

**A COMPARISON BETWEEN AGGRESSION AND SELF-ESTEEM  
AMONG UNIVERSITI TEKNOLOGI MARA (UiTM) SHAH ALAM  
ATHLETES**

*Mohad Anizu bin Mohd Nor*

*Faculty of Sport Science and Recreation, UiTM Shah Alam*

*Vincent Parnabas*

*Faculty of Sport Science and Recreation, UiTM Shah Alam*

*Mohamad Azuwan b. Shahrudin*

*Faculty of Sport Science and Recreation, UiTM Shah Alam*

*Zarizi Ab. Rahman*

*Faculty of Education, UiTM Puncak Alam*

*Alexander Paul Roper*

*International College of Management Sydney, Australia*

**Received: 13 May 2020**

**Accepted: 23 July 2020**

**Published: 15 Sept 2020**

**Correspondent Author**

Associate Professor Dr. Mohad Anizu Mohd Nor  
Faculty of Sport Science and Recreation  
Universiti Teknologi MARA Shah Alam Selangor.  
Email: [mohadanizu@uitm.edu.my](mailto:mohadanizu@uitm.edu.my) / mohanizu5313@gmail.com

## **A COMPARISON BETWEEN AGGRESSION AND SELF-ESTEEM AMONG UNIVERSITI TEKNOLOGI MARA (UiTM) SHAH ALAM ATHLETES**

*Mohad Anizu bin Mohd Nor  
Vincent Parnabas  
Mohamad Azuwan Bin Shaharudin  
Zarizi Ab. Rahman  
Alexander Paul Roper*

*Faculty of Sport Science and Recreation, UiTM Shah Alam  
Faculty of Education, UiTM Puncak Alam  
International College of Management Sydney, Australia*

### **Abstract**

*Human aggression was a major worldwide health issue that brings negative effect to victims, perpetrators, and society. One of the areas that may be potentially variables for understanding aggression was self-esteem that could influence whether someone display an aggressive behaviour. Therefore, the aim of this study was to determine the relationship between the level of aggression and level of self-esteem among Universiti Teknologi MARA (UiTM) Shah Alam student-athletes. This study was very important to determine the athlete's aggression and self-esteem level based on the differences of genders and types of sport. Furthermore, the findings of this study may help in promoting a beneficial knowledge among coaches and athletes about aggression level and also self-esteem level toward maintaining and improving sports performance. A correlational study was selected in order to conduct this study. This correlational study was selected because this study was closely related to both descriptive and causal-comparative research. The instrument used for this study comprised of a 10-item Rosenberg Self-Esteem Scale (RSES) and 19-item of Aggression Questionnaire (AQ), which had been distributed in UiTM Shah Alam. The samples consisted of 260 UiTM Shah Alam athletes, included male and female, individual and team sports, age ranged between 18 until 26 years old. Independent t-test showed there was no significant difference between genders and types of sport on aggression level,  $p > 0.05$ . Result also showed that there was no significant difference on self-esteem between types of sport,  $p > 0.05$ . Meanwhile, a result found that there was a significant difference on self-esteem between genders,  $p < 0.05$ . Result also showed that there was a positive correlation between aggression and self-esteem among UiTM Shah Alam athletes, ( $r = 0.20$ ,  $p < 0.05$ ). Present findings indicated that athletes who had higher aggression level tend to have a higher level of self-esteem. Therefore, psychological skill training (PST) recommended as a better coping technique in order to promote better adaptation to the constraints of the sports involvement.*

*Keywords: Aggression, self-esteem, athletes, coping.*

## INTRODUCTION

Human aggression was a major worldwide health issue that brings negative effect to victims, perpetrators, and society. Generally, victims who experience or were exposed to such behavior suffer from a variety of psychological issues related to depression, anxiety, and stress. Given that the term ‘aggression’ originated from the Latin word *aggression* – meaning to ‘attack’ – this is perhaps not too surprising. Indeed, Bordens and Horowitz’s (2013) definition, where aggression was any behaviours which purposely set out to inflict harm on another organism or object (and this harm can be either psychological or physical in nature). This notion of ‘attacking’ is further underscored. Similarly, for Anderson and Bushman (2002), aggression was defined in terms of an action directed towards causing harm, but here the immediacy of the action to cause said ‘harm’ was an important delineation.

One of the potential variables when understanding aggression was self-esteem that can influence whether someone displayed an aggressive behaviour or not (Kirkpatrick, Waugh, Valencia & Webster, 2002). Self-esteem was often talked about in association with being mentally healthy, successful, and living an effective “good life” (Mruk, 2006). For Mruk (2006) self-esteem was very important for both individuals and society as a whole, in term of self-regulation and quality of life. In seeking to further understand self-esteem, it is important to recognize that there are two kinds of self – esteem, implicit self-esteem and explicit self-esteem (Van Tuijl, De Jong, Sportel, De Hullu & Nauta, 2014). An attempt to differentiate the two provided by Van Tuijl et al. (2014), who defined explicit self-esteem as an appraisal of individual behaviour takes place, whereas implicit self-esteem relates to an individual who has the motivation, time and cognitive resources.

From all of this, it was possible to how self-esteem leads to maintaining and promoting a healthy self-perspective particularly for athletes in sports environments (Mosewich, Kowalski, Sabiston, Sedgwick & Tracy, 2011). As such, it would seem logical to infer that having low self-esteem was much more likely to result aggressive

behaviour, whilst having high self-esteem was much more likely to result in positive, productive behaviour (Thomaes, Bushman & Thomaes, 2011).

The relationship between self-esteem and aggression supported by a number of studies which set out exactly how and why low self-esteem was linked to aggression (Boden, Fergusson & Horwood, 2007; Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). Other studies however, had posited that it is that high self-esteem can be associated with and lead to aggressive behaviour (Bushman, Baumeister, Thomaes, Ryu, Begeer & West, 2009; Muller, Bushman, Subra & Ceaux, 2012). In light of such conflicting research. Ostrowsky (2010) noted that understanding self-esteem influenced aggression as difficult, given the inconsistency in produced findings. As such – and an attempt to try and investigate if there could be clarified somewhat as further research – the aim of this study was to examine the relationship between self-esteem and aggressive behaviour.

## **RESEARCH METHODOLOGY**

### *Research Design*

A correlational study was selected to conduct this research. This was because the study itself was closely related to both descriptive and causal-comparative research. The main purpose here were (1) to determine whether, and to what extent, a relationship exists between two or more variables and (2) to use relationship to make predictions (Baumgartner & Hensley, 2013). Specifically, the study sought to determine the relationship between the level of aggression and level self-esteem among UiTM Shah Alam athletes. The prediction variables employed were gender and the types of sport (team & individual) of the athletes – under analysis – while the outcome variables were self-esteem and aggression. The research design as constructed, was shown on page 134.

