



The Relationship between Monetary Reward and Athletic Identity of Lagos State Athletes

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This study investigated the relationship between monetary reward and athletes' athletic identity. The purpose was to understand the relationship in athletic identity between athletes who earned monetary compensations and those who did not earn any monetary compensations for participating in sports. Two hundred and fifty-six athletes who competed in state-organized sports competitions completed the Athletic Identity Measurement Scale (AIMS). The data collected were analyzed using Mann-Whitney *U* tests and a linear regression using a 0.05 level of significance. The findings revealed that age did not predict athletic identity, and monetary reward did not differentiate athletes who received financial compensation from those who did not based on their athletic identity. The results have confirmed that other nonmonetary factors may be associated with athletes' athletic identity. Therefore, sports psychologists should identify these factors to help athletes sustain their athletic personalities.

Keywords: age, athletes, athletic identity, reward, sports psychologists

Athletic performance has been found to be influenced by both physical and mental factors. For this reason, sports psychology is receiving a lot of attention in both team and individual sports, especially in the area of personality development. Athletic identity is a characteristic and an important concept of an athlete's personality. Brewer et al. (1993) defined athletic identity as the degree to which an individual thinks and feels like an athlete. It means that an individual who participates in sports attributes their athletic role to themselves above any other role being played. Therefore, athletic identity plays an influential role in the life of athletes (Martin et al., 2014). Athletic identity may be associated with how athletes manage injuries during and after rehabilitation. It also determines how well athletes end their careers (Sanders & Stevinson, 2017). Research suggests that individuals who end their career with a very high athletic identity find it difficult to adapt away from their sport (Hatamleh, 2013; Samuel et al., 2015). This is especially difficult for athletes who experience an abrupt end to their sports career following injuries.

Athletic identity is formed and maintained through social processes (Reifsteck et al., 2013). This means that athletic identity is formed as a result of an athlete's interactions with others. A systematic review of athletic identity in youth athletes found that parents were primary agents for initiating and maintaining a strong role in their children's sporting experiences (Edison et al., 2021). These individuals, including parents, peers, and coaches, contribute to developing the athlete's identification of their athletic role by confirming and validating their self-concept (Reifsteck et al., 2013). Furthermore, because research has also shown that most athletes make friends with athletes rather than nonathletes (Henriksen et al., 2010), it is without a doubt that their peer group relationship contributes to the identification of their athletic role.

The degree to which an individual feels a sense of belonging to an athletic group of choice will influence the development of their athletic identity (Hawkins et al., 2014). When athletes refer to themselves as athletes, they initiate a process of stereotyping in which they embody every meaning associated with being an athlete. Even when an athlete has an identity that contains numerous identities, such as being a student and an athlete, one particular identity might become more dominant or preferred (Yukhymenko-Lescroart, 2014). The social environment in which an athlete operates is more likely to strengthen the athletic identity of the athlete. In a study by Çetinkaya and Yetim (2017) on the athletic identity of team sports athletes, 485 athletes responded to the Athlete Identity Measurement Scale (AIMS). The result of the study revealed that there was no significant difference in athletic identity based on the amount of time spent within the sport (Çetinkaya & Yetim, 2017). These findings show that the environment, and not time, contributes to the strong athletic identity that athletes express.

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A recent study explored the levels of athletic identity in professional youth footballers (Mitchell et al., 2014). Results revealed that social identity was higher for players in their first year compared to those in the second year (Mitchell et al., 2014). In this study, 168 youth team soccer players aged 16-18 years with a two-year apprenticeship were recruited from four major English professional leagues. The AIMS and a self-report questionnaire were administered to the participants. Based on the results obtained, the authors suggested that the first-year apprentices occupied the football or soccer player role more than the older players due to the transition from schoolboy to full-time training (Mitchell et al., 2014). Apart from the fact that they were recruited by professional football clubs, the experience of success as perceived by the first-year apprentices contributed to their high social identity. Therefore, their perception suggests that achieving success and recognition presupposes a strong social identity for athletes.

Studies have identified that age has an important influence on the differences in athletic identity (Martin & Fogarty, 2014; Proios, 2012). A study conducted by Martin and Fogarty (2014) investigated the self-identity characteristics possessed by Australian elite athletes. This study included athletic identity and the impact of age in 917 athletes who had sports scholarships at the Australian institute of sports (Martin & Fogarty, 2014). The AIMS was administered to measure the athletic identity of the athletes. Results revealed that the level at which an athlete viewed their athletic identity decreased significantly with age (Martin & Fogarty, 2014). Therefore, the authors concluded that age plays an important role in athletic identity. The results of this study are similar to that of another, in which athletic role was found to decrease as the individual matures (Proios, 2012).

