *Korean Journal of Sociology of Sport*, 24(1), 1-24.
- Lim, T. H. (2013). The Effect of School Life Adaptation with Taekwondo Elite Competitors on Mentoring Program. *The Journal of Korean Alliance of Material Arts*, 15(2), 1-16.
- Lim, T. H., & Jang, C. Y. (2017). The application and its effect of life skills program in sport. *Korean Journal of Sport Science*, 28(3), 577-591.
- Lim, T., & O'Sullivan, D. M. (2016). Case Study of Mental Skills Training for a Taekwondo Olympian. *Journal of human kinetics*, 50(1), 235-245.
- Lim, Y. S., Han, M. S., & Kim, J. S. (2014). The Path-Analysis of Student Athletes' Drop-Out. *Korean Journal of Sport Science*, 25(3), 450-466.
- Lim, Y. S., Ryu, T. H., & Lee, G. I. (2010). The Process of Loss for Drop-out Student Athletes. *Korean Journal of Anthropology of Education*, 13(3), 37-69.
- Lloyd, R. J. (2012). Moving to learn and learning to move: A phenomenological exploration of children's climbing with an interdisciplinary movement consciousness. *The Humanistic Psychologist*, 40(1), 23-37.
- Ministry of Culture, Sports and Tourism (2016). 2014 White Paper on Physical Education.
- O'Hearn, T. C., & Gatz, M. (2002). Going for the goal: improving youth problem solving skills through a school-based intervention. *Journal of Community Psychology*, 30, 281-303.

38. Papacharisis, V., Goudas, M., Danish, S. J., & Theodorakis, Y. (2005). The effectiveness of teaching a life skills program in a sport context. *Journal of applied sport psychology*, 17(3), 247-254.
39. Schunk, D. H., & Zimmerman, B. J. (2007). Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading & writing quarterly*, 23(1), 7-25.
40. Weiss, M. R., & Raedeke, T. D. (2004). Developmental Sport and Exercise Psychology: Research Status on Youth and Directions Toward a Lifespan perspective. *Fitness Information Technology*.
41. WHO. (1999). Partners in life skills education - Conclusions from a United Nations inter-agency meeting. Geneva: World Health Organization, Department of Mental Health, Social Change and Mental Health cluster. Retrieved January 12, 2008, from http://www.who.int/mental_health/media/en/30.pdf.
42. Wright, S. (1996). Positive experiences in personal and professional growth. *The Humanistic Psychologist*, 24(3), 331.
43. Yang, H. Y., & Chung, J. H. (2014). A Narrative Research on New Ways of Life of High School Female Basketball Dropout Players. *Journal of Coaching Development*, 16(4), 3-12.