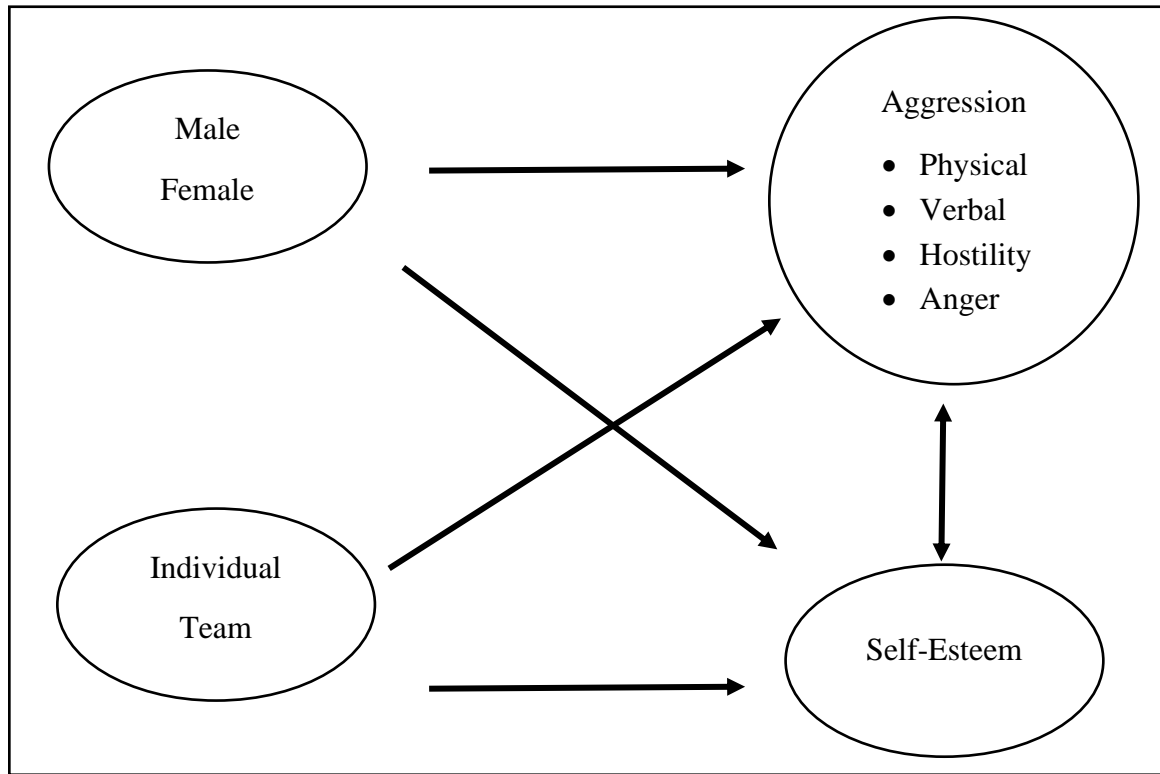


Figure 1: Research Framework

### *Sampling*

The samples were chosen in this study based on the UiTM Shah Alam athletes' population. There were 800 of athletes in UiTM Shah Alam population, based on Krejcie and Morgan, (1970) 260 athletes were selected to represent the entire UiTM Shah Alam athletes' population (Baumgartner & Hensley, 2013). The sample size in this study was 90 % confidence that the difference in the population and the significance level set as lesser than 0.05 as far as social science research concerned (Baumgartner & Hensley, 2013). Therefore, the total samples required in this study were 260 of UiTM Shah Alam athletes.

### *Sampling Technique*

Samples were selected by using non-probability sampling (subjects were not randomly selected). Here, the subjects were selected because they possessed certain characteristics or satisfied a specific criterion set by the researcher. This purposive sampling approach

saw 260 UiTM Shah Alam athletes selected for the study, their selection premised upon their specific characteristics in a certain segment of the university's student population, namely being a male or female UiTM Shah Alam students' athlete, aged between 18 to 26 years old, who had represented the university at least in any sporting events.

### *Instrumentations*

The Aggression Questionnaire (AQ; Buss & Perry, 1992) was used to assess the propensity toward aggression of the selected UiTM Shah Alam athletes. The AQ assessed aggressive tendencies across 29 areas and were divided into four subscales of physical aggression (1, 2, 3, 4, 5, 6, 7, 8, 9), verbal aggression (10, 11, 12, 13, 14), hostility (15, 16, 17, 18, 19, 20, 21, 22), and anger (23, 24, 25, 26, 27, 28, 29). Responses were made on the 5-point Likert scales ranging from one (extremely uncharacteristic of me) to five (extremely characteristics of me). The internal consistency reliability of Cronbach's Alpha reported for previously studied was  $\alpha = 0.77$  (Garofalo, Holden, Zeigler-Hill, & Velotti, 2016), while for present study was  $\alpha = 0.94$ .

### *Self-Esteem*

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) was used in this study to assess the self-esteem level of the UiTM Shah Alam athletes. This RSES consisted 10-item instruments according to how they generally feel about themselves. Responses were made on the 4-point Likert scales ranged from one (strongly agree) to four (strongly disagree). The internal consistency reliability of Cronbach's Alpha reported in the previous studied with  $\alpha = 0.84$  (Garofalo et al., 2016) (Appendix D). The Cronbach's Alpha for present study was reported  $\alpha = 0.66$ .

### *Data Collection*

Approval to conduct this study was obtained from Research Ethics Committee, Faculty of Sports Science and Recreation, Universiti Teknologi MARA (UiTM) Shah Alam, Selangor. Prior to data collection, the consent form was distributed to the participants and they were informed that participation was not only voluntary but they would also be

allowed to withdraw from the study (if they agreed to participate in it) at any time. The Aggression Questionnaire (AQ) and The Rosenberg Self - Esteem Scale (RSES) were distributed to participants who were willing to participate in this study. This was to measure the relationship between aggression and self-esteem among the athletes. On average, participants answered all questionnaires in approximately 20 minutes.

### *Data Analysis*

Data was analysed using the Statistical Package for Social Sciences (SPSS 23.0) for Windows. Descriptive statistics were used to describe the mean and standard deviation for athletes' demographic informations. Independent t-tests were used to determine the differences of aggression and self-esteem level between genders. In addition, independent t-tests were also used to determine the differences in the levels of aggression and self-esteem between the different types of the sport played by the athletes. Pearson Product Moment Correlation Coefficient was conducted to determine the correlation between aggression and self-esteem among athletes. Statistical significance was set at  $p < 0.05$ . The findings were revealed either to reject or failed to reject null hypotheses.

## **RESULTS**

### *Dependent Variables*

*Table 1: Descriptive of Dependent Variables*

| Variables           | Mean | S.D  | Minimum | Maximum |
|---------------------|------|------|---------|---------|
| Physical aggression | 2.33 | 0.99 | 1.00    | 5.00    |
| Verbal aggression   | 2.71 | 0.77 | 1.00    | 5.00    |
| Hostility           | 2.87 | 0.89 | 1.00    | 5.00    |
| Anger               | 2.70 | 0.77 | 1.00    | 4.71    |
| Aggression          | 2.63 | 0.73 | 1.03    | 4.48    |
| Self-esteem         | 2.48 | 0.46 | 1.40    | 4.00    |

The mean and standard deviation of physical aggression, verbal aggression, hostility, anger, aggression and self-esteem was presented in table 1. Mean and standard deviation for all dependent variables were: physical ( $M = 2.33$ ,  $SD = 0.99$ ), verbal ( $M = 2.71$ ,  $SD = 0.77$ ), hostility ( $M = 2.87$ ,  $SD = 0.89$ ), anger ( $M = 2.70$ ,  $SD = 0.77$ ), aggression ( $M = 2.63$ ,  $SD = 0.73$ ), and self-esteem ( $M = 2.48$ ,  $SD = 0.46$ ).