One hundred and forty participants between the ages of 8 and 17 were recruited from three categories of sports gymnastics (artistic gymnastics, rhythmic gymnastics, acrobatic gymnastics) (Proios, 2012). The participants competed in four divisions (Division IV, $n = 49$; Division III, $n = 61$; Division II, $n = 20$; and Division I, $n = 10$), which were classified by age. In addition, each gymnast completed the seven-item AIMS. These findings established that high perception of their athletic role significantly decreased with the increase of sports divisions (Proios, 2012). Although some results have revealed that their athletic role decreases with the increase of sports divisions, recent studies have revealed that as athletes enter into higher competitive levels, the stronger their athletic identity becomes (Edison et al., 2021; Lamont-Mills & Christensen, 2006).

Lamont-Mills and Christensen (2006) found that elite athletes reported stronger athletic identities than both recreational and nonathletes. According to the authors, athletes competing at high-level sports competitions had a stronger athletic identity than lower competition sports. According to previous studies, athletes' athletic identity increased as they participated in more prominent competitions. However, no study has investigated the connection between athletic identity and monetary rewards. Therefore, the purpose of this study was to examine the relationship between athletic identity and monetary reward and to understand the relationship between athlete's age and athletic identity. In order to achieve these objectives, two hypotheses were formed. First, that monetary reward would significantly differentiate athletes based on their athletic identity and, second, that there is a significant relationship between age and the athlete's athletic identity.

Method

Participants

The sample was comprised of 256 athletes from nine different sports in Lagos State. The athletes (88% male and 12% female) competed in seven individual sports (track and field, badminton, cycling, gymnastics, table tennis, Taekwondo, and tennis) and two team sports (basketball and football). The mean age of participants was 22 years ($SD = 4.03$). A total of 58% of the athletes earned money from their participation in sports, while the other 42% did not earn money from their participation in sports. The majority of respondents participated in football (69%), which is the most popular sport in Nigeria. All participants competed in state-organized sports tournaments.

Procedure

For convenience, coaches known to the authors were contacted. These coaches headed the different sports in the sports council in Lagos State. The authors met with the coaches of the various sports at their training venues. The coaches were informed verbally about the study and the possibility of their athletes taking part in the study. All of the coaches agreed to allow their athletes to participate in the study because the study would not interfere with their normal training schedules. Before the athletes responded to the questionnaires, each participant verbally read out the consent information. Data collection lasted four weeks, and it took the athletes about 5 min to complete the questionnaire. The Ethical Approval Board of the Department of Human Kinetics and Health Education approved the study.

Measure

The survey was comprised of 15 questions, including demographic information: age, gender, type of sport, and monetary reward from sports. In addition, participants responded to questions such as: “Which sport do you participate in?”, and “Do you earn money from your sport?” of which they were expected to select either Yes/No.

Athletic Identity

The original 10-item scale, Athletic Identity Measurement Scale (AIMS) (Brewer et al., 1993), was used to measure the athletic identity of the participants. This test can measure levels of athletic identity and has high internal consistency and index test-retest reliability. The AIMS is both unidimensional and multidimensional (Brewer & Cornelius, 2001). The unidimensional scale can be evaluated by totaling the scores obtained to get a single score, with high scores indicating a strong athletic identity. On the other hand, the multidimensional scale contains four scales: self-identity, social identity, exclusivity, and negative affectivity (Brewer et al., 1993). Self-identity items measure self-referenced concepts. Social-identity items express the degree to which individuals perceive themselves as occupying their athletic role. Exclusivity measures an individual's self-worth achieved by engaging in their athletic role. Finally, negative affectivity refers to the degree to which individuals experience negative emotions from undesirable sporting outcomes, such as injury, retirement, or any obstruction to sports participation.

The study participants were asked to indicate their agreement with each item by responding on a 7-point scale from “strongly agree” to “strongly disagree.” The scale was comprised of 10 items measuring self-identity (e.g., “I consider myself an athlete”), social identity (e.g., “Most of my friends are athletes”), negative affectivity (e.g., “I would be very depressed if I were injured and could not compete in sport”), and exclusivity (e.g., “Sport is the most important part of my life”). The internal consistency of this questionnaire was satisfactory ($\alpha = 0.93$).

Data Analyses

Descriptive statistics were presented using means, standard deviations, percentages, and frequency counts, while group differences were subjected to Mann-Whitney U tests. Mann-Whitney U tests were used to determine the difference in athletic identity between athletes who reported earning money from participating in sports and athletes who reported that they do not earn money from their sports participation. In addition, a linear regression was used to analyze the interaction between age and athletic identity, with age as the predictor variable and athletic identity as the criterion variable. We used STATA version 14 SE (College Station, Tx: StataCorp LLC) for all statistical analyses. All statistical tests were performed at a 0.05 level of significance.

Results

The details of the study sample are presented in Table 1. The descriptive statistics of the AIMS dimensions and total AIMS scores of the participants are presented in Table 2. Self-identity had the highest average ($M = 18.61$, $SD = 4.20$), followed by exclusivity ($M = 17.15$, $SD = 4.68$). The lowest dimension of the AIMS was social identity ($M = