

COMPARISON OF TEAM SPORT ATHLETES' AND INDIVIDUAL SPORT  
ATHLETES' MORAL IDENTITY AND ANTISOCIAL/PROSOCIAL  
BEHAVIOR IN SPORTS

by

LEAH MICHAL MIRIAM HANLE

DAVID WALKER – COMMITTEE CHAIR  
HYEMIN HAN – COMMITTEE CO-CHAIR  
JASON SCOFIELD  
STEFANIE WIND

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## ABSTRACT

Sport as a common activity for pleasure and health all over the world is also understood to have the potential to foster the development of moral reasoning skills and sportsmanship in athletes, making sport an effective tool for moral and character development. The purpose of this study was to explore moral identity as well as social behavior (antisocial and prosocial) in team sport and individual sport athletes. Participants were 62 individual sport athletes and 80 team sport athletes located at the University of Alabama. Data were collected using two questionnaires and analyzed using SPSS 22.0. Moral identity was measured using the Moral Identity Questionnaire (MIQ by Aquino & Reed, 2002) whereas Prosocial and antisocial behavior was measured using the Prosocial and Antisocial Behavior in Sports Scale (PABSS by Kavussanu & Boardly, 2009). In this study, team sport athletes scored higher on antisocial behavior towards opponents compared to individual sport athletes. When comparing gender, male athletes also scored higher on antisocial behavior towards opponents than female athletes. Finally, results also showed a weak negative correlation between moral identity and antisocial behavior towards opponents. Such antisocial behaviors should be regarded with importance by coaches and parents in being aware of the factors that may influence moral identity development or antisocial behavior.

## DEDICATION

This thesis is dedicated to my grandparents, Prof. Dr. Adolf Hanle and Dr. Gisela Hanle, who always encouraged me in pursuing a higher education and showed greatest interest in my studies. Also, to my parents, Evelyn and Wolfgang, who constantly provide me with their emotional, spiritual, and moral support.

## LIST OF ABBREVIATIONS AND SYMBOLS

a	Cronbach's index of internal consistency
AO	Antisocial Opponent
df	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
M	Mean: the sum of a set of measurements divided by the number of measurements in the set
MI	Moral Identity
MIQ	Moral Identity Questionnaire
NAIA	National Association of Intercollegiate Athletics
NCAA	National Collegiate Athletic Association
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
PABSS	Prosocial and Antisocial Behavior in Sports Scale
PO	Prosocial Opponent
r	Pearson product-moment correlation
t	Computed value of t test
UA	University of Alabama
<	Less than
=	Equal to

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# COMPARISON OF TEAM SPORT ATHLETE'S AND INDIVIDUAL SPORT ATHLETE'S MORAL IDENTITY AND ANTISOCIAL/PROSOCIAL BEHAVIOR IN SPORTS

## INTRODUCTION

Sport is more present in our society than ever before as participating in physical activity is not only known to improve physical or mental health (Hendry et al., 1994, Sabo & Veliz, 2008, Vuori et al., 1995) but is also associated to build character and develop social skills (Arnold, 2001, Pennington, 2017). Thus, physical or mental health benefits are not the only force that leads people to exercise. For professional athletes and student-athletes, sport is a central part of their life as it becomes a tool for self-actualization, self-discovery, and individual self-expression (Maslow, 1962; Gutierrez, 1995). In that sense, sport brings people together, helps establish social contacts, and conveys social and moral values such as compassion, honesty, helpfulness, and fairness (Aquino & Reed, 2002; Shields et al., 2005; Gutierrez, 1995). In fact, college sport is known to have the potential to foster the development of moral reasoning skills and sportsmanship in athletes, making sport an effective tool for moral and character development (Arnold, 2001; Pennington, 2017). Several studies documented an association between athletics, character development, and moral reasoning skills (Burton & Peachey, 2013; Clarke, 2018; DeSensi, 2014). However, such association is conditional, as only if authorities such as coaches, team leaders, or administrators are aware of the importance of having social and moral skills in sport and consciously target the development of morals and character aside of the physical development (Bonfiglio, 2011; Weiss & Bredemeier, 1990). In cases where coaches in fact make moral and character education a part of their training, the moral atmosphere can then be associated with positive prosocial norms and its advocacy of character development and prosocial behavior in athletes (Shields et al., 2005, Weiss & Bredemeier, 1990).

Many different admirable acts of prosocial behavior in sports take place throughout all competitive levels. For example, Russia's Anton Gafarov was helped by the Canadian coach who lent him a ski after his had broken during the Sochi Winter Olympics 2014; David Luiz, who recognized the excellent performance of his opponent James Rodriguez at the 2014 World Cup; Lutz Long who advised his opponent Jesse Owens on how to improve his long jump form so he could win gold at the 1936 Summer Olympics (World Athletics, 2009; NBC Sports, 2014). Yet, while there are numerous examples of prosocial behavior in sport, it is just as common to see immoral behavior throughout all competitive levels. Examples of antisocial behaviors include Luis Suarez, who bit his opponent during a World Cup match; the baseball player Stuart Broad who aggressively and intentionally threw a ball at the batsman; Tennis player Nick Kyrgios who insulted his opponent during Wimbledon. Thus, such incidences of antisocial behavior challenge the character developing function attributed to sport (Kavussanu & Stanger, 2017; Weiss & Bredemeier, 1990). Such failure may be attributed to the type of sport as each sport has its own, unique culture that is typical for its domain (e.g., track & field vs. soccer), a different level of competitiveness (e.g., club sport vs. elite sport), or a lack of focus on character building and moral development which causes a negative influence on an athlete's moral identity formation and behavior (Weiss & Bredemeier, 1990). The many different components that come with each sport show the complexity of social behavior in sport and how many different factors contribute to an athlete's prosocial or antisocial behavior.

As this topic has gained interest, much research has been done in the field of sport and behavior, investigating gender differences, behavior in general, or elite vs. non-elite sport (Barriga et al., 2001; Hodge & Gucciardi, 2015; Milovanović et al. 2020). This being said, research has typically ignored the differences between individual and team sport and is essentially an area of scholarship which needs more attention, underpinning the need for

independent inquiries. Therefore, the purpose of this research is to investigate the differences in moral identity and social behavior (e.g., prosocial behavior, antisocial behavior) between the team and individual sports athletes. Guiding this study, there will be four research questions. First, are there moral identity differences in individual sports and team sports athletes? Secondly, are there differences in prosocial/antisocial behavior between individual sport and team sport athletes? Thirdly, how does the moral identity of individual sport and team sport athletes impact their antisocial/prosocial behavior. To take a possible influence of gender on the overall score of individual and team sport athletes, a fourth research question was developed – are there differences in moral identity or prosocial/antisocial behavior between male and female athletes? In what follows, the thesis begins with an overview of peer influence and conformity and afterwards, two underpinning theories, moral identity and prosocial/antisocial behavior, are reviewed.

### **Peer influence & conformity**

The first years of life are fundamental for developing a sense of self, especially the time between adolescence and early adulthood as significant for identity formation (Spencer et al., 2015; Lapsley & Narvaez, 2004; Dunkel & Anthis, 2001; Arnett 2000; Bronk, 2011). As soon as children venture outside of the house independently, the influence of society and their peers increases, whereas the influence of family and parents is likely to decrease (Steinberger & Monahan, 2007). As this occurs around the time of adolescence, the impact of peers becomes more important and influential for their social and moral development, as young adolescents are known to be especially sensitive to peer influence (Steinberger & Monahan, 2007). Children and adolescents observe and evaluate the behavior of others and are likely to adopt the rules and behaviors displayed by their peer group (Guzman, 2007; Steinberger & Monahan, 2007). Sport teams represent a specific type of peer group, but members are known to have well defined social relations between each other (Vučković et

al., 2012). The socialization process is commonly related to conformity (Vučković et al., 2012), which can be defined as the act of adapting to the attitude and behavior of others. Thus, it involves a change in the judgments, opinions, and attitudes of an individual as a result of the confrontation with the judgments, opinions, and attitudes of other individuals and in order to match those (Cakirpaloglu, Lemrova, Kvintova, & Vévodová, 2016). Consequently, research has shown that sport teams have the potential to lead members to conform to opinions, attitudes, behaviors, and other established group standards (Vučković et al., 2012). However, a distinction can be made between two forms of conformity depending on how established one's identity is. On the one hand, conformity can involve internal acceptance, meaning the individual accepts the views and actions demanded by the environment as correct and believes in themself as a result of socialization. This process is often accompanied by immaturity and cognitive dissonance and may be promoted / consolidated by propaganda, hierarchy, and social influences (Heinz & Goodfried, 2018). In the case of compliance, the individual also acts in conformity and follows the norms, but without believing in the correctness of the action (Heinz & Goodfried, 2018).

However, maladaptive conformity in the context of peer pressure can become problematic as it may lead to deviant (i.e., antisocial) behavior, suppression of rationality, or the spread of errors throughout a whole group (Kundu & Cummins, 2012). According to Campbell (1990), not giving in to conformity can be considered rational and moral as it reflects more accurate judgment based on facts and the adherence to principle. In reference to morality, Kundu & Cummins (2012) asked if conformity can also influence something someone may consider a substantial part of their identity. Behavior can be judged by someone's actions. Thus, they either align with one's moral principles (MI) and are less likely to align with those of the peer group, or one conforms to the principles held by the group or (sporting) culture in order to avoid exclusion but must negate their own moral

concepts (Kundu & Cummins, 2012). One common view in the literature is that behavior is guided by a person's identity standard as well as by society such that a person is influenced by the reactions of their surroundings. If a peer-group has low moral standards, moral behavior may not be challenged and immoral behavior and practices can be formed (Stets & Carter, 2012).

As previously mentioned, peer pressure can also lead to deviant behavior. Social conformity is the attitude and model of individual behavior that meets the expectations of his social group, the tendency of the individual to incorporate norms, habits, values and change his initial views under the influence of the views of others – good and bad (Cakirpaloglu et al., 2016). However, willingness to adapt depends on self-confidence. People with low assertiveness are more likely to give in to group pressure and join the majority (or lead wolf) due to the fear of not fitting in. However, a more important factor is self-control and, ultimately, self-determination (Suhendi et. al., 2019). Thus, a self-determined person may be less prone to conformity, deviant behavior, or negative influences on moral values. A relationship between conformity and bad behavior has been found and can be explained by an increased need for belonging (Cakirpaloglu et al., 2016). In order to be a part of group life, existing norms and objectives have to be adopted. Depending on a person's readiness and compliance, this may be automatic or lead to interpersonal tensions. As young people are generally less experienced and have not yet developed stable moral and personal views, they are more likely to lack the (internal) ability to select between right, good, and useful or wrong, bad, and useless (Cakirpaloglu et al., 2016). Thus, due to inexperience and a high need for belonging, they are more likely to take part in risky behavior, including drug consumption and different types of deviant behavior (Cakirpaloglu et al., 2016). In society, people have specific roles, with family and other social groups. Those environments contribute to one's identity and moral duty, which that person displays (Graham et al., 2011).

In the previous section I showed how young people need to find healthy ways to relate to their various social contexts that contain various norms and requirements for conformity. A young person's development can only occur if they are able to successfully negotiate their place in the various contexts in which they operate, and this involves the cultivation of their own sense of who they are and what they value in life. One way that this has been discussed in the literature involves the concept of moral identity which I introduce next as a concept to explore in relation to individual and team sport as different kinds of sporting contexts with different kinds of norms and conformity requirements. Sport is an interesting context for considering moral identity and antisocial behavior because it is often an extreme and tight knit culture where influential figures such as coaches or teammates help shape the climate. By observing and imitating the behavior of others, every sport sets out the principles of its own moral climate and recent literature / press reports suggest that this is not always morally admirable or emphasizes only some qualities at the expense of others. I will now build on this position by describing how moral identity and prosocial/antisocial behavior connect.

### **Theory 1 - Moral Identity:**

As mentioned, moral identity is a developed sense of moral agency believed key to who one is in life. According to Hardy & Carlo (2011, p.212), moral identity refers to "the degree to which being a moral person is important to an individual's identity". This goes beyond conforming to social norms since the individual has come to own this for themselves in that they pursue morally valuable ends in life because they view themselves as the kind of person that does this. Of course, social norms still matter, not just for contributing to the formation of moral identity but for the extent to which they support or hinder moral identity. There are several different perspectives regarding moral identity in terms of structure, mechanisms, and dynamics. The concept of moral identity proves to be ambiguous: on the one hand, it can mean a comprehensive moral orientation that includes both the orientation



towards the 'good life' and respect for other people, but on the other hand, moral identity can be understood in a narrower sense as the one that transcends the perspective of a good life (Hardy & Carlo, 2011). When acting morally, a person judges their responsibility to respond not only in terms of evaluating an action as moral, but also the responsibility they might feel. Such judgment, however, depends on how important morality is to that person's sense of self (their moral identity). It can be concluded that when someone centers their identity on morality, there is a greater desire to align their behaviors to be consistent with their sense of self, and therefore they are morally motivated (Hardy & Carlo, 2011). Based on these considerations, Aquino and Reed (2002) designed a trait-based scale for the systematic recording of the self-relevance of moral identity, which they define as a self-conception that organizes itself around certain moral traits. In particular, the authors highlight two dimensions of moral identity, one public and one private. The former is referred to as symbolization and reflects the extent to which people want to embody moral qualities through their own actions to the outside world. The second facet describes the internalization and centrality of moral qualities for one's own self-image and is called internalization. Following this dimension, it can be assumed that primarily persons with a high self-relevance of moral values show consistent behavior and are less susceptible to the influence of others (Conn, 1977). Moral identity, in fact, may be a primary influence on moral motivation and thus fosters moral action. However, it can also be seen as somewhat of a dynamic process as moral action may lead someone to view themselves in moral terms, thus shaping their moral identity. Overall, there is little knowledge about the developmental course of moral identity (Hardy & Carlo, 2011; Kingsford, Hawes & De Rosnay, 2018). Blasi (1980) concludes that "a central moral identity will cause people to act morally because they are committed to a sense of personal integrity". Such a sense of personal integrity may lead people to act in an increased prosocial manner, thus demonstrating a link between someone's moral identity and

moral actions (Jimenez et. Al, 2008). In the context of sport, an individual's moral identity is significant to their sporting behavior and becomes essential to their moral functioning and how athletes engage in sport or physical activity (Kavussanu, Stanger, & Ring, 2015; Sage, Kavussanu, & Duda, 2006). Even though this idea of a relationship between moral development and sports participation is not new (Weiss & Bredemeier, 1990, Arnold, 1986), moral identity in the sporting context still needs more research (Funk, 2017). This is especially so because research conducted about moral identity and its association with prosocial and antisocial behavior (Kavussanu, Stanger, & Ring, 2015; Sage, Kavussanu, & Duda, 2006) presented contrasting results; some found a direct, strong association between the two (Blasi, 1980; Aquino and Reed, 2002), whereas others found a rather moderate link (Kavussanu, Stanger, & Boardley, 2013; Kavussanu, Stanger, et al., 2015). As each athlete has an individual identity, the importance of morals to their concept about themselves (i.e., moral identity) may vary significantly, thus, having different consequences for their moral behavior not only in the sporting context, but also in everyday life (Funk, 2017). However, in order to get a better picture and understanding of moral functioning in sport, much more research needs to be done on moral identity and its role in behavior. Research on moral identity conducted by Hardy & Gustavo (2011) identifies different predictors of moral identity, one of them being involvement in prosocial actions. However, this research was neither conducted in a sporting context, nor was the focus on the social setting. Although literature speaks about the development of moral identity in terms of an altruistic personality which can be an association with prosocial behavior (Carlo et al., 2009; Dovidio, Piliavin, Shroeder, & Penner, 2006), to date, not much research connects moral identity and prosocial behavior in sport. In fact, research on moral Identity in sport is very limited. Several studies may involve character development through sport. However, character and moral identity have to be distinguished (Ferris et al., 2015, Beller, 2002). To the best of the authors

knowledge, research has been conducted very generally on sports, but limited attention has been paid to the category (e.g., individual activity, team activity) of sport and how moral identity is developed in that context. Therefore, by conducting this research, we might develop a more sophisticated understanding of how the type of sport (e.g., individual vs. team-based) associated to specific sporting cultures impacts (or is impacted by) an athlete's moral identity and prosocial or antisocial behavior. Secondly, from a teaching standpoint, this research may help to find out if there is a need for coaches to reflect on pedagogies they are using and whether they contribute to the development of moral identity in their athletes or not. In building on this position, I now concentrate on prosocial and antisocial behavior.

### **Theory 2 - Prosocial and antisocial behavior**

In social psychology, prosocial behavior is primarily understood as voluntary actions intended to help another person or group of people. However, this definition relates primarily to the consequences of the acts rather than the motivation behind those acts. The motivation behind a prosocial action can also be selfish, for example, if action serves primarily to improve one's own prestige as one may gain acknowledgement and recognition from others or the media (Dong et al., 2019; Funk, 2017). Even though it might still be identified as moral action, it is important to make a distinction between such moral behavior and moral identity. This being said, moral action can be versatile as one behaves morally not only for altruistic reasons but also to look good in public or to feel better about themselves (e.g., self-enhancement; Dong et al., 2019; Baumeister, 1982). In this case, morality itself is not what is important to the person's identity but rather the prestige that society attaches to moral/prosocial behavior, a phenomenon Dong et al. (2019, p. 1) labels as "moral hypocrisy".

Thus, Eisenberg & Miller (1987, p. 92) defined prosocial behavior as "voluntary, intentional behavior that results in benefits for another; the motive is unspecified and may be positive, negative, or both". There are several aspects to prosocial behavior. One of them is

undoubtedly empathy. If someone experiences this feeling, one may help without taking advantage of it. In this state, someone can position themselves in another's situation and understand how they may be feeling and can act to help the other person (Lay & Hoppmann, 2015). Help and altruism are also part of prosocial behavior. By showing help, there is usually a specific intention. Someone wants to do something that benefits the person in need. In doing so, they want to alleviate the suffering and contribute to the restoration of their well-being (Lay & Hoppmann, 2015). The behavior of help is intertwined not only with empathy but also with altruism. The latter is also understood to be behavior for the benefit of others. But unlike aid, altruistic actions are of purely empathetic origin with no extrinsic reward expected for the behavior shown (Lay & Hoppmann, 2015).

In sport, prosocial behaviors are displayed when an athlete helps an injured opponent or gives positive feedback to others, whereas voluntary fouling, punching, or injuring an opponent would be considered antisocial behavior (Bruner, Boardley, & Côté, 2014). In team sports, however, prosocial and antisocial behavior towards others needs to be distinguished between behavior towards opponents or teammates (Bruner, Boardley, & Côté, 2014). Previous research conducted by Sofia & Cruiz (2017) found a connection between anger and antisocial behavior towards others after comparing aggressive behavior across sports with different levels of physical contact, competitive categories, and levels of success. Despite their study, they did not attempt to explore how the type of activity (e.g., team activity, individual activity) influences athlete's prosocial or antisocial behavior. In contrast, Maxwell, Visek, & Moores (2007) conducted research that included a comparison between individual and team sports in terms of athletes' aggression. Even though they found different levels of aggression associated with the sport played, their research is limited in that they only studied a handful of sports (e.g., football, basketball, squash). Furthermore, they concentrated more on a comparison of contact and non-contact sport rather than team and individual sports.

As prosocial and antisocial behavior has been of interest to social scientists for a long time, several predictors have been found, one of them being moral identity (Hardy & Carlo, 2011; Hardy, Bean, & Olsen, 2014). Thus, research on that topic has been conducted previously with different foci such as gender (Barriga & Morrison, 2001; Van der Graaff et al., 2017) parenting style (Fatima, Dawood, & Munircite, 2020) or age (Krettenauer, & Victor, 2017). Thus, results have established an association between moral identity and engagement in prosocial behavior or lower levels of antisocial behavior, respectively (Hardy, 2006; Barriga et al., 2001; Hardy et al., 2014; Krettenauer 2011). Thus, it is moral identity that influences social behavior rather than the other way around. However, as previously mentioned, different social factors such as culture, family, peers etc. is what influences the development of one's moral identity. Another influence on behavior may be gender as previous research has also revealed gender differences in terms of prosocial and antisocial behavior (Abdullahi & Kumar, 2016; Calvo, Gonzalez, & Martorell, 2014; Van der Graaf et al., 2017). This being said, girls tend to show greater levels than boys in terms of prosocial behavior. Professionals suggest this may be due to increased perspective taking, moral reasoning skills, and greater concern about morality in society in females. In the world of sport, there is an obvious relation between sport culture (i.e., behavior) and moral identity. This is particularly important for athletes as they are more likely to embody culture-behavior of sport with their moral identity when compared to non-athletes who are less likely to embody values of prosocial behavior of sport to their moral identity. This may be because moral identity is about life (Hardy & Carlo, 2011) whereas sport is more contextual. Again, it seems obvious that the culture of a sport influences how an athlete behaves, however, to date, there is little to no research focused on proving this claim – therefore, this is currently only supported as relational and not correlational.

## **Rationale**

Sport is a complex paradigm, and different sporting cultures are significant for individual moral identity and how sports people may behave in terms of prosocial and antisocial behavior. In the current study, the sporting culture is not tailored a particular sport, for concentrating on the culture of individual sports versus that of team-based sports.

As mentioned, research has typically ignored differences between individual and team sport. Therefore, the purpose of this research is to investigate the differences in moral identity and social behavior (e.g., prosocial behavior, antisocial behavior) between team and individual sports athletes. Again, the four research questions will be (1) Are there moral identity differences in individual sports and team sports athletes? (2) Are there differences in prosocial/antisocial behavior between individual sport and team sport athletes? (3) Is there a relationship between moral identity and an athlete's prosocial/antisocial behavior? (4) Is there a gender difference in terms of moral identity and prosocial/antisocial behavior?

Differences between team sport and individual sport athletes are expected in terms of how they score not only for moral identity but consequently for prosocial/antisocial behavior. Further, individual sport athletes are expected to score higher on moral identity and prosocial behavior than team sport athletes. Different factors lead to that assumption, where the culture of a sport is one of the main influences. Thus, group sport represents a place for the existence of a team culture. This being said, team sport athletes may not necessarily score poorly for moral identity and prosocial behavior. Rather, team-based athletes seem likely to have higher levels of antisocial behavior and lower levels of prosocial behavior when compared to individual athletes. A main factor leading to this assumption is the culture of teams is believed more intense than those of individual sports. This may be due to the way sport is portrayed in the media as they potentially instigate mistrust and prejudice between athletes and groups or present negative values and behavior to a large audience (Ott & Van

Puymbroeck, 2008). Additionally, the way universities promote sporting culture may be important as well. As football, basketball, and baseball are the most popular sports in the US, there is a greater interest and focus on team sport compared to individual sport. Overall, there are also more opportunities in the culture of team sports to be more intense due to the rules, laws of the sport (i.e., fouling/tackling is accepted to a certain extent), or the moral language of a culture of team sport versus the culture of individual sport. Differences between individual and team sport athletes may also arise due to group identity and the in-group-out-group effect. As people take roles within different social groups (i.e., family, society, team, etc.) it influences their identity and moral behavior based on the members of their group (Graham, 2017; Shweder et al., 1997). Thus, people identify with that certain group (in-group), and act or even adapt the given values and rules but may act antisocially towards members from other groups (out-group) (Diesendruck & Benozio, 2015). This could be transferred into the world of sport where team sport athletes identify with their own team (in-group) during a competition against an opponent team (out-group). Individual sport athletes however often compete by themselves thus, lack a group. As it seems part of human nature to seek social groups (Baumeister & Leary, 1995; Correll & Park, 2005) for individual athletes, it is possible the opponent might become the social group as the athletes can relate to each other's situation and experience.

## **METHODOLOGY**

### **Participants**

The previous goal was to recruit participants based on their status of being a student athlete from the university. However, the athletic department advised against. Therefore, participants were selected for being students at the University of Alabama that participate in athletics. Students were contacted via email through the different colleges of the school. The colleges that agreed to send out the recruitment email to their entire student body were the (1) College of Business, (2) College of Education, (3) College of Communication & Information Sciences, (4) College of Human Environmental Sciences, (5) School of Social Work. Through the email, students were asked to take two surveys voluntarily. The goal was to recruit an equal number of participants in terms of sport played (e.g., team sport, individual sport) and gender. Participants were asked to sign an informed consent before taking the questionnaires that confirmed their voluntary participation. Furthermore, participants were not asked any personal information that would make them identifiable afterwards. They were able to withdraw at any time. The final sample of participants consisted of 142 Student from the university that indicated to participate in athletics. Overall, 42 participants were male athletes, 99 were female athletes, and 1 participant identified as non-binary. The two groups were of similar sample size with the team sport group having slightly more participants. Thus, 62 participants indicated to be individual sport athletes (43.7%) whereas 80 participants indicated to be team sport athletes (56.3%; for more information see table 1).

### **Demographics**

An important factor to consider in this study is demographics. There is research to suggest a difference in prosocial and antisocial behavior based on gender (Barriga & Morrison, 2001; Van der Graaff et al., 2017) which has shown that female participants are



likely to score higher on prosocial behavior when compared to male participants. Another demographic factor that may affect results could be how long and on what level participants have played the sport. This being said, the years of experience an athlete has (i.e., operation under authority (coach, captain, etc.), familiarity with rules of the game, previous incidences, etc.) influences an athletic and moral identity as well as overall behavior (Hodge & Lonsdale, 2011) Especially the coach-athlete relationship that tends to be deeper and more stable the more time has been spend together has a big impact on an athletes attitude and behavior (Bartholomew, Ntoumanis & Thogersen-Ntoumani, 2010; Gagné, Ryan, & Bargmann, 2003). This goes hand in hand with the age of an athlete. Generally speaking, younger adolescents tend to display more risk-taking behavior due to increased sensation seeking and lower self-regulation capabilities (Leather, 2009; Sanci et al., 2018; Steinberg, 2004). This could be transferred into the world of sport as younger athletes may display more antisocial behavior when compared to older athletes. However, due to the college rules given by the NCAA, age range may not vary more than 10 years, as athletes must be enrolled no longer than one year after college and have only 4 years of eligibility (with exceptions of injury accounted breaks). Finally, cultural differences may affect the results as well since there are at this date in time over 20.000 international student-athletes in the US (NCAA, 2021). This may play a significant role as research comparing different European countries has revealed that athletes differ significantly in their prosocial behavior based on their culture (Milovanović et al., 2020).

### **Data collection**

**Moral identity:** The surveys used for data collection were distributed online as participants will be contacted via email to complete two questionnaires sent to the athletes through the athletic office. The first survey is the Moral Identity Questionnaire (MIQ), developed by Aquino & Reed (2002) and includes the two dimensions previously mentioned

of moral identity. Thus, questions 1-7 measure the dimension of internalization, whereas questions 8-13 measure the dimension of symbolization. At the beginning, participants will be provided with a set of characteristics (e.g., caring, compassionate, fair, friendly, generous, hardworking, helpful, honest, kind) which will help visualize themselves or someone else. Then they will be asked to answer overall 13 questions based on how that person would think, feel, and act (e.g., “it would make me feel good to be a person who has these characteristics,” or “having these characteristics is not really important to me”). (See table 8 for specific questions). Questions will be answered using a 5-point scale (1 = Strongly disagree, 5 = Strongly agree).

**Prosocial/antisocial behavior:** The second survey will include 16 questions from the “Prosocial and Antisocial Behavior in Sports Scale” (PABSS; Kavussanu & Boardley, 2009). The questions included ask participants to indicate how often they have engaged in prosocial behavior (i.e., (e.g., “I helped an injured opponent”; “I congratulated an opponent for good play”) or antisocial behavior (i.e., “I argued with an opponent”) during their season. This study uses a modified version of the prosocial and antisocial behavior in the sport scale. The modifications to the questionnaire will include using more appropriate language based on the purpose of the study and the population focus (e.g., team activity, individual activity) (See table 9 for specific questions pre and post). The scale in its original form is made up of 20 questions and four sub-scales (prosocial teammate; antisocial teammate; prosocial opponent; antisocial opponent). As individual sport athletes lack the teammate component, the adjusted version of the PABSS includes only two dimensions (prosocial opponent; antisocial opponent). Participants will be asked to respond on a 5-point scale (1=never, 2=rarely, 3=sometimes, 4=often, 5=very often). Originally, this study was developed by Kavussanu & Boardley in 2009 for the sole purpose of measuring prosocial and antisocial behavior in soccer players.

**Reliability:** Reliability of the PABSS was previously assessed by Kavussanu et. al. (2013) using test-retest reliability. However, due to the modifications, internal consistency reliability analysis will be conducted to evaluate the internal consistency reliability of the PABSS and each of its sub-scales. Internal consistency reliability refers to the ability of each item on the instrument to measure a single dimension. It assumes the equivalence of all items on the scale and internal consistency coefficients estimates how consistently individuals respond to the same items within the scale (Rovai et. al., 2014). Reliability will be estimated by how well items that reflect the same construct produce similar results by using Cronbach's alpha. This model of internal consistency reliability analysis is based on the average inter-item correlation and measures the extent to which item responses obtained correlate highly with each other. Cronbach's alpha should be  $> 0.70$  for a set of items to be considered an internally consistent scale (Rovai et. al., 2014). As with the PABSS, internal consistency of the MIQ and each of the two dimensions (internalization & symbolization) will be evaluated.

### **Intended data analysis**

The following questions are the guiding research questions for this study.

(1) Are there moral identity differences in individual sports and team sports athletes?  $H_0$ : The difference in means between individual and team sport athletes' moral identity is equal to zero. (2) Are there differences in prosocial/antisocial behavior between individual sport and team sport athletes?  $H_0$ : The difference in means between individual and team sport athletes' prosocial/antisocial behavior is equal to zero. (3) Is there a relationship between moral identity and prosocial/antisocial behavior in athletes?  $H_0$ : There is no relationship between MI and prosocial/antisocial behavior in athletes. (4) Is there a difference in moral identity and prosocial/antisocial behavior between male and female athletes?  $H_0$ : There is no difference in moral identity and prosocial/antisocial behavior between male and female athletes.

An independent t-test is an appropriate statistical analysis when the purpose of research is to assess whether the means of the two independent groups are statistically different from each other. Thus, to examine research question 1, an independent t-test (also known as student's t-test or an) as a parametric procedure will be conducted to assess whether the means of the two independent groups (individual athletes vs. team athletes) are statistically different from each other. As each sample consists of a different set of cases and the composition of sample 1 (individual athletes) is not influenced by the composition of sample 2 (team athletes) they represent two independent samples (Diekhoff, 1992). Moral identity represents the dependent variable (DV). The assumption of normal homogeneity will be assessed by using Levene's Test of Equality of Variance. Homoscedasticity assumes that the p-value of Levene's test is greater than 0.05. Normality assumes that DV is normally distributed in each group. However, boxplots will be used to ensure the absence of extreme outliers in each group. Data will be entered into SPSS to analyze data and ultimately determine if there is a statistically significant difference between the two groups. To examine research question 2, the same procedure will be carried out with just a different dependent variable (Social behavior instead of moral identity).

Pearson correlations (Pearson product-moment correlation test; Pearson  $r$ ) as a parametric procedure can be used as it determines the strength and direction of the linear relationship between two continuous variables (MI, social behavior). Thus, for research question 3, a Pearson product-moment correlation test (Pearson  $r$ ) will be conducted to evaluate the null hypothesis that there is no relationship between moral identity and prosocial/antisocial behavior in athletes (individual sport & team sport athletes). As both variables should have an underlying distribution that is bivariate normal, the assumption of bivariate normality will be evaluated. Thus, both variables will be tested for normality using Pearson's chi-square goodness-of-fit test which is appropriate as the sample size is

sufficiently large ( $N > 30$ ) (Rovai et. al., 2014). Data will be entered into SPSS to analyze the data and to generate a table.

## **DATA ANALYSIS**

First, data from participants who had incomplete responses or who had indicated non-participation in sports were eliminated from the data. Overall, there were 327 people taking the survey. However, 138 participants indicated not-participation in sports and were therefore eliminated from the data set. After further elimination of participants based on partial or incomplete item response of the two questionnaires, 143 participants were used for data analysis. Incomplete responses were random throughout different sports and both genders. However, a majority of the incomplete responses did not answer question 6 and 7 of the PABSS (“I asked to stop play when an opponent was injured”; “I helped an opponent off the floor/court/out the pool). Even though the sport offers the opportunity for such behavior, it might just not be a common behavior or simply less occasions/opportunities to display such actions. Data were analyzed using SPSS 22.0. Based on the remaining participant’s, demographic information was used for descriptive analysis and is representing in Table 1 to show how many participants are in each category. Overall, sports were represented relatively equal with the exception of track & field / XC (34 participants) and soccer (19 participants) having the most participants (see table 2).

### **Moral Identity Questionnaire:**

Next, responses from questions 4 and question 5 of the MIQ (“I would be ashamed to be a person who has these characteristics”; “Having these characteristics is not really important to me”) were reverse coded. Then, the responses from the questionnaire were re-coded to obtain an overall MI score for each participant. Additionally, MIQ data were split into the two different sub-scales, internalization and symbolization, and were re-coded to obtain an overall score for each of those categories. Then, to address research question one

(“how do individual and team sport athletes score on the MIQ”), an independent sample t-test was performed.

### **Prosocial and Antisocial Behavior in Sports Scale:**

First, data from the PABSS were split into the two different sub-scales of antisocial opponent and prosocial opponent. Then, data were re-coded to obtain an overall score for each participant. To address research question two (“how do individual and team sport athletes score on the PABSS”), an independent sample t-test was performed. Finally, to address research question 3 (“Is there a relationship between moral identity and prosocial/antisocial behavior in athletes) a Pearson’s correlation test was performed. To understand if gender influenced the results, an independent t-test was performed (1) between male and female regardless of their sport (team and individual sport athletes) and (2) between team and individual sport athletes within each gender group (male and female).

## RESULTS

### Moral Identity Questionnaire:

Before running the independent samples t-test, validity and reliability of the subscales were tested. Therefore, histograms were created showing the distributions of internalization and symbolization among UA participants (N = 142; N = 140) (see Figure 1&2). A ceiling effect does not seem to be a serious issue in symbolization but does in internalization. Therefore, reliability of each scale was tested again. The widely accepted social science cut-off is that Cronbach's alpha should be 0.70 or higher for a set of items to be considered an internally consistent scale (Rovai et al, 2014). Reliability statistics for internalization resulted in Cronbach's Alpha .541 ( $< 0.70$ ) thus, this scale is not considered reliable (see table 3). Cronbach's Alpha for symbolization however was .850 ( $> 0.70$ ) and therefore, the scale may be considered reliable (see table 3). As the scale for internalization turns out to have a ceiling effect with Cronbach's alpha being smaller than 0.70 (0.541), the scale is not internally consistent and therefore unreliable. In consideration of both results, the dimension of internalization was still included in the following data analysis, however, greater attention was paid to the dimensions of symbolization. Regarding the low alpha level and skewed distribution for internalization, an inter-item analysis was conducted. Results show that the two reverse coded questions 4 and 5 ("I would be ashamed to be a person who has these characteristics", "Having these characteristics is not really important to me") showed low inter-item correlation as they are below 0.20. Therefore, those items seem to be not representative of the same content domain. This may be due to the way the questions are worded as 'ashamed' may be a relatively extreme formulation.

An independent-samples t-test was conducted to compare internalized moral identity for individual sport athletes and team sport athletes. Results show, that there is no significant



difference in the scores for individual sport athlete ( $M= 21.70$ ,  $SD= 4.58$ ) and team sport athlete ( $M= 21.28$ ,  $SD= 4.34$ ) groups;  $t(138)= 0.69$ ,  $p = 0.491$  (see table 4&5). These results suggest that internalized moral identity as assessed by MIQ is not significantly related to type of sport (individual versus team). Specifically, those results suggest that whether playing a team sport or an individual sport, moral identity may not influence or be influenced by it. When comparing between gender, results of the independent samples t-test show, that there is a significant difference in the scores for male ( $M= 20.15$ ,  $SD= 4.55$ ) and female athlete ( $M= 22.07$ ,  $SD= 4.31$ ) groups;  $t(138)= -2.366$ ,  $p = 0.019$ . These results suggest that gender may be related to someone's moral identity. In other words, those results suggest that even female athletes tend to show higher scores on moral identity when compared to male athletes.

#### **Prosocial and Antisocial Behavior in Sports Scale:**

Similar to the MIQ, reliability of the two sub-scales were tested before running the independent samples t-test. Reliability statistics for prosocial opponent and antisocial opponent resulted in Cronbach's Alpha .838 ( $> 0.70$ ) and .890 ( $> 0.70$ ) thus, meaning both scales can be considered reliable (see table 3). In order to understand how far, if at all, individual or team sport may be related to an athlete's behavior towards an opponent, an independent-samples t-test was conducted to compare (1) prosocial behavior and (2) antisocial behavior in individual sport athletes and team sport athletes. Again, there is no significant difference in prosocial behavior scores for individual sport athlete ( $M= 22.82$ ,  $SD= 6.09$ ) and team sport athlete ( $M= 21.55$ ,  $SD= 6.39$ ) groups;  $t(141)= -0.32$ ,  $p = 0.750$  (see table 4&5). However, there is a significant difference in antisocial behavior scores for individual sport athlete ( $M= 9.27$ ,  $SD= 3.18$ ) compared to team sport athlete ( $M= 11.29$ ,  $SD= 4.09$ ) groups;  $t(139)= -3.33$ ,  $p < 0.001$  (see table 4&5), medium effect size;  $d= -0.551$  (see table 6). Thus, results suggest that the group (team or individual) may not be related to prosocial behavior but in fact, on antisocial behavior.

As with moral identity, scores were also compared between male and female genders. Thus, results of the independent samples t-test show, that there is no significant difference in the scores for male ( $M= 20.51$ ,  $SD= 5.49$ ) and female athlete ( $M= 20.86$ ,  $SD= 7.08$ ) groups;  $t(101.5)= -0.318$ ,  $p= 0.751$ ; Equal variance not assumed,  $p= 0.027$ . However, a significant difference has been found in scores for antisocial behavior between male athletes ( $M= 12.76$ ,  $SD= 4.76$ ) and female athletes ( $M= 9.28$ ,  $SD= 2.74$ );  $t(52.9)= 4.44$ ,  $p < 0.001$ ; equal variance not assumed,  $p < 0.001$ . These results suggest that gender may be unrelated to prosocial behavior. However, for antisocial behavior, male athletes reported higher levels of antisocial behavior than female athletes. Specifically, those results suggest that even though there is no difference in prosocial behavior, male athletes tend to show increased antisocial behavior when compared to female athletes.

### **Correlation MI and social behavior**

A Pearson product-moment correlation coefficient was computed to assess the relationship between an athlete's moral identity and their social behavior (prosocial and antisocial) towards their opponent (see table 7). Results showed there was no correlation between moral identity and prosocial behavior,  $r = 0.112$ ,  $n = 140$ ,  $p = 0.188$ . On the other hand, results for MI and antisocial behavior showed a weak negative correlation between the two variables,  $r = -0.238$ ,  $n = 138$ ,  $p = 0.005$ . A scatterplot summarizes the results (see figure 3&4). Overall, there was a weak negative correlation between moral identity and antisocial behavior towards opponents. Decreases in moral identity were correlated with increases in antisocial behavior.

## DISCUSSION

The main aim of this study was to compare differences between team sport athletes and individual sport athletes for (1) moral identity, (2) prosocial and antisocial behavior towards opponents, (3) to consider how moral identity relates to prosocial and antisocial behavior, and (4) to see if there is a difference between gender in terms of moral identity and prosocial/antisocial behavior.

In this investigation of athletes from the University of Alabama and their moral identity as well as their social behavior in sports, differences in antisocial behavior between team sport and individual sport athletes were found, together with a correlation between moral identity and antisocial behavior in general. Statistically significant differences between team sport athletes and individual sport athletes were observed, with team sport athletes reporting more antisocial behavior towards opponents compared to individual sport athletes. Additionally, male athletes reported more antisocial behavior than female athletes, regardless of their sport (whether it was team sport or individual sport). The latter findings align with previous research that focused on gender differences and social behavior in sports. Thus, literature shows, gender differences seem to relate to moral variables such as moral reasoning or behavior considered 'non-sportsperson-like', with male athletes having lower levels of moral reasoning skills and more incidence of antisocial behavior (Bredemeier & Shields, 1986; Conroy et al., 2001; Kavussanu & Roberts, 2001; Kavussanu, Stamp Slade, & Ring, 2009; Shields, et al., 2007). Research by Kavussanu and colleagues on male and female soccer players concurs with the findings of the current study because these authors did not find a difference between the two groups for prosocial behavior, yet males showed greater antisocial behavior than females (Kavussanu, Stamp Slade, & Ring, 2009). Similar findings were reported by Shields et al (2018), who found that female athletes not only demonstrated

less antisocial behavior in sport than male athletes but also reported more prosocial behavior. Even though this was not reported as a significant difference between male and female athletes in the current study, female athletes still scored slightly higher on prosocial behavior than male athletes. In this study, the distribution of male and female athletes within the two groups was almost equal for female athletes, however, more male participants indicated to participate in team sport (27 vs. 15, see table 1). As data analysis has shown, male athletes tend to score higher on antisocial behavior than female athletes. Considering that two-third of the male participants were part of the team sport group may therefore contribute to the statistically significant difference in antisocial behavior between individual and team sport athletes.

Additionally, results showed that lower moral identity scores are associated with greater antisocial behavior towards opponents in general. Those results align with previous findings by Shields et al (2018), as their research with NAIA Student-Athletes revealed a significant negative correlation between moral identity and antisocial behavior. In contrast to my findings however, they also found a positive correlation between moral identity and prosocial behavior. This difference might be due to type of sport which was mostly baseball/softball & basketball. This is relevant because these sports are not as intense or aggressive in nature when compared to soccer or football for example.

Research shows that prosocial behavior in sport is positively related to higher levels of moral identity (Kavussanu et al., 2013) and empathy (Kavussanu & Boardley, 2009; Kavussanu et al., 2013) whereas antisocial behavior is positively linked to hostility and lower moral identity (Kavussanu et al., 2013; Kavussan, Stanger & Ring, 2015). It might seem surprising therefore, that the current study revealed only significant differences between the two groups in terms of antisocial behavior but not prosocial behavior. In other words, greater antisocial behavior towards an opponent is not associated with lower prosocial behavior.

However, in line with Bandura (1999) and Kavussanu & Boardley (2009) this could be because antisocial and prosocial behavior represent two different dimensions. Furthermore, research by Graupensperger et al (2018), specifically investigating this relationship, failed to find any significant associations. Yet, they found that higher prosocial behavior towards teammates was associated with increased antisocial behavior towards opponents. Unfortunately, because the current study did not take the teammate component into account (individual team sport does not involve this component), we only have the component of behavior towards opponents as a comparison. Nevertheless, the explanation Graupensperger and colleagues used for their results is still applicable. Thus, sport in general seems to create a unique environment when it comes to group dynamics as the setting leads to a clear in-group out-group differentiation, where the in-group represents the own team and the out-group the opponent team. Such differentiation often leads to certain behaviors and standards (Graupensperger, Jensen, & Evans, 2018). Simply being a member of a group can often shape someone's behavior towards out-group members (Tajfel, Billig, Bundy, & Flament, 1971). Even so, research by Bruner et al. (2014, 2017) established a relevant association between social identity and behavior in sports. As such, athletes identifying strongly with their team show greater antisocial behavior towards their opponents (Benson et al., 2014, 2017). Considering social identity theory, this is not surprising as individuals strongly associated with a group are said to be more motivated to differentiate themselves and their group from other groups and often hold superior views and behaviors in order to maintain self-esteem or feel more connected to their group members (Tajfel & Turner, 1971). In the case of an athlete, being a part of a sport team, someone might want to dominate the other team and interact more antisocially with out-group members when given the opportunity (Nezlek & Smith, 2005; Tajfel & Turner, 1971). In the case of this research, team sport athletes show greater antisocial behavior towards opponents than individual sport athletes. This might be

because team sport athletes already have their group, their teammates, whereas individual sport athletes lack this component and therefore, may seek their group in their opponents as they identify more with each other than others (do the same sport, experience the same situation, feel the same pain, put in similar effort, etc.). Such group identification has been associated with less antisocial behavior towards group members (Benson, Bruner, & Eys, 2017; Nezlek & Smith, 2005). Reflecting on the results from the current study, perhaps when playing a team sport, an athlete tends to show greater antisocial behavior towards an opponent. However, this direction is based on the previous mentioned research about the influence of social groups on behavior but would need future research to capture the dynamics to get an accurate understanding.

Coming back to idea of antisocial behavior and prosocial behavior as two different dimensions, this would explain the findings from this research. The current study contributes to our understanding of moral identity and social behavior towards opponents in team sport and individual sport athletes and how they are similar but also different from each other. Results indicate that athletes participating in team sports tend to show greater antisocial behavior towards opponents than athletes taking part in individual sports. It can be interpreted that the group aspect that comes with a team may lead to more aggressive or antisocial behavior. However, as the two groups did not show a significant difference in prosocial behavior, it might be that, regardless of group, sports in general influences prosocial behavior towards others. A second factor that might explain those differences between team and individual sport athletes in their social behavior could be the motivational attitude of an athlete. This refers to the orientation of an athlete and whether it is mastery oriented (also referred to as task oriented) or performance oriented (also referred to as ego oriented). In mastery orientation, one's focus lies on personal progress such as skill improvement and displaying maximal effort. It is more about self-improvement and testing one's limits rather

than dominating others. The latter would rather be considered having an ego-orientation / goal orientation. Thus, winning and trying to hold a favorable standing over others is what drives behavior (Ames, 1995, Fry, 2003). Such focus of winning at all costs and demonstrating one's abilities may lead athletes to engage in antisocial behavior towards others. In contrast, a focus on personal growth and cooperation may foster prosocial behavior (Kavussanu, Stamp Slade, & Ring, 2009). In fact, research showed that athletes with a mastery orientation tend to strive for a fair competition and show more empathy and prosocial behavior towards others whereas athletes with high task orientation engage more often in unfair play and antisocial behavior as they focus on themselves at the costs of others (Duda et al., 1991; Kavussanu, 2006; Kavussanu et al., 2006; Miller et al., 2004). One might think that the aspect of competition with others as a part of (competitive) sport is what promotes antisocial behavior. Research, however, suggests this is not necessarily the case as it is not the competition itself but rather an athlete's orientation towards competition that promotes antisocial behavior (Graupensberger et al., 2018).

Even though this is not necessarily the case for each individual sport athlete, they often compete 'on their own' or follow an individualized training plan. Thus, an explanation for the difference in antisocial behavior between individual and team sport athletes may be, that this factor creates a focus on personal progress and mastery orientation rather than performance orientation. Unfortunately, there is little to no research on this comparison, and so we cannot know how influential the group/individual aspect is in terms of mastery versus performance orientation. What research has shown however, is that significant others such as teammates, parents, or coaches are highly influential on an athlete's orientation. Thus, if coaches support a social environment emphasizing social interaction with others and creating a goal orientation, they may lower a team's performance climate and ultimately an athlete's ego orientation. Kavussanu et al. (2009) recommend that coaches should avoid punishing

their athletes when making mistakes, but also avoid favoritism or special recognition of the best player since such practices may impact the motivational climate of a team negatively and subsequently increase antisocial behavior. By stressing the importance of each and every one equally, a coaches can establish a supportive team culture and influence a team's motivational climate positively. Last but not least, by include empathy training activities (i.e., letter writing, videoclips of real-match situations, affirmation cards, etc.) coaches can enable their athletes to support and influence each other positively (Ames, 1995, Kavussanu et al., 2009). Stressing the importance of everyone on a team as well as recognizing progress equally may promote positive and social behavior within a team itself but also towards others. Since research and previous studies have shown, team sport athletes tend to show greater antisocial behavior towards others, those coaching team sport athletes may need pay additional attention on developing a cooperative mindset and value fairness, sportsmanship, mastery orientation, etc. in order to lower antisocial behavior.

Returning to the relationships between lower moral identity and increased antisocial behavior, raising an athlete's moral identity could also be way to decrease antisocial behavior. As mentioned earlier, studies show adolescence as a significant stage for moral identity formation (Colby & Damon, 1995; Hart et al., 1999, Leonard, 2010). As most of the participants in this study is still in the stage of late adolescence (18-21), it is important to understand the influences on moral identity. This being said, several factors such as personality, self-perception, emotions, social involvement and relationships have an influence on one's development of moral identity. We know significant others have a huge influence on moral identity development, specifically parents and family environment (Hart et al., 1999, Leonard, 2010) as well as social environment, neighborhoods, schools, cities, etc. (Atkins & Hart, 2003; Hart et al., 1998; Hart & Matsuba, 2009). Thus, (team) sport can be seen as another social influence and opportunity for adolescents to get involved. It is the relationships



with teammates and the interaction that influences the development of moral identity. However, it would be important that those interactions and relationships are positive and of prosocial nature. Thus, it can have a positive influence on the development of social skills, a sense for cooperation rather than competition, overall values and beliefs, and ultimately increase one's moral identity (Leonard, 2010). Since authority figures such as parents, coaches, or older peers are a great influence on an adolescent, it is important that they are aware of their role and responsibility. A coach giving feedback on someone's behavior and actions may lead an athlete to do self-reflection. Components involved in this process such as emotions, insights, self-appraisal, etc. can transform into a comprehensible moral identity (Damon, 2000). Therefore, it would be important to make coaches and parents aware not only of their influence, but responsibility on forming an athlete's moral identity in order to ultimately lower antisocial behavior.

If we trust those experts claiming that moral identity is developed through morally significant social interaction with others which may be respect for authority and others, rule-following, truthfulness, etc. (Damon, 2000) it appears to be surprising that team sport athletes did not score higher than individual sport athletes regarding prosocial behavior. This may be that even though the group as a social influence can have positive effects on moral identity development or prosocial behavior but may also cause exposure to negative influence. However, this is just an assumption based on the results obtained and a literature review of similar studies and would require specific research in the future in order to clarify that assumption. Overall, there seems to be a relationship between the three variables of moral identity, social environment, and personal orientation/social behavior. Thus, future research may focus on the relationship and what influence the variables have on each other.

## CONCLUSION

This research aimed to differentiate moral identity and social behavior of athletes based on the category of sport (team versus individual). Four different research questions were developed to understand (1) moral identity in team sport athletes and individual sport athletes, (2) prosocial and antisocial behavior towards opponents in team sport athletes and individual sport athletes, (3) a relationship between moral identity and prosocial or antisocial behavior, and (4) differences in moral identity and prosocial/antisocial behavior between male and female athletes. Based on a quantitative analysis of moral identity and social behavior scores, it can be concluded that there is not difference between team sport athletes and individual sport athletes in terms of moral identity and prosocial behavior towards opponents. However, a difference between the two groups has been found in terms of antisocial behavior with team sport athletes showing greater levels of antisocial behavior than individual sport athletes. Finally, a weak negative correlation between moral identity and antisocial behavior was found. The results indicate that lower levels of moral identity are related to greater levels of antisocial behavior towards opponents. By analyzing moral identity and social behavior, this thesis has shown how team sports or individual sports are directly or indirectly related to moral identity and, specifically, antisocial behavior.

### **Limitations**

Even though significant differences between the two groups were found for antisocial behavior, the categorization might be quite broad. This being said, football or soccer are known to be much more violent in nature than volleyball, rowing or gymnastics, simply due to the fact that those involve little to no physical contact with the opponent in contrast to soccer or football. To take it even further, someone might view fouling as antisocial behavior even though in some sports such is a part of the game itself. Another reason why we may fail

to see a significant difference between the two sports could be the mindset that is created by the college sport setting. Based on the responses of participants, there was no difference between team sport and individual sport athletes regarding the question of how much they feel like being a part of a team (see table 1). This might mean that we cannot draw a clear line between team sport and individual sport, even though they are different (by definition). But since the social context is understood to be quite powerful in terms of moral identity formation and behavior, it may be just as powerful when it comes to feelings of belongingness and community. Differences in antisocial behavior could be simply explained by the fact that team sport athletes have much more opportunity to behave antisocial (Kavussanu et al, 2006). Another factor to keep in mind is the time when data were collected. As different sports have different seasons in college (fall season, spring season), responses may differ not only based on how often someone competes (see table 1), but how long ago the last competition has been. Thus, someone who last competed more than six months ago may or may not recall the same behavior as someone who has competed more recently. Furthermore, using questionnaires may result in inaccurate measures of both – moral identity as well as social behavior. The internalization dimension of the MIQ has clearly shown that people tend to view themselves as someone with high moral standards / identity whether that might be accurate or rather to possibly make them feel better about themselves. As morality and high moral standards are values by society it would not be surprising that someone would like to think of themselves as someone with those standards. As mentioned before, it may be hard to differentiate between all the sports since each sport has its own culture and typical behaviors or rules of the game. For example, in soccer, congratulating an opponent for good play seems to be a very rare occurrence (Kavussanu et al, 2006), whereas it is part of the game and culture to congratulate the opponent player in tennis. Additionally, helping someone off the floor in soccer may be a much more frequent or common practice, as it does

not only happen more often that someone happens to be on the ground, but also such an action of help /prosocial behavior would in fact be a disqualifying factor in the sport of track and field (i.e., leaving their lane) (World Athletics). Such factors make prosocial behavior then dependent on the context of the sport rather than the persons moral identity. Even though the PABSS was alternated to be applicable to each sport, it might still not give an equally accurate measure of social behavior for each sport, considering the previous mentioned differences. Even though there is a significant difference between team and individual sport athletes in antisocial behavior, the question remains whether it is the type of sport influencing behavior or someone's personality, moral identity, and social behavior specifically, influencing the type of sport one chooses to do.

### **Future research suggestions**

Having the above-mentioned limitations in mind, future research may compare moral identity and social behavior of each sport separately to get a more accurate understanding of the interplay between type of sport, MI, and prosocial and antisocial behavior. It might also be taken into consideration how the culture of one sport (e.g., contact team sport versus non-contact team sport) compares to that of another to better understand and interpret results. Furthermore, future research in this area might be conducted in a setting where team sport and individual sport are more contrary settings (e.g., no college athletes, athletes practicing privately, European countries where individual sport is much more individualized than in the US, etc.). Thirdly, conducting in-depth qualitative research would be interesting in order to be able to take an athlete's circumstances like the social environment, parental support, team cohesion, a coaches' behavior, etc. into account. Therefore, a study involving actual observation of behavior during a competition, or a game may deliver a more accurate picture. Finally, future research might develop a scale that is more generalizable and fitting for all sports equally in order to measure prosocial and antisocial behavior appropriate/accurate.

## **IMPLICATION**

The present study demonstrated that there is a difference between team sport athletes and individual sport athletes in terms of opponent directed antisocial behavior. Knowing about the factors influencing antisocial behavior, might allow coaches and teammates to possibly lower such behavior. For instance, making their athletes aware of certain group dynamics or the power of resisting conformity may help reducing in-group-out-group bias. Of course, it must be taken into consideration that the nature of competitive sports comes with a certain differentiation between the self and others, however, antisocial behavior towards an opponent might be regulated nevertheless by developing social-cognitive skills of their athletes (e.g., moral reasoning, perspective taking, social interaction, etc.) (Killen et al., 2011; Rutland et al., 2015). This research also highlighted the relationship between lower moral identity and increased opponent directed antisocial behavior. Knowing about the factors that develop moral identity and the power of social groups can help developing an athlete's moral identity and possibly lowering their antisocial behavior.

## REFERENCES

- Abdullahi, I., & Kumar, P. (2016). Gender Differences in Prosocial Behaviour. *International Journal of Indian Psychology*, 3, 171-175. 10.25215/0304.017. doi:10.25215/0304.017
- Ames, C. (1995). Achievement goals, motivational climate, and motivational processes. In G. C. Roberts (Ed.), *Motivation in sport and exercise*. (pp. 161–176). Human Kinetics Books.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Arnold, P. J. (2001). Sport, Moral Development, and the Role of the Teacher: Implications for Research and Moral Education. *Quest*, 53(2), 135-150. doi:10.1080/00336297.2001.10491734
- Atkins, R., & Hart, D. (2003). Neighborhoods, adults, and the development of civic identity in urban youth. *Applied Developmental Science*, 7(3), 156–164. [https://doi.org/10.1207/S1532480XADS0703\\_6](https://doi.org/10.1207/S1532480XADS0703_6)
- Aquino, K., & Reed, A., II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423–1440
- Bailey, R. P. (2005). Evaluating the relationship between physical education, sport and social inclusion. *Educational Review*, 57:1, 71-90. Retrieved from <http://dx.doi.org/10.1080/0013191042000274196>
- Bailey, R. P. (1999) Play, health and physical development, in: T. David (Ed.) *Young children learning* (London, Paul Chapman Publishers).
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3, 193–209. [http://dx.doi.org/10.1207/s15327957pspr0303\\_3](http://dx.doi.org/10.1207/s15327957pspr0303_3)
- Barriga, A., Morrison, E., Liao, A., & Gibbs, J. (2001). Moral Cognition: Explaining the Gender Difference in Antisocial Behavior. *Merrill-Palmer Quarterly*, 47(4), 532-562. Retrieved April 9, 2021, from <http://www.jstor.org/stable/23093698>
- Baumeister, R.F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*. 91(1):3– 26.
- Benson, A. J., Bruner, M. W., & Eys, M. (2017). A social identity approach to understanding the conditions associated with antisocial behaviors among teammates in female teams. *Sport, Exercise, and Performance Psychology*, 6(2), 129–142. <https://doi.org/10.1037/spy0000090>
- Beller, J. (2002). Positive Character Development in School Sport Programs. ERIC Digest. *ERIC digest*. Retrieved from ED477729.pdf
- Bonfiglio, R. A. (2011). Bottom line: Intercollegiate athletic programs deepening their educational impact. *About Campus*, 16(3), 29-32.
- Bonn, K. (2014, July 4). *David Luiz epitomizes sportsmanship by consoling, applauding a crying James Rodriguez*. NBC Sports. David Luiz epitomizes sportsmanship by consoling, applauding a crying James Rodriguez - ProSoccerTalk | NBC Sports

- Bredemeier, B.J., & Shields, D.L. (1986). Athletic aggression: An issue of contextual morality. *Sociology of Sport Journal*, 3(1), 15–28.  
<https://journals.humankinetics.com/view/journals/ssj/3/1/article-p15.xml>
- Bronk, K. C. (2011). The role of purpose in life in healthy identity formation: A grounded model. *New Directions for Youth Development*, 2011(132), 31–44. doi:10.1002/yd.426
- Bruner, M. W., Boardley, I. D., Allan, V., Root, Z., Buckham, S., Forrest, C., & Côté, J. (2017). Examining social identity and intrateam moral behaviors in competitive youth ice hockey using stimulated recall. *Journal of Sports Sciences*, 35, 1963–1974.  
<http://dx.doi.org/10.1080/02640414.2016.1243797>
- Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise*, 15, 56 – 64.  
<http://dx.doi.org/10.1016/j.psychsport.2013.09.003>
- Burton, L., & Welty Peachey, J. (2013). The Call for Servant Leadership in Intercollegiate Athletics. *Quest*, 65(3), 354-371. <https://doi.org/10.1080/00336297.2013.791870>
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88(1), 1–45. <https://doi.org/10.1037/0033-2909.88.1.1>
- Cakirpaloglu, S., Lemrova, S., Kvintova, J., & Vévodová, Š. (2016). CONFORMITY, PEER PRESSURE, POPULARITY AND RISK BEHAVIOR AMONG ADOLESCENTS. 4078-4086. 10.21125/iceri.2016.0196.
- Calvo, A. J., González, R., & Martorell, M. C. (2001). Variables related to prosocial behavior in childhood and adolescence: Personality, self-concept and gender, *Journal for the Study of Education and Development*, 24:1, 95-111, DOI: [10.1174/021037001316899947](https://doi.org/10.1174/021037001316899947)
- Carlo, G., PytlikZillig, L. M., Roesch, S. C., & Dienstbier, R. A. (2009). The elusive altruist: The psychological study of the altruistic personality. In D. Narvaez & D. Lapsley (Eds.), *Personality, identity, and character: Explorations in moral psychology* (pp. 271–294). New York: Cambridge University Press
- Clarke, J. (2018). Effects of Athletics on Character and Moral Development of Collegiate Athletes. *Kinesiology, Sport Studies, and Physical Education Synthesis Projects*. 52.
- Colby, A., & Damon, W. (1995). The development of extraordinary moral commitment. In M. Killen & D. Hart (Eds.), *Morality in everyday life: Developmental perspectives* (pp. 342–370). Cambridge University Press.
- Conn, W. E. (1977). Erik Erikson: The Ethical Orientation, Conscience and the Golden Rule. *The Journal of Religious Ethics*, 5(2), 249–266. <http://www.jstor.org/stable/40017730>
- Conroy, D. E., Silva, J. M., Newcomer, R. R., Walker, B. W., & Johnson, M. S. (2001). Personal and participatory socializers of the perceived legitimacy of aggressive behavior in sport. *Aggressive Behavior*, 27, 405–418. <https://doi.org/10.1002/ab.1026>
- Damon, W. (2000). Setting the stage for the development of wisdom: Self-understanding and moral identity during adolescence. In W. Brown (Ed.), *Understand wisdom* (pp. 339-360). Radnor, PA: Templeton Foundation
- Desensi, J. T. (2014). Sport: An Ethos Based on Values and Servant Leadership. *Journal of Intercollegiate Sport*, 7(1), 58-63.

- Diekhoff, G. (1992). *Statistics for the Social and Behavioral Science Sciences: Univariate, Bivariate, Multivariate*. Dubuque: Wm. C. Brown
- Dong, M., van Prooijen, J.W., van Lange, P.A.M. (2019). Self-enhancement in moral hypocrisy: Moral superiority and moral identity are about better appearances. *PLOS ONE* 14(7): e0219382. <https://doi.org/10.1371/journal.pone.0219382>
- Duda, J. L., Olson, L. K., & Templin, T. J. (1991). The relationship of task and ego orientation to sportsmanship attitudes and the perceived legitimacy of injurious acts. *Research Quarterly for Exercise and Sport*, 62(1), 79-87.
- Duda, J. L., & Whitehead, J. (1998). Measurement of goal perspectives in the physical domain. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 21–48). Morgantown, WV: Fitness Information Technology.
- Dunkel, C., & Anthis, K. (2001). The role of possible selves in identity formation: A short-term longitudinal study. *Journal of Adolescence*, 24(6), 765-776. doi:10.1006/jado.2001.0433
- Eisenberg, Nancy & Miller, Paul. (1987). The Relation of Empathy to Prosocial and Related Behaviors. *Psychological bulletin*. 101. 91-119. 10.1037/0033-2909.101.1.91. DOI: 10.1037/0033-2909.101.1.91
- Families of Jesse Owens, Lutz Long to Unite as World Championships* (2009, August 5). World Athletics. Retrieved April 7, 2021, from Families of Jesse Owens, Luz Long to unite at World Championships | NEWS | World Athletics
- Ferris, K., Vest Ettekal ,A.,Agans, J., Burkhard, B. (2015). Character Development Through Youth Sport: High School Coaches' Perspectives about a Character-based Education Program. Retrieved from Character Development Through Youth Sport: High School Coaches' Perspectives about a Character-based Education Program | Ferris | Journal of Youth Development (pitt.edu)
- Fry, M. D., & Newton, M. (2003). Application of achievement goal theory in an urban youth tennis setting. *Journal of Applied Sport Psychology*, 15(1), 50–66. <https://doi-org.libdata.lib.ua.edu/10.1080/10413200305399>
- Funk, C. (2017). *Elements of Moral Functioning in Sport and School. Dissertations. 709.* <https://irl.umsl.edu/dissertation/709>
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366.
- Graupensperger, S. A., Jensen, C. J., & Evans, M. B. (2018). A meta-analytic review of studies using the Prosocial and Antisocial Behavior in Sport Scale: Associations among intergroup moral behaviors. *Sport, Exercise, and Performance Psychology*, 7(2), 186–204. <https://doi-org.libdata.lib.ua.edu/10.1037/spy0000121.supp>
- Gutierrez, M. & Gonzalez-Herrero, E. (1995). Motivos por los que los jóvenes practican Actividad Física y Deportiva: Análisis de una muestra de estudiantes universitarios. In: *II Congreso de Ciencias del Deporte, la Educación Física y la Recreación. Lleida: INEF;*
- Guzman, T. (2007). Friendship, Peer Influence and Peer Pressure during the Teen Years. *University of Nebraska*. Retrieved from g1751.indd (unl.edu)



- Hardy, Sam & Carlo, Gustavo. (2011). Moral Identity: What Is It, How Does It Develop, and Is It Linked to Moral Action?. *Child Development Perspectives*, 5, 212 - 218. 10.1111/j.1750-8606.2011.00189.x.
- Hart, D. (2005). Adding Identity to the Moral Domain. *Human Development*, 48(4), 257–261. <https://www.jstor.org/stable/26763843>
- Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a context for the development of moral identity in adolescence. *Journal of Social Issues*, 54, 513–530. <https://doi.org/10.1111/j.1540-4560.1998.tb01233.x>
- Hart, D., Atkins, R., & Ford, D. (1999). Family influences on the formation of moral identity in adolescence: Longitudinal analyses. *Journal of Moral Education*, 28, 375–386, <https://doi.org/10.1080/030572499103142>
- Hart, D., & Fegley, S. (1995). Prosocial behavior and caring in adolescence: Relations to self-understanding and social judgment. *Child Development*, 66, 1346– 1359. <https://doi.org/10.2307/1131651>
- Hart, D., & Matsuba, M. (2009). Urban Neighborhoods as Contexts for Moral Identity Development. In D. Narveaz & D. Lapsley (Eds.), *Personality, Identity, and Character: Explorations in Moral Psychology* (pp.214-231). Cambridge: Cambridge University Press. doi:10.1017/VBO9780511627125.010
- Heinzen, T. & Goodfried, W. (2018). Social Psychology, *The SAGE edge*. Retrieved from 07\_heinzen\_social\_influence\_0.pdf (sagepub.com)
- Hendry, L. B., Shucksmith, J., Love, J. & Glendenning, A. (1994) *Young people's leisure and lifestyles* (London, Routledge).
- Hodge, K., & Gucciardi, D. F. (2015). Antisocial and Prosocial Behavior in Sport: The Role of Motivational Climate, Basic Psychological Needs, and Moral Disengagement. *Journal of sport & exercise psychology*, 37(3), 257–273. <https://doi.org/10.1123/jsep.2014-0225>
- Jimenez, J. A., Nawrocki, L., Hill, P.L. & Lapsley, D.K. (2008) Development and Validation of a Moral Identity Q-Sort. *University of Notre Dame*. Retrieved from \*MPA Q-sort presentation (nd.edu)
- Kavussanu, M. (2006). Motivational predictors of prosocial and antisocial behavior in football. *Journal of Sports Sciences*, 24(6), 575-88. doi: 10.1080/02640410500190825.
- Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behavior in sport scale. *Journal of Sport and Exercise Psychology*, 31, 97–117. <http://dx.doi.org/10.1123/jsep.31.1.97>
- Kavussanu, M., Ring, C., & Kavanagh, J. (2015). Antisocial behavior, moral disengagement, empathy and negative emotion: A comparison between disabled and able-bodied athletes. *Ethics & Behavior*, 25(4), 297–306. <https://doi.org/10.1080/10508422.2014.930350>
- Kavussanu, M., & Roberts, G. C. (2001). Moral Functioning in Sport: An Achievement Goal Perspective. *Journal of Sport and Exercise Psychology*, 23, 37-54. <https://doi.org/10.1123/jsep.23.1.37>
- Kavussanu, M., Seal, A. R., & Phillips, D. R. (2006). Observed prosocial and antisocial behaviors in male soccer teams: Age differences across adolescence and the role of

- motivational variables. *Journal of Applied Sport Psychology*, 18, 326–344.  
<http://dx.doi.org/10.1080/10413200600944108>
- Kavussanu, M., Stamp, R., Slade, G.F., & Ring, C. (2009). Observed Prosocial and Antisocial Behaviors in Male and Female Soccer Players. *Journal of Applied Sport Psychology*, 21, S62 - S76. DOI: 10.1080/10413200802624292
- Kavussanu, M and Stanger, N (2017) Moral Behavior. *Current Opinion in Psychology*, 16, pp. 185-192. DOI: <https://doi.org/10.1016/j.copsyc.2017.05.010>
- Kavussanu, M., Stanger, N., & Boardley, I. D. (2013). The Prosocial and Antisocial Behaviour in Sport Scale: Further evidence for construct validity and reliability. *Journal of Sports Sciences*, 31, 1208–1221. Retrieved from 10.1080/02640414.2013.775473
- Kavussanu, M., Stanger, N., & Ring, C. (2015). The effects of moral identity on moral emotion and antisocial behavior in sport. *Sport, Exercise, and Performance Psychology*, 4, 268–279. <https://doi.org/10.1037/spy0000040>
- Kohlberg, L. (1981). *The philosophy of moral development: Moral stages and the idea of justice*. San Francisco: Harper & Row.
- Kundu, P., & Cummins, D. D. (2013). Morality and conformity: The Asch paradigm applied to moral decisions. *Social Influence*, 8(4), 268–279.  
<https://doi.org/10.1080/15534510.2012.727767>
- Lapsley, D.K., & Narvaez, D. (2004). A Social-cognitive approach to the moral personality. In D. K. Lapsley & D. Narvaez (Eds.), *Moral development, self and identity* (pp. 189–212). Mahwah, NJ: Erlbaum.
- Lay, Jennifer & Hoppmann, Christiane. (2015). Altruism and Prosocial Behavior. *Encyclopedia of Geropsychology*. 10.1007/978-981-287-080-3\_69-1.  
 DOI: 10.1007/978-981-287-080-3\_69-1
- Leonard, R. J. (2010). *Moral identity in adolescence: A literature review* (Order No. 3406256). Available from ProQuest Dissertations & Theses Global. (288243404). Retrieved from <https://www.proquest.com/dissertations-theses/moral-identity-adolescence-literature-review/docview/288243404/se-2?accountid=14472>
- Maslow, A. H. (1962). *Toward a psychology of being*. Princeton: D. Van Nostrand Company.
- Maxwell, J. P., 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.  
<https://doi.org/10.1016/J.PSYCHSPORT.2008.07.010>
- Miller, B., Roberts, G. C., & Ommundsen, Y. (2004). Effect of motivational climate on sportpersonship among competitive male and female football players. *Scandinavian Journal of Medicine and Science in Sports*, 14, 193 – 202
- Nezlek, J., & Smith, C. (2005). Social identity in daily social interaction. *Self and Identity*, 4, 243– 261. <http://dx.doi.org/10.1080/13576500444000308>
- Pennington, C. G. (2017). Moral Development and Sportsmanship in Physical Education and Sport. *Journal of Physical Education, Recreation & Dance*, 88(9), 36-42.

- Rovai, A. P., Baker, J. D., & Ponton, M. K. (2014). *Social Science Research Design and Statistics*. Chesapeake, VA: Watertree Press LLC.
- Rutland, A., Hitti, A., Mulvey, K. L., Abrams, D., & Killen, M. (2015). When Does the In-Group Like the Out-Group? Bias Among Children as a Function of Group Norms. *Psychological Science*, 26(6), 834–842. <https://doi.org/10.1177/0956797615572758>
- Sabo, D. & Veliz, P. (2008). *Go Out and Play: Youth Sports in America*. East Meadow, NY: Women's Sports Foundation.
- Sage, L., Kavussanu, M., & Duda, J. (2006). Goal orientations and moral identity as predictors of prosocial and antisocial functioning in male association football players. *Journal of Sports Sciences*, 24, 455–466.
- Shields, D.L., Bredemeier, B.L., LaVoi, N.M., & Power, F.C. (2005). The sport behavior of youth, parents, and coaches: The good, the bad, and the ugly
- Shields, D. L., Funk, C. D., & Bredemeier, B. L. (2018). Relationships among moral and contesting variables and prosocial and antisocial behavior in sport. *Journal of Moral*
- Shields, D. L., LaVoi, N. M., Bredemeier, B. L., & Power, F. C. (2007). Predictors of poor sportspersonship in youth sports: Personal attitudes and social influences. *Journal of Sport and Exercise Psychology*, 29(6), 747-762. <https://doi.org/10.1123/jsep.29.6.747>
- Sofia, R., & Cruz, J. (2017). Unveiling anger and aggression in sports : the effects of type of sport, competitive category and success level.
- Stets, J. E., & Carter, M. J. (2012). A Theory of the Self for the Sociology of Morality. *American Sociological Review*, 77(1), 120–140. <https://doi.org/10.1177/0003122411433762>
- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43(6), 1531–43. <http://doi.org/10.1037/0012-1649.43.6.1531>
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology*, 1, 149 –178. <http://dx.doi.org/10.1002/ejsp .2420010202>
- Van der Graaff, J., Carlo, G., Crocetti, E. *et al.* Prosocial Behavior in Adolescence: Gender Differences in Development and Links with Empathy. *J Youth Adolescence* 47, 1086–1099 (2018). <https://doi.org/10.1007/s10964-017-0786-1>
- Vuori, I, Fentem, P., Svoboda, B., Patriksson, G., Andreff, W. & Weber, W. (1995) The significance of sport for society: health, socialisation, economy (Strasbourg, Council of Europe)
- Vučković, Igor & Gadzic, Aleksandar & Sekulic, Zeljko & Kukrić, Aleksandar. (2012). Conformity of athletes: roles of type of sports, gender and competition experience. *HOMO SPORTICUS*. 14. 12-16.
- Weiss, M. R., & Bredemeier, B. J. (1990). Moral development in sport. *Exercise and Sport Sciences Reviews*, 18, 331–378

APPENDIX: TABLES

Table 1

*Demographics of participants*

		Count individual	Count team	% Individual	% Team	Mean	SD
Group		62	80	43.7%	56.3%		
Class		62	80	43.7%	56.3%		
	Freshman	9	27	14.5%	33.8%		
	Sophomore	9	12	14.5%	15.0%		
	Junior	13	16	21.0%	20.0%		
	Senior	16	14	25.8%	17.5%		
	Graduate Student	15	11	24.2%	13.8%		
age (team)			80		56.3%	21	1
Age (individual)		62		43.7%		23	8
Age	18-20 years	27	49	43.5%	61.3%		
	21-23 years	24	23	38.7%	28.7%		
	24+ years	11	8	17.7%	10.0%		
Gender	Male	15	27	24.2%	33.8%		
	Female	47	52	75.8%	65.0%		
	Non-binary	0	1	0.0%	1.3%		
Ethnicity	White	49	64	79.0%	80.0%		
	African American	9	11	14.5%	13.8%		
	Asian	1	3	1.6%	3.8%		
	Other	3	2	4.8%	2.5%		
International student?	Yes	14	3	22.6%	3.8%		
	No	48	77	77.4%	96.3%		
Student-Athlete at UA	Yes	47	39	75.8%	48.8%		
	No	15	41	24.2%	51.2%		
level of experience		62	80	43.7%	56.3%		
	(1) Beginner	1	3	1.6%	3.8%		
	(2) Intermediate	19	16	30.6%	20.0%		
	(3) Advanced	42	61	67.7%	76.3%		

How often do you compete		62	80	43.7%	56.3%
Never		2	0	3.2%	0.0%
Sometimes		8	18	12.9%	22.5%
About half the time		7	4	11.3%	5.0%
Most of the time		24	28	38.7%	35.0%
Always		21	30	33.9%	37.5%
How much do you feel as a part of a team?		62	80	43.7%	56.3%
1 (not at all)		4	0	6.5%	0.0%
2		0	1	0.0%	1.3%
3		14	10	22.6%	12.5%
4		11	26	17.7%	32.5%
5 (at all)		33	43	53.2%	53.8%

Table 2

*Distribution of sports*

	Count	%
Volleyball	9	6.3%
Baseball / Softball	14	9.9%
Soccer	19	13.4%
Golf	4	2.8%
Football	11	7.7%
Basketball	13	9.2%
Track & Field / XC	34	23.9%
Cheerleading	8	5.6%
Swimming	10	7.0%
Gymnastics	1	0.7%
Tennis	9	6.3%
Rowing	4	2.8%
Other (individual)	6	4.2%

Table 3

*Reliability Statistics*

Scale	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
MIQ Internalization	.541	.579	7
MIQ Symbolization	.850	.852	6
PABSS Prosocial Opponent	.838	.842	7
PABSS Antisocial Opponent	.890	.899	9

Table 4

*Group Statistics*

	Group	N	Mean	Std. Deviation	Std. Error Mean
MIQ_Int	Individual	61	32.279	2.794	.358
	Team	80	31.438	3.748	.419
MIQ_sym	Individual	60	21.700	4.582	.592
	Team	79	21.279	4.338	.488
PABSS_PO	Individual	62	22.823	6.088	.773
	Team	80	21.550	6.386	.714
PABSS_AO	Individual	62	9.274	3.184	.404
	Team	78	11.295	4.013	.454

Table 5

*Independent Samples t-test*

		Sig.	t	df	Mean Difference Two-Sided p
MIQ_Int	Equal variances assumed	.086	1.469	139	.144
MIQ_sym	Equal variances assumed	.518	.554	137	.581
PABSS_PO	Equal variances assumed	.682	1.202	140	.231
PABSS_AO	Equal variances assumed	.030	-3.236	138	.002
	Equal variances not assumed		-3.322	138	.001

Table 6

*Independent Samples Effect Sizes*

		Standardizer <sup>a</sup>	Point Estimate	95% Confidence Interval	
				Lower	Upper
MIQ_Int	Cohen's d	3.369	.250	-.085	.584
MIQ_sym	Cohen's d	4.445	.095	-.241	.430
PABSS_PO	Cohen's d	6.258	.203	-.129	.535
PABSS_AO	Cohen's d	3.670	-.551	-.889	-.210

a. The denominator used in estimating the effect sizes.  
Cohen's d uses the pooled standard deviation.

Table 7

*Pearson's Correlation*

		MIQ_Int	MIQ_sym	PABSS_PO	PABSS_AO
MIQ_Int	Pearson	1	.440**	.104	-.299**
	Correlation				
	Sig. (2-tailed)		<.001	.221	<.001
	N	141	139	141	139
MIQ_sym	Pearson	.440**	1	.162	-.236**
	Correlation				
	Sig. (2-tailed)	<.001		.057	.005
	N	139	139	139	137
PABSS_PO	Pearson	.104	.162	1	-.119
	Correlation				
	Sig. (2-tailed)	.221	.057		.160
	N	141	139	142	140
PABSS_AO	Pearson	-.299**	-.236**	-.119	1
	Correlation				
	Sig. (2-tailed)	<.001	.005	.160	
	N	139	137	140	140

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 8

*Moral Identity Questionnaire (MIQ) by Aquino and Reed (2002) - J Pers Soc Psychol*

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Characteristics that may describe a person:

Caring, Compassionate, Fair, Friendly, Generous, Hardworking, Helpful, Honest, Kind

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1. It would make me feel good to be a person who has these characteristics.
2. Being someone who has these characteristics is an important part of who I am.
3. A big part of my emotional well-being is tied up in having these characteristics.
4. I would be ashamed to be a person who has these characteristics.\*
5. Having these characteristics is not really important to me.\*
6. Having these characteristics is an important part of my sense of self.
7. I strongly desire to have these characteristics.
8. I often buy products that communicate the fact that I have these characteristics.
9. I often wear clothes that identify me as having these characteristics.
10. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.
11. The kinds of books and magazines that I read identify me as having these characteristics.
12. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
13. I am actively involved in activities that communicate to others that I have these characteristics.

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\*Reverse coded



Table 9

*The prosocial and antisocial behavior in sports scale, original and modified version*

<i>The prosocial and antisocial behavior in sport scale</i>	<i>Modified version of the prosocial and antisocial behavior in sport scale</i>
I encouraged a teammate (PT)	I encouraged an opponent (PO)
I congratulated a teammate for good play (PT)	I congratulated an opponent for good play (PO)
I gave positive feedback to a teammate (PT)	I gave positive feedback to an opponent (PO)
I gave constructive feedback to a teammate (PT)	I gave constructive feedback to an opponent (PO)
I helped an injured opponent (PO)	I helped an injured opponent (PO)
I asked to stop play when an opponent was injured (PO)	I helped an injured opponent (PO)
I helped an opponent off the floor (PO)	I asked to stop play when an opponent was injured (PO)
I verbally abused a teammate (AT)	I helped an opponent off the floor/court/out the pool (PO)
I swore at a teammate (AT)	I verbally abused an opponent (AO)
I argued with a teammate (AT)	I swore at an opponent (AO)
I criticized a teammate (AT)	I argued with an opponent (AO)
I showed frustration at a teammate's poor play (AT)	I tried to injure an opponent (AO)
I tried to injure an opponent (AO)	I tried to wind up <sup>a</sup> an opponent (AO)
I tried to wind up <sup>a</sup> an opponent (AO)	I intentionally distracted an opponent (AO)
I deliberately fouled an opponent (AO)	I intentionally broke the rules of the game (AO)
I intentionally distracted an opponent (AO)	I physically intimidated an opponent (AO)
I retaliated after a bad foul (AO)	I criticized an opponent (AO)
I intentionally broke the rules of the game (AO)	
I physically intimidated an opponent (AO)	
I criticized an opponent (AO)	

AO = antisocial opponent; AT = antisocial teammate; PO = prosocial opponent; PT = prosocial teammate; actual range of all items was 1–5.<sup>a</sup>Winding up an opponent means physically or verbally taunting him/her to cause distraction or provoke a punishable reaction.

APPENDIX: FIGURES

Figure 1

*Histogram showing the distribution of internalization*

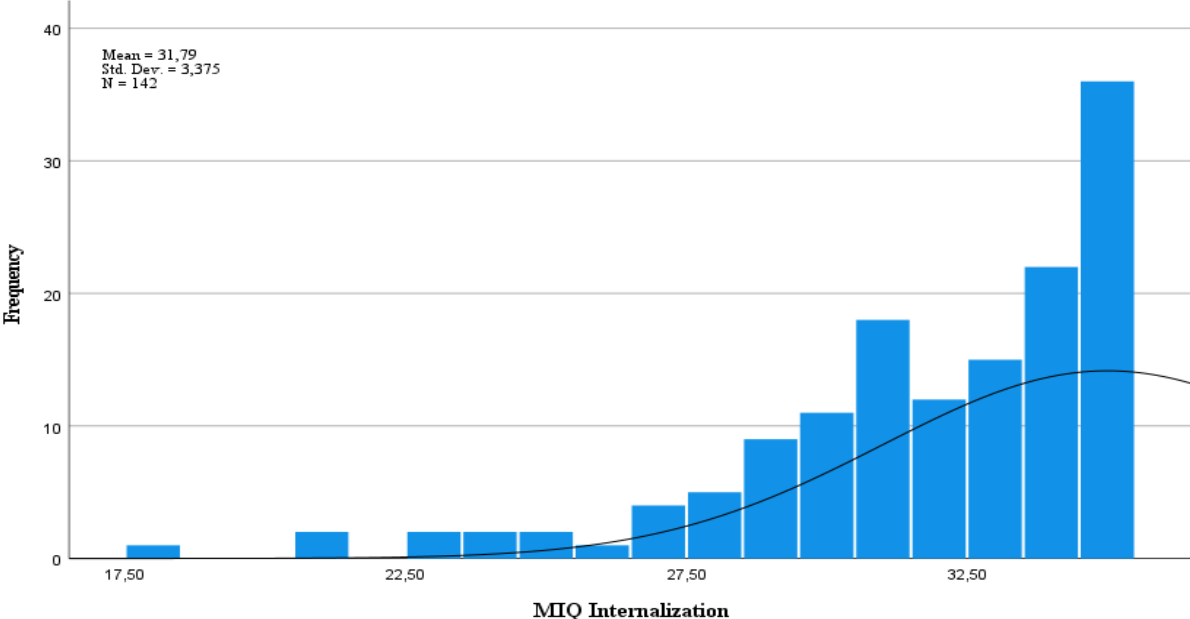


Figure 2

*Histogram showing the distribution of symbolization*

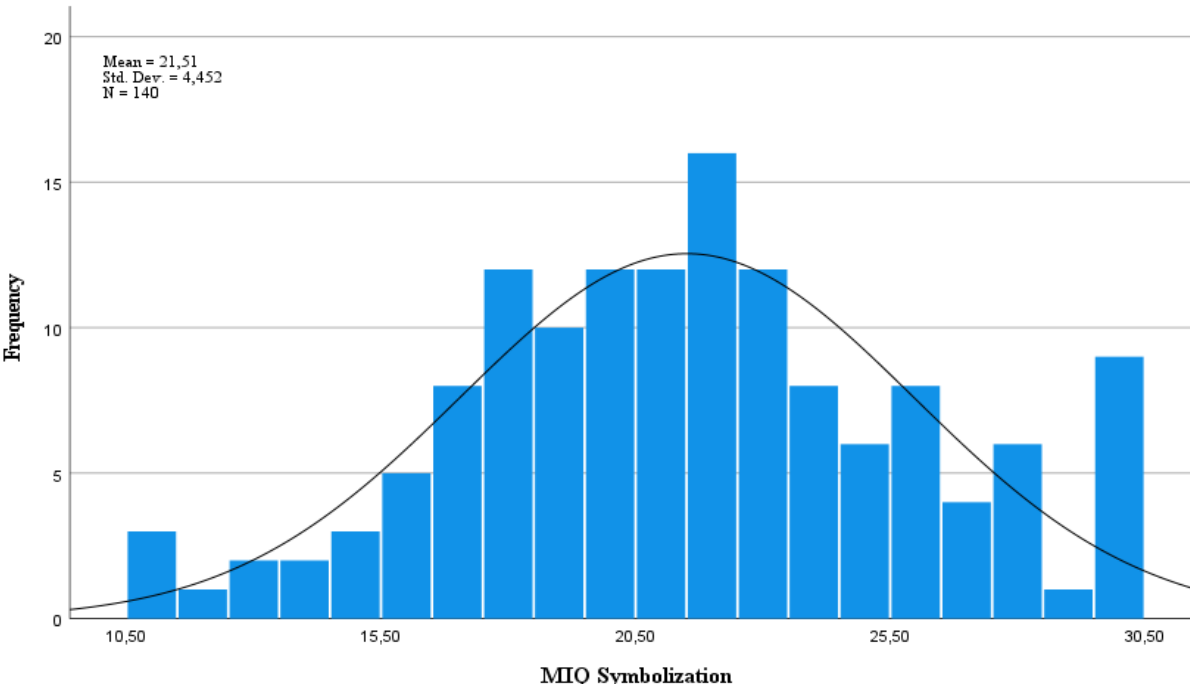
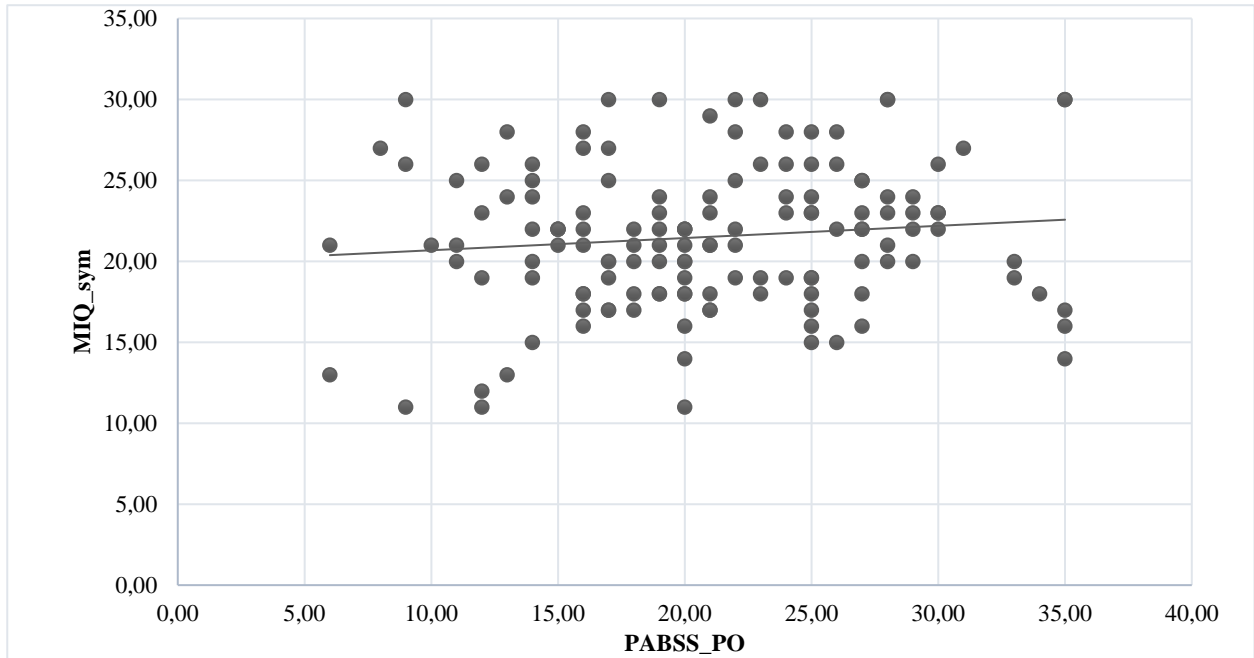


Figure 3:

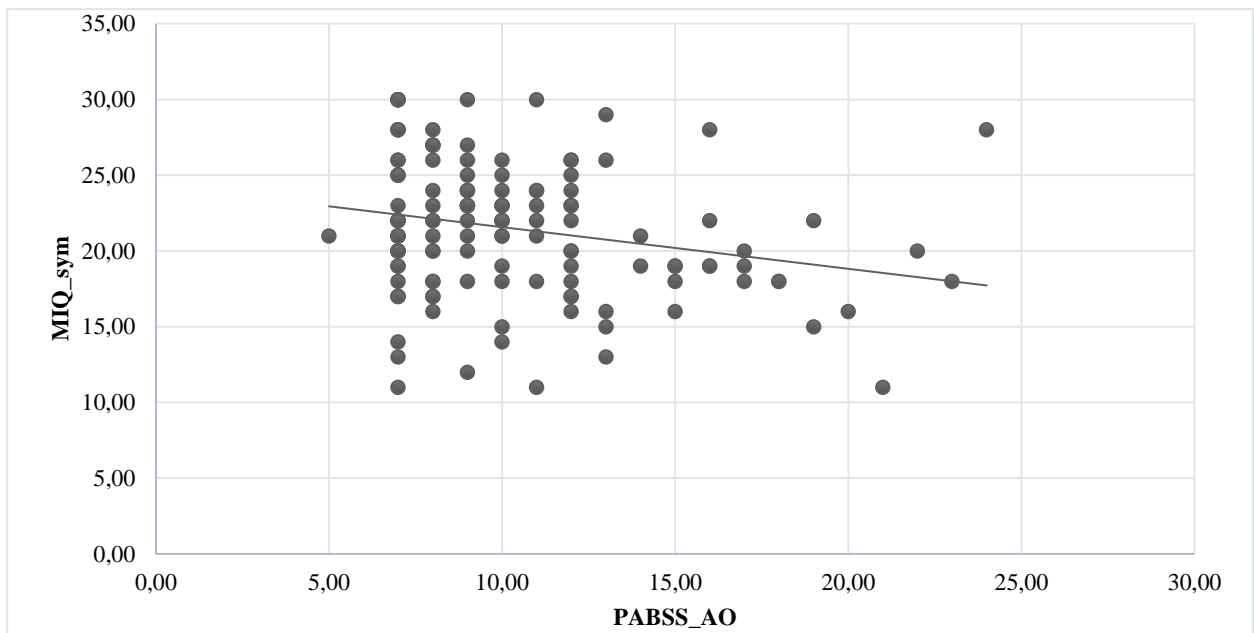
*Scatterplot of MI symbolization by prosocial behavior*



*Note.* Correlation of moral identity and prosocial behavior towards opponents

Figure 4

*Scatterplot of MI symbolization by antisocial behavior*



*Note.* Correlation of moral identity and antisocial behavior towards opponents

APPENDIX: IRB APPROVAL

August 24, 2021

Leah Hanle  
Department of Educational Psychology  
College of Education  
The University of Alabama  
Box 870231

Re: IRB # 20-12-4209-A: "Comparison of Team Sport Athletes' and Individual Sport Athletes' Moral Identity and Antisocial & Prosocial Behavior in Sports"

Dear Ms. Hanle:

The University of Alabama Institutional Review Board has reviewed the revision to your previously approved exempt protocol. The board has determined that the change does not affect the exempt status of your protocol.

Please remember that your protocol will expire on June 21, 2022.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.

Good luck with your research.

Sincerely,

Carpantato T. Myles, MSM, CIM, CIP  
Director & Research Compliance Officer