### *Aggression Factors between Genders*

*Table 2: Comparison of Aggression Factors between Genders (n = 260)*

| Variables           | Group  | N   | Mean | SD   | t     | df  | p-value |
|---------------------|--------|-----|------|------|-------|-----|---------|
| Physical aggression | Male   | 130 | 2.42 | 1.04 | 1.59  | 258 | 0.11    |
|                     | Female | 130 | 2.23 | 0.94 |       |     |         |
| Verbal aggression   | Male   | 130 | 2.73 | 0.81 | 0.47  | 258 | 0.64    |
|                     | Female | 130 | 2.69 | 0.73 |       |     |         |
| Hostility           | Male   | 130 | 2.74 | 0.91 | -2.24 | 258 | 0.03    |
|                     | Female | 130 | 2.99 | 0.85 |       |     |         |
| Anger               | Male   | 130 | 2.73 | 0.83 | 0.76  | 258 | 0.45    |
|                     | Female | 130 | 2.66 | 0.72 |       |     |         |

Independent t-tests were conducted to compare the different levels of aggression between the genders. The results of which are presented in table 2. Based on these results, there was no significant differences across physical aggression, verbal aggression, and anger level between male and female among UiTM Shah Alam athletes with  $p > 0.05$ .

In terms of hostility, however, there was a significant difference between male and female among UiTM Shah Alam athletes with  $p < 0.05$ . Therefore, it was suggested that the null hypothesis was rejected. Based on the table, whilst the males had a higher level of physical aggression ( $M = 2.42$ ,  $SD = 1.04$ ), verbal aggression ( $M = 2.73$ ,  $SD = 0.81$ ), and anger ( $M = 2.73$ ,  $SD = 2.66$ ) than their female counterparts – who recorded results of physical ( $M = 2.23$ ,  $SD = 0.94$ ), verbal ( $M = 2.69$ ,  $SD = 0.73$ ), and anger ( $M = 2.66$ ,  $SD = 0.72$ ) it was the females, who showed higher levels of hostility ( $M = 2.99$ ,  $SD = 0.85$ ) as opposed to males ( $M = 2.74$ ,  $SD = 0.91$ ).



*Aggression between Genders**Table 3: Comparison of Aggressions between Genders*

| Variable   | Group  | N   | Mean | SD   | t    | df  | p-value |
|------------|--------|-----|------|------|------|-----|---------|
| Aggression | Male   | 130 | 4.03 | 1.16 | 0.21 | 258 | 0.84    |
|            | Female | 130 | 4.00 | 1.06 |      |     |         |

Independent t-tests were conducted to compare difference in aggression levels between genders. The results presented in table 3. Based on the results, there was no significant differences in aggression levels between the male and female UiTM Shah Alam athletes with  $p > 0.05$ . Therefore, it was suggested that the null hypothesis was failed to reject. In addition, male ( $M = 4.03$ ,  $SD = 1.16$ ) was reported to have a higher level of aggression when compared to female ( $M = 4.00$ ,  $SD = 1.06$ ).

*Aggression Factors between Types of Sport**Table 4: Comparison of Aggression Factors between Types of Sport (n = 260)*

| Variables           | Group      | N   | Mean | SD   | t     | df  | p-value |
|---------------------|------------|-----|------|------|-------|-----|---------|
| Physical aggression | Team       | 169 | 2.32 | 1.03 | 1.14  | 258 | 0.99    |
|                     | Individual | 91  | 2.32 | 0.93 |       |     |         |
| Verbal aggression   | Team       | 169 | 2.67 | 0.77 | -1.13 | 258 | 0.26    |
|                     | Individual | 91  | 2.79 | 0.76 |       |     |         |
| Hostility           | Team       | 169 | 2.81 | 0.93 | -1.32 | 258 | 0.18    |
|                     | Individual | 91  | 2.96 | 0.79 |       |     |         |
| Anger               | Team       | 169 | 2.65 | 0.79 | -1.32 | 258 | 0.19    |
|                     | Individual | 91  | 2.78 | 0.74 |       |     |         |

In order to compare differences in aggression factors levels between sports, independent t-tests were conducted. The results presented in table 4. Based on the results, there was no

significant differences in physical aggression, verbal aggression, hostility, and anger level across the different types of sport taken by UiTM Shah Alam athletes with  $p > 0.05$ . Therefore, it was indicated that the null hypothesis been failed to reject. Based on the table, it was found also found that team physical aggression ( $M = 2.32$ ,  $SD = 1.03$ ) was at an equal level with individual physical aggression ( $M = 2.32$ ,  $SD = 0.93$ ). Other than that, individual sports / athletes were also found to have a higher level of verbal aggression ( $M = 2.79$ ,  $SD = 0.76$ ), hostility ( $M = 2.96$ ,  $SD = 0.79$ ), and anger ( $M = 2.78$ ,  $SD = 0.74$ ), than team verbal aggression ( $M = 2.67$ ,  $SD = 0.77$ ), hostility ( $M = 2.81$ ,  $SD = 0.93$ ), and anger ( $M = 2.65$ ,  $SD = 0.79$ ).

#### *Aggression between Types of Sport*

*Table 5: Comparison of Aggression between Types of Sport (n = 260)*

| Variable   | Group      | N   | Mean | SD   | t    | df  | p-value |
|------------|------------|-----|------|------|------|-----|---------|
| Aggression | Team       | 169 | 3.97 | 1.17 | 0.98 | 258 | 0.33    |
|            | Individual | 91  | 4.10 | 1.00 |      |     |         |

Compare differences between aggression level in different types of sport, independent t-tests were conducted. The results presented in table 5. Based on the results, there was no significant difference aggression level and the types of sport played by UiTM Shah Alam athletes with  $p > 0.05$ . Therefore, it was indicated that the null hypothesis failed to reject.

#### *Self-esteem between Genders*

*Table 6: Comparison of Self-esteem between Genders (n = 260)*

| Variable    | Group  | N   | Mean | SD   | t    | df  | p-value |
|-------------|--------|-----|------|------|------|-----|---------|
| Self-esteem | Male   | 130 | 2.55 | 0.44 | 2.49 | 258 | 0.01    |
|             | Female | 130 | 2.41 | 0.47 |      |     |         |

Independent t-tests were also conducted to compare the difference of self-esteem level between genders. The results presented in Table 6. Based on these findings, there was a significant difference in term of self-esteem levels between male and female UiTM Shah Alam athletes with  $p < 0.05$ . Therefore, it was suggested that the null hypothesis was

rejected. In addition, results also illustrated that the males sampled ( $M = 2.55, SD = 0.44$ ) had significantly higher level of self-esteem than their female counterparts ( $M = 2.41, SD = 0.47$ ).

*Self-esteem between Types of Sport (n = 260)*

*Table 7: Comparison of Self-Esteem between Types of Sport*

| Variable    | Group      | N   | Mean | SD   | t    | df  | p-value |
|-------------|------------|-----|------|------|------|-----|---------|
| Self-esteem | Team       | 169 | 2.50 | 0.46 | 1.14 | 258 | 0.26    |
|             | Individual | 91  | 2.44 | 0.45 |      |     |         |

Independent t-tests were conducted in order to compare the difference of self-esteem level between types of sport. The results presented in table 7. Based on these results, there was no significant difference of self-esteem level between team and individual sports among UiTM Shah Alam athletes with  $p > 0.05$ . Therefore, the null hypothesis was failed to reject. Furthermore, team ( $M = 2.50, SD = 0.46$ ) scored higher in self-esteem levels than their individual sport counterparts ( $M = 2.44, SD = 0.45$ ).

*Relationship between Aggression and Self-esteem*

*Table 8: Correlation between Aggression and Self-esteem*

| Variable   | Self-esteem |             |         |
|------------|-------------|-------------|---------|
|            | N           | Correlation | p-value |
| Aggression | 260         | 0.20**      | 0.002   |

*\*\* Correlation is significant at the 0.01 level*

Pearson Product-Moment Correlation was conducted to determine the relationship between aggression and self-esteem among UiTM Shah Alam athletes. The results presented in Table 8. The results showed that there was significant positive relationship between aggression and self-esteem with  $r(260) = 0.20, p < 0.01$ . Thus, it was suggested that the null hypothesis was rejected. Although there was a relationship, it was weak relationship at r reading less than 0.30. Therefore, it concluded that individuals who demonstrated higher self-esteem levels did tend to be more aggressive.

## DISCUSSION

### *Aggression between Genders*

The result of this study had shown that there was no significant difference in term of aggression levels between males and females. The results were consistent with previous studies (Mashhoodi et al., 2013; Rahimizadeh et al., 2011). This was contrast to more recent studies where significant differences between male and female aggression had been reported (Ali et al., 2013; Shaheen & Jahan, 2014). In this study, there was no significant difference between male and female aggression levels (something possibly due to the personalities of the athletes involved). In contemporary sport, aggression can see those involved open to more exposure to aggressive behaviours and situations which might in turn, influence an individual's behaviours. Furthermore, winning was an essential part of athlete's goal toward successful performance. As such, becoming aggressive may actually helped some athletes.

As mentioned over page, the current findings were contradicted by other previous studies which reported significant differences in the levels of physical aggression exerted by both genders (Ali et al., 2013; Shaheen & Jahan, 2014). This may link to the condition or situational context athletes find themselves in or in the personalities of those sampled in this study. Perhaps it was important to be cognizant that athletes tend to be both competitive and ambitious (Tomar & Singh, 2012). Therefore, most individuals involved in competitive sports – whether males or females – being in a typically more aggressive environment was almost unavoidable (Boostani & Boostani, 2012). It was perhaps due to this reason more than any other that athletes adopted physical aggressive approach as a strategy to help them in their effort to win to use physical aggression in order to seek an advantage over their opponents.

In those sports in which physical contact was allowed or was part of the rules using physical aggression to win was a common tactic. It was that may well account for the fact that was no difference in the levels between male and female UiTM Shah Alam

athletes as physical aggression – irrespective of gender – was seen to be an essential strategy for success. While there was no significant differences in levels of physical aggression between genders, the males did exhibit a higher level of physical aggression than their female counterparts. This was a finding which supported this present research undertaken by Shaheen and Jahan (2014), reported males in their study as having a higher level of physical aggression than females and also by Ali et al. (2013) who also found this to be true. Other studies showing that males were more physically aggressive than females included Giles and Heyman (2005); Maughan et al. (2004); and Ostrov and Keating (2004).

#### *Aggression between Types of Sport*

The findings showed no significant difference in aggression levels between team sports and individual sports. This supported recent studies by Moghadam et al. (2015) and Yetis (2016) who also found there to be no significant difference in aggression levels between athletes who played on teams or who competed individually. However, it also contrasted with study undertaken by Mashhoodi et al. (2013), whose work highlighted significantly differences in aggression levels depending on the types of sports played. Whilst it was important to be mindful here that in a study conducted by Moghadam et al. (2015), the specific sport an athlete plays simply one of variables behind aggressive behaviours.

Most of the previous studies had not supported present findings liked Bushman & Anderson, 2001; Kirker et al., 2000; Mashhoodi et al., 2013; Ruiz et al., 2001; Sohrabi et al., 2011. In a sports context, the losing of a game can be an important factor elicit frustration (Munyo & Rossi, 2013). In fact, there was a vast difference between individual sport and team sport. In an individual sports context, an athlete's performance (and ultimately their success or failure) relies much more on individuals own performance. whereas in team sports it was shared much more amongst teammates. Because of that, individual athletes may experience more frustration than athlete in a team setting and as such it can be assumed that athletes playing individual sports may exhibit more aggression than athletes involved in teams.

Indeed, frustration had been long established as one of the sources for aggression (Anderson & Bushman, 2002). The frustration-aggression theory referred to aggression arising as a direct result of goal blockage or failure to achieve a specific goal. Again then, in an individual sports context, athletes may experience more frustration and by extension become more aggressive compared to team athletes because ultimately, their success relies much more on their own efforts.

#### *Self-esteem between Genders*

The finding also showed that there was a significant difference in self-esteem levels between male and female of UiTM Shah Alam athletes, with males scoring higher. This was both consistent with (Ahmed et al., 2014; Arshad et al., 2015; Bleidon et al., 2016; Derdikman-Eiron et al., 2011; Gentile et al., 2009; Kundu & Rani, 2007; Mitrovic et al., 2012; Moksnes & Espnes, 2013; Moksnes et al., 2010; Naderi et al., 2009; Pilafova et al., 2007), and also contradicted other finding (Ajeesh, 2013; Alfred et al., 2014; Erol & Orth, 2011; Ichraf et al., 2013).

The significance difference in levels of self-esteem between the genders in this study may be due to a number of reasons: males developing more self-esteem from physical activities with females more than extracurricular activities; participation in competitive sport being more popular amongst males; cultural factors such as gender conditioning and internal negative stereotyping. Shaheen and Jahan (2014) would also point to males typically having higher level of self-esteem because they tend to be typically stronger and typically have more opportunities / less obstacles placed in their way.

#### *Self-esteem between Types of Sport*

Regarding the comparison of self-esteem between sports types, this finding found that there was no significant differences between UiTM Shah Alam athletes who participated in team and individual sports. The supports findings from Ucan and Caglayan (2012); Altıntaş et al. (2007); Moghadam et al. (2015) which also failed to identify any significant differences in self-esteem scores between those sampled involved in team and individual sports.

It was once more important to be cognizant that in terms of participation, a number of the athletes may have been involved in both team and individual sports. In addition, previous studies had suggested that team sport tends to be higher in terms of self-esteem, as being part of a social group may promote a feeling of belonging and a lack of isolation (Walseth, 2006). The fact that, in the course of this current study and in order to practice and to prepare for competition, athletes worked in social groups. As such, individual athletes may well have been much more exposed to an environment typically more akin to that faced by team athletes.

In the line comparison between the team and individual sports differences, team sport showed higher on self-esteem level as compared to an individual sport. This current finding was supported by the previous study which was showing the similar finding (Slutzky & Simpkins, 2009; Wann et al., 2008). However, this current finding was contrasted with the other previous study (Ali et al., 2013; Ichraf et al., 2013; Laborde et al., 2016) that individual sport found had a higher level on self-esteem than a team sport. According to Slutzky and Simpkins (2009), individuals who spent more time in team sports than individual sports have higher self-esteem level.

#### *Relationship between Aggression and Self-esteem*

This study found that whilst there was a positively significant relationship between aggression and self-esteem among UiTM Shah Alam athletes, the relationship between aggression and self-esteem showed weaker correlation. From this study, it was assumed that an individual who had a higher level of aggression would also have a higher level of self-esteem. This again matched with Bushman et al., 2009; Muller et al. 2012 studies, but contradict with Corwyn & Benda, 2001; Donnellan et al., 2005; Lindström, 2001; Okada, 2012; Toombs et al., 2000 findings.

A

## RECOMMENDATION

### *Aggression between Genders*

Based on the present findings, there was no significant difference in aggression levels between male and female UiTM Shah Alam athletes. In order to dwell deeper into this area and further improve the accuracy of findings, a recommendation would get greater samples sizes employed in a future study. In addition to that, assessments of biological, hormonal, and neural factors might also be examined when analysing aggression levels in and between the genders.

### *Aggression between Types of Sports*

The findings showed no significant difference on aggression levels between team and individual sport among UiTM Shah Alam athletes. In future studies, the nature of sports participated in should also be assessed, so as further investigate patterns in aggression both in and across different types of sport. Perhaps also a greater number of sports might be included to get a more representative sample of team and individual athletes. By doing this, a future study may provide a clearer understanding of aggression levels in different sports, allowing for a deeper exploration of it, and how, team and individual sports differ.

### *Self-esteem between Genders*

Regarding levels of self-esteem between the genders, the findings showed a significant difference in levels of self-esteem between male and female UiTM Shah Alam athletes. Further analysis to test the accuracy of the findings here, might see a greater samples size sought. In addition, the achievement of the individual in question should also be taken into consideration. In a future study, the utilization of different instruments and measurement would also be recommended. These initiatives would help provide additional data to be analysed from which a more accurate understanding of the levels of self-esteem between the genders may arise.

### *Self-esteem between Types of Sports*

The current finding was showed that there was no significant difference on self-esteem level between types of sport among UiTM Shah Alam athletes. In order to provide



accurate finding and better understanding about self-esteem between types of sport, the level of experience, achievement level of the athletes, and years of involvement should be recommended in future study. Moreover, greater sample size and greater number of sports that are more representative of team and individual should be recommended in future study to gain more accurate finding for clearer understanding that relate with self-esteem level between types of sport.

#### *Relationship between Aggression and Self-esteem*

Based on the present finding, it was found that there was a positively relationship between aggression and self-esteem among UiTM Shah Alam athletes. Thus, in the future study it was recommended to use other measurement tools to assess aggression and self-esteem of the athletes. Greater sample size and greater sport types also can be recommended in the future study to gain accurate finding regarding relationship between aggression and self-esteem. Other than that, level of experience, years of involvement, athlete's achievement, and variation of aggression forms should be recommended in the future study to explore deeply regarding relationship between aggression and self-esteem among athletes.

## **CONCLUSION**

In conclusion, this study provided relevant findings pertaining to the differences between genders and types of sport on aggression and self-esteem level. Findings demonstrated a positive correlation between aggression and self-esteem. As such, it assumed that the individual who has a high aggression level also have a high level of self-esteem. Although the relationship was not strong, there was evidence to support a hypothesis that self-esteem levels influence aggression levels. Therefore, it would seem appropriate to place more importance on an athlete's self-esteem and the minimization of the levels of aggression. In addition, psychological skill training was recommended. This should be focused on by coaches; the aim being to improve and develop self-esteem and concomitantly furnish the athlete with the capacity to better develop coping techniques. These initiatives will help promote better adaptation to the environment and circumstances in which the athlete may find themselves. Psychological skill training

application such as imagery, self-talk, stress management, goal setting, relaxation and others are also recommended.

## REFERENCES

- Abe, T., Kearns, C., & Fukunaga, T. (2003). Sex differences in whole body skeletal muscle mass measured by magnetic resonance imaging and its distribution in young Japanese adults. *British Journal of Sports Medicine*, 37(5), 436-440.
- Adie, J. W., Duda, J. L., & Ntoumanis, N. (2008). Achievement goals, competition appraisals, and the psychological and emotional welfare of sports participants. *Journal of sport and exercise psychology*, 30(3), 302-322.
- Ahmad, R., Imran, H., Khanam, S. J., & Riaz, Z. (2013). Gender differences in domain specific self-esteem of adolescents. *Asian journal of social sciences & humanities*, 2(2), 432-440.
- Ahmed, D., Mladenovic, M., Ho, W. K. Y., Lee, K.-C., & Khan, B. A. (2014). Exploring the perception of self-esteem among high school athletes. *SportLogia Journal*, 10(2), 81-88.
- Ahsan, M. (2015). Physical, verbal, anger and hostility aggressiveness in University physical education students. *International Journal of Sports and Physical Education (IJSPE)*, 1(2), 20-23.
- Ajeesh, P. (2013). A study on self-esteem among men and women volleyball players. *International Journal of Behavioural Social and Movement Sciences*, 2(3), 56-63.
- Alfred, B., Taraknath, P., & Nisha, T. (2014). Impact of gender and level of participation on the self-esteem of Indian archers during senior national archery championship. *International Journal of Sports Sciences & Fitness*, 4(2), 136-143.
- Ali, B. M., Ichraf, A., Khaled, T., Liwa, M., & Ali, E. (2013). Effect of gender and type of sport practiced on aggression and self-esteem in Tunisian athletes. *IOSR Journal of Humanities and Social Science*, 8(4), 74-80.
- Altıntaş, A., Aşçı, F., & Özenir, B. (2007). An examination of self-presentation in exercise contexts with regard to gender and exercise behavior variables. *Hacettepe J. Of Sports Sciences*, 18(2), 91-99.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual review of psychology*, 53, 27-51.

- Archer, J. (2004). Sex differences in aggression in real-world settings: a meta-analytic review. *Review of General Psychology*, 8(4), 291-322.
- Arshad, M., Zaidi, S. M. I. H., & Mahmood, K. (2015). Self-Esteem & Academic Performance among University Students. *Journal of Education and Practice*, 6(1), 156-162.
- Aryana, M. (2010). The relationship between self-esteem and academic achievement amongst pre-university students. *Journal of applied sciences*, 10(20), 2474-2477.
- Bali, A. (2015). Psychological factors affecting sports performance. *International Journal of Physical Education, Sports and Health*, 1(6), 92-95.
- Bardel, M.-H., Fontayne, P., Colombel, F., & Schiphof, L. (2010). Effects of match result and social comparison on sports state self-esteem fluctuations. *Psychology of Sport and Exercise*, 11(3), 171-176.
- Baron, R. A. (2013). *Human Aggression*, 1<sup>st</sup> edition. New York: Springer.
- Baumgartner, T. A., Hensley, L. D. (2013). *Conducting & Reading Research in Kinesiology*, 5<sup>th</sup> edition. New York, USA: McGraw-Hill.
- Baumeister, R. F., Bushman, B. J., & Campbell, W. K. (2000). Self-esteem, narcissism, and aggression do violence result from low self-esteem or from threatened egotism? *Current directions in psychological science*, 9(1), 26-29.
- Bleidorn, W., Arslan, R. C., Denissen, J. J., Rentfrow, P. J., Gebauer, J. E., Potter, J., Gosling, S. D. (2016). Age and Gender Differences in Self-Esteem—A Cross-Cultural Window. *Journal of Personality and Social Psychology*, 111(3), 396-410.
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30(3-4), 177-188.
- Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2007). Self-esteem and violence: Testing links between adolescent self-esteem and later hostility and violent behavior. *Social Psychiatry and Psychiatric Epidemiology*, 42(11), 881-891.
- Bordens, K. S., & Horowitz, I. A. (2013). *Social Psychology*, 2<sup>nd</sup> edition. New York: Psychology Press.
- Boostani, M. A., & Boostani, M. H. (2012). Investigation and comparing aggression in athletes in non-contact (swimming), limited contact (karate) and contactable (kickboxing) sports fields. *Journal of Combat Sports and Martial Arts*, 2(2), 87-89.

- Bowker, A. (2006). The relationship between sports participation and self-esteem during early adolescence. *Canadian Journal of Behavioural Science*, 38(3), 214-229.
- Breckler, S. J., Olson, J. M., & Wiggins, E. C. (2005). *Social Psychology Alive*, 1<sup>st</sup> edition. Belmont, CA: Thomson Learning Inc.
- Broad, E. (2014). *Sports Nutrition for Paralympic Athletes*, 1<sup>st</sup> edition. Boca Raton, FL: CRC Press.
- Burt, I., Patel, S., Butler, S., & Gonzalez, T. (2013). Integrating leadership skills into anger management groups to reduce aggressive behaviors: The LIT model. *Journal of Mental Health Counseling*, 35(2), 124-141.
- Bushman, B., & Anderson, C. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological review*, 108(1), 273-279.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, 75(1), 219-229.
- Bushman, B. J., Baumeister, R. F., Thomaes, S., Ryu, E., Begeer, S., & West, S. G. (2009). Looking again, and harder, for a link between low self-esteem and aggression. *Journal of personality*, 77(2), 427-446.
- Buss, D. M., & Shackelford, T. K. (1997). Human aggression in evolutionary psychological perspective. *Clinical psychology review*, 17(6), 605-619.
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child development*, 79(5), 1185-1229.
- Corwyn, R. F., & Benda, B. B. (2001). Violent youths in southern public schools in America. *International journal of adolescence and youth*, 10(1-2), 69-90.
- Crocker, J., & Park, L. (2004). The costly pursuit of self-esteem. *Psychological bulletin*, 130(3), 392-414.
- D'Anna, C., Rio, L., & Paloma, F. G. (2015). Competitive sport and self-concept in an adolescent. *Journal of Human Sport and Exercise*, 10(1), 425-429.
- Derdikman-Eiron, R., Indredavik, M., Bratberg, G., Taraldsen, G., Bakken, I., & Colton, M. (2011). Gender differences in subjective well-being, self-esteem and psychosocial functioning in adolescents with symptoms of anxiety and depression: findings from the Nord-Trøndelag Health Study. *Scandinavian journal of psychology*, 52(3), 261-267.

- Diamantopoulou, S., Rydell, A. M., & Henricsson, L. (2008). Can Both Low and High Self-esteem Be Related to Aggression in Children? *Social Development*, 17(3), 682-698.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological science*, 16(4), 328-335.
- Du, H., Jonas, E., Klackl, J., Agroskin, D., Hui, E. K., & Ma, L. (2013). Cultural influences on terror management: Independent and interdependent self-esteem as anxiety buffers. *Journal of Experimental Social Psychology*, 49(6), 1002-1011.
- Edalati, A., & Redzuan, M. R. (2010). Women physical aggression (a review). *Journal of American Science*, 6(6), 227-235.
- Ellickson, P. L., & McGuigan, K. A. (2000). Early Predictors of Adolescent Violence. *American Journal of Public Health*, 90(4), 566-572.
- Erol, R. Y., & Orth, U. (2011). Self-esteem development from age 14 to 30 years: A longitudinal study. *Journal of Personality and Social Psychology*, 101(3), 607-619.
- Fallowfield, J. L., Hale, B. J., & Wilkinson, D. M. (2005). *Using statistic in sport and exercise science research*. Chischester: Lotus Publishing.
- Fares, N. E., Ramirez, J. M., Cabrera, J. M., Lozano, F., & Salas, F. (2011). Justification of physical and verbal aggression in uruguayan children, and adolescents. *The Open Psychology Journal*, 4(Suppl), 45-54.
- Fischer, A. H., & Evers, C. (2011). The social costs and benefits of anger as a function of gender and relationship context. *Sex roles*, 65(1-2), 23-34.
- Gadson, S. (2001). *Psychology and Sport*, 1st edition. Oxford, UK: Heinemann.
- Garofalo, C., Holden, C. J., Zeigler-Hill, V., & Velotti, P. (2016). Understanding the connection between self-esteem and aggression: The mediating role of emotion dysregulation. *Aggressive behavior*, 42(1), 3-15.
- Gat, A. (2010). *Mind the gap: Tracing the origins of human universals*, 1<sup>st</sup> edition. New York: Springer
- Giles, J. W., & Heyman, G. D. (2005). Young children's beliefs about the relationship between gender and aggressive behavior. *Child development*, 76(1), 107-121.

- Gentile, B., Grabe, S., Dolan-pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender Differences in Domain-specific Self-esteem. *Review of General Psychology*, 13(1), 34-45.
- Gledhill, A., Mulligan, C., Saffery, G., Sutton, L., & Taylor, R. (2007). *BTEC National Sport & Exercise Sciences*, 2<sup>nd</sup> edition. Oxford, UK: Heinemann.
- Hagger, M., & Chatzisarantis, N. (2005). *Social Psychology of Exercise and Sport*, 1<sup>st</sup> edition. New York: Open University Press.
- Harmon-Jones, E., & Sigelman, J. (2001). State anger and prefrontal brain activity: evidence that insult-related relative left-prefrontal activation is associated with experienced anger and aggression. *Journal of personality and social psychology*, 80(5), 797-803.
- Hesari, N. K. Z., & Hejazi, E. (2011). The mediating role of self-esteem in the relationship between the authoritative parenting style and aggression. *Procedia-social and behavioral sciences*, 30, 1724-1730.
- Hill, G. (2001). *A Level Psychology Through Diagrams*, 2<sup>nd</sup> edition. Oxford, UK: Oxford University Press.
- Hogan, R., & Roberts, B. W. (2004). A socioanalytic model of maturity. *Journal of Career Assessment*, 12(2), 207-217.
- Hollister-Wagner, G. H., Foshee, V. A., & Jackson, C. (2001). Adolescent aggression: Models of resiliency1. *Journal of Applied Social Psychology*, 31(3), 445-466.
- Ichraf, A., Ali, B. M., Khaled, T., Liwa, M., & Ali, E. (2013). Effect of gender and type of sport on anxiety and self-esteem. *International Journal of Humanities and Social Science Invention*, 2(3), 55-61.
- Johnson, A. J., Becker, J. A., Wigley, S., Haigh, M. M., & Craig, E. A. (2007). Reported argumentativeness and verbal aggressiveness levels: The influence of type of argument. *Communication Studies*, 58(2), 189-205.
- Kawabata, Y., Crick, N. R., & Hamaguchi, Y. (2010). Forms of aggression, social-psychological adjustment, and peer victimization in a Japanese sample: The moderating role of positive and negative friendship quality. *Journal of abnormal child psychology*, 38(4), 471-484.
- Khetmalis, M. S. (2012). Comparison of aggression between team game players and individual game players. *International Journal of Behavioral Science and Movement Sciences*, 1(2), 113-116.

- Kirker, B., Tenenbaum, G., & Mattson, J. (2000). An investigation of the dynamics of aggression: Direct observations in ice hockey and basketball. *Research Quarterly for Exercise and Sport*, 71(4), 373-386.
- Kirkpatrick, L. A., Waugh, C. E., Valencia, A., & Webster, G. D. (2002). The functional domain specificity of self-esteem and the differential prediction of aggression. *Journal of Personality and Social Psychology*, 82(5), 756-767.
- Kolayış, H., Sarı, İ., Soyer, F., & Gürhan, L. (2010). Effect of the physical activities on orphans' anxiety and self esteem. *Sport Scientific & Practical Aspects*, 7(2), 17-20.
- Krishnaveni, K., & Shahin, A. (2014). Aggression and its Influence on Sports Performance. *International Journal of Physical Education, Sports, and Health*, 1(2), 29-32.
- Kumar, S. (2016). Study of hostile aggression in male and female sports person. *International Journal of Physical Education, Sport, and Health*, 3(3), 444-446.
- Kundu, S. C., & Rani, S. (2007). Human resources' self-esteem across gender and categories: a study. *Industrial management & data systems*, 107(9), 1366-1390.
- Laborde, S., Guillén, F., & Mosley, E. (2016). Positive personality-trait-like individual differences in athletes from an individual- and team sports and in non-athletes. *Psychology of Sport and Exercise*, 26, 9-13.
- Lal, M. (2017). An Analysis of Aggression and Anger Expression Among All India Inter-University Female Boxers. *International Journal of Scientific Research*, 5(10), 396-397.
- La Mar, M. P., Vohs, K. D., & Joiner, T. E. (2005). Discrepancies between self and other-esteem as correlates of aggression. *Journal of Social and Clinical Psychology*, 24(5), 607-620.
- Lansford, J. E., Skinner, A. T., Sorbring, E., Giunta, L. D., Deater-Deckard, K., Dodge, K. A., et al. (2012). Boys' and girls' relational and physical aggression in nine countries. *Aggressive behavior*, 38(4), 298-308.
- Lee, E. J. (2014). The relationship between unstable self-esteem and aggression differences in reactive and proactive aggression. *The Journal of Early Adolescence*, 34(8), 1075-1093.
- Lindström, P. (2001). School violence: A multi-level perspective. *International Review of Victimology*, 8(2), 141-158.

- Lochman, J. E., Barry, T., Powell, N., & Young, L. (2010). Anger and Aggression. *Practitioner's Guide to Empirically Based Measures of Social Skills*, 155-166.
- Locke, K. D. (2009). Aggression, narcissism, self-esteem, and the attribution of desirable and humanizing traits to self versus others. *Journal of Research in Personality*, 43(1), 99-102.
- Malamuth, N. M., & Thornhill, N. W. (1994). Hostile Masculinity, Sexual Aggression, and Gender-Biased Domineeringness in. *Aggressive behavior*, 20, 185-193.
- Mashhoodi, S., Mokhtari, P., & Tajik, H. (2013). The comparison of the aggression of young and adult athletes in individual or team sport. *European Journal of Experimental Biology*, 3(1), 661-663.
- Maughan, B., Rowe, R., Messer, J., Goodman, R., & Meltzer, H. (2004). Conduct disorder and oppositional defiant disorder in a national sample: developmental epidemiology. *Journal of child psychology and psychiatry*, 45(3), 609-621.
- Maxwell, J. (2004). Anger rumination: an antecedent of athlete aggression? *Psychology of Sport and Exercise*, 5(3), 279-289.
- Maxwell, J., Visek, A. J., & Moores, E. (2009). Anger and perceived legitimacy of aggression in male Hong Kong Chinese athletes: Effects of type of sport and level of competition. *Psychology of Sport and Exercise*, 10(2), 289-296.
- Mitrovic, M., Todorovic, D., & Markovic, Z. (2012). Anxiety and self-esteem in students of sport and physical education. *Research in Kinesiology*, 40(2), 133-139.
- Moghadam, R. K., Keshvari, F., Torabi, S. B., Bakhshalipour, V., & Moghadam, M. K. (2015). The comparison of students' self-esteem and aggression in team and individual sports of Dorud City. *Journal of Novel Applied Sciences*, 4(12), 1230-1235.
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents—gender and age as potential moderators. *Quality of Life Research*, 22(10), 2921-2928.
- Moksnes, U. K., & Espnes, G. A. (2012). Self-esteem and emotional health in adolescents—gender and age as potential moderators. *Scandinavian Journal of Psychology*, 53(6), 483-489.
- Moksnes, U. K., Moljord, I. E., Espnes, G. A., & Byrne, D. G. (2010). The association between stress and emotional states in adolescents: The role of gender and self-esteem. *Personality and Individual Differences*, 49(5), 430-435.



- Mosewich, A. D., Kowalski, K. C., Sabiston, C. M., Sedgwick, W. A., & Tracy, J. L. (2011). Self-compassion: A potential resource for young women athletes. *Journal of sport and exercise psychology*, 33(1), 103-123.
- Mruk, C. J. (2006). *Self-esteem research, theory, and practice: Toward a positive psychology of self-esteem*, 3<sup>rd</sup> edition. New York, USA: Springer Publishing Company.
- Muller, D., Bushman, B. J., Subra, B., & Ceaux, E. (2012). Are people more aggressive when they are worse off or better off than others? *Social Psychological and Personality Science*, 3(6), 754-759.
- Munyo, I., & Rossi, M. A. (2013). Frustration, euphoria, and violent crime. *Journal of Economic Behavior & Organization*, 89, 136-142.
- Naderi, H., Abdullah, R., Aizan, H. T., Sharir, J., & Kumar, V. (2009). Self-esteem, gender and academic achievement of undergraduate students. *American Journal of Scientific Research*, 3, 26-37.
- Nelson, R. J. (2006). *Biology of Aggression*, 1<sup>st</sup> edition. New York, USA: Oxford University Press.
- O'Donoghue, P. (2012). *Statistics for sport and exercise studies*, 1<sup>st</sup> edition. New York: Routledge.
- Okada, R. (2012). Friendship motivation, aggression, and self-esteem in Japanese undergraduate students. *Psychology*, 3(1), 7-11.
- O'Leary, K. D., Slep, A. M. S., Avery-Leaf, S., & Cascardi, M. (2008). Gender differences in dating aggression among multiethnic high school students. *Journal of Adolescent Health*, 42(5), 473-479.
- Onukwufor, J. N. (2013). Physical and verbal aggression among adolescent secondary school students in rivers state of Nigeria. *British Journal of Education*, 1(2), 62-73.
- Ostrov, J. M., & Keating, C. F. (2004). Gender differences in preschool aggression during free play and structured interactions: An observational study. *Social Development*, 13(2), 255-277.
- Ostrowsky, M. K. (2010). Are violent people more likely to have low self-esteem or high self-esteem? *Aggression and Violent Behavior*, 15(1), 69-75.
- Page, A., & Smith, L. F. (2016). Relational aggression and physical aggression among adolescent Cook Islands students. *Issues in Educational Research*, 26(1), 98-116.

- Parnabas, V. A., Mahamood, Y., & Parnabas, J. (2013). Level of Sport Performance of Universiti Malaya (UM) Athletes. *International Journal of Human Movement and Sports Sciences*, 1(2), 41-45.
- Parrott, D. J., & Zeichner, A. (2008). Determinants of anger and physical aggression based on sexual orientation: An experimental examination of hypermasculinity and exposure to male gender role violations. *Archives of Sexual Behavior*, 37(6), 891-901.
- Pilafova, A., Angelone, D., & Bledsoe, K. (2007). The relationship between gender, BMI, self-esteem, and body esteem in college students. *Psi Chi Journal of Undergraduate Research*, 12(1), 24-30.
- Potegal, M., Stemmler, G., & Spielberger, C. (2010). *International Handbook of Anger: Constituent and Concomitant Biological, Psychological, and Social Processes*, 1<sup>st</sup> edition. New York: Springer.
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why Do People Need Self-Esteem? A Theoretical and Empirical Review. *Psychological bulletin*, 130(3), 435-468.
- Rahimizadeh, M., Arabnarmi, B., Mizany, M., & Shahbazi, M. (2011). Determining the Difference of Aggression in Male & Female, Athlete, and Non-Athlete students. *Procedia-Social and behavioral sciences*, 30, 2264-2267.
- Ressler, K. J. (2010). Amygdala Activity, Fear, and Anxiety: Modulation by Stress. *Biological Psychiatry*, 67(12), 1117-1119.
- Rill, L., Baiocchi, E., Hopper, M., Denker, K., & Olson, L. N. (2009). Exploration of the relationship between self-esteem, commitment, and verbal aggressiveness in romantic dating relationships. *Communication Reports*, 22(2), 102-113.
- Rosenthal, S. A., Montoya, R. M., Ridings, L. E., Rieck, S. M., & Hooley, J. M. (2011). Further evidence of the narcissistic personality inventory's validity problems: a meta-analytic investigation—Response to Miller, Maples, and Campbell (this issue). *Journal of Research in Personality*, 45(5), 408-416.
- Ruiz, J. M., Smith, T. W., & Rhodewalt, F. (2001). Distinguishing narcissism and hostility: Similarities and differences in interpersonal circumplex and five-factor correlates. *Journal of personality assessment*, 76(3), 537-555.
- Sakai, A., & Yamasaki, K. (2004). Development of a proactive and reactive aggression questionnaire for elementary school children. *Shinrigaku kenkyu: The Japanese journal of psychology*, 75(3), 254-261.

- Sanderson, C. A. (2009). *Social Psychology*, 1<sup>st</sup> edition. Hoboken, NJ: John Wiley & Sons Inc.
- Scheff, T. J., & Fearon, D. S. (2004). Cognition and emotion? The dead end in self-esteem research. *Journal for the Theory of Social Behaviour*, 34(1), 73-90.
- Sell, A., Hone, L. S., & Pound, N. (2012). The importance of physical strength to human males. *Human Nature*, 23(1), 30-44
- Shaffer, D.R. (2005). *Social and personality development*, 5th edition. Belmont, CA: Wadsworth
- Shaffer, D. R. (2008). *Social and Personality Development*, 6<sup>th</sup> edition. Belmont, CA: Cengage Learning.
- Shaheen, F., & Jahan, M. (2014). Role of self-esteem in the development of aggressive behaviour among adolescents. *International Journal of Education and Psychological Research (IJEPR)*, 3(4), 54-57.
- Siever, L. J. (2008). Neurobiology of aggression and violence. *American Journal of Psychiatry*, 165(4), 429-442.
- Slutzky, C. B., & Simpkins, S. D. (2009). The link between children's sports participation and self-esteem: Exploring the mediating role of sports self-concept. *Psychology of Sport and Exercise*, 10(3), 381-389.
- Sohrabi, F., Atashak, S., & Aliloo, M. (2011). Psychological profile of athletes in contact and non-contact sports. *Middle-East Journal of Scientific Research*, 9(5), 638-644.
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological bulletin*, 139(1), 213-240.
- Taylor, L. D., Davis-Kean, P., & Malanchuk, O. (2007). Self-esteem, academic self-concept, and aggression at school. *Aggressive behavior*, 33(2), 130-136.
- Thomaes, S., Bushman, B. J., & Thomaes, S. (2011). Mirror, mirror, on the wall, who's the most aggressive of them all? Narcissism, self-esteem, and aggression. *Human aggression and violence. Causes, manifestations, and consequences*, 203-219.
- Tomada, G., & Schneider, B. (1997). Relational aggression, gender, and peer acceptance: invariance across culture, stability over time, and concordance among informants. *Developmental psychology*, 33(4), 601-609.
- Tomar, R., & Singh, R. (2012). Aggression in athletics: A comparative study. *Ovidius University Annals, Physical Education, and Sport/Science, Movement and Health Series*, 12(1), 31-34.

- Toombs, N. J., Benda, B. B., & Corwyn, R. F. (2000). Violent youth in boot camps for non-violent offenders. *Journal of Offender Rehabilitation*, 31(3-4), 113-133.
- Tremblay, R. E., Nagin, D. S., Seguin, J. R., Zoccolillo, M., Zelazo, P. D., Boivin, M., Perusse, D., Christa, J. (2005). Physical aggression during early childhood: Trajectories and predictors. *Canadian child and adolescent psychiatry review*, 14(1), 3-9.
- Tucker, L. W., & Parks, J. B. (2001). Effects of gender and sports type on intercollegiate athletes' perceptions of the legitimacy of aggressive behaviors in sport. *Sociology of Sports Journal*, 18(4), 403-413.
- Twenge, J. M., & Campbell, W. K. (2003). "Isn't it fun to get the respect that we're going to deserve?" Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin*, 29(2), 261-272.
- Ucan, Y., & Caglayan, N. (2012). Comparison of self-esteem scores of individual and team sports athletes and nonathletes. *Nigde University Journal of Physical Education and Sports Sciences*, 6(3), 279-287.
- Van Tuijl, L. A., de Jong, P. J., Sport, B. E., de Hullu, E., & Nauta, M. H. (2014). Implicit and explicit self-esteem and their reciprocal relationship with symptoms of depression and social anxiety: a longitudinal study in adolescents. *Journal of behavior therapy and experimental psychiatry*, 45(1), 113-121.
- Velotti, P., Elison, J., & Garofalo, C. (2014). Shame and aggression: Different trajectories and implications. *Aggression and Violent Behavior*, 19(4), 454-461.
- Walseth, K. (2006). Sport and belonging. *International Review for the Sociology of Sport*, 41(3-4), 447-464.
- Wann, D., Grieve, F., Zapalac, R., & Pease, D. (2008). Motivational profiles of sports fans of different sports. *Sports Marketing Quarterly*, 17(1), 6-19.
- Warburton, W. A., & Anderson, A. (2015). Aggression, social psychology of. *International encyclopedia of the social & behavioral sciences*, 373-380.
- Webster, G. D., Kirkpatrick, L. A., Nezelek, J. B., Smith, C. V., & Paddock, E. L. (2007). Different slopes for different folks: Self-esteem instability and gender as moderators of the relationship between self-esteem and attitudinal aggression. *Self and Identity*, 6(1), 74-94.
- Williams, J. M., & Currie, C. (2000). Self-esteem and physical development in early adolescence: Pubertal timing and body image. *The Journal of Early Adolescence*, 20(2), 129-149.

- Xie, H., Cairns, B. D., Cairns, R. B., Pepler, D., Madsen, K., & Webster, C. (2005). The development of aggressive behaviors among girls: Measurement issues, social functions, and differential trajectories. *The development and treatment of girlhood aggression*, 105-136.
- Yetis, U. (2016). Analysis of aggression levels in individual and team athletes. *Studies on ethno-medicine*, 10(1), 15-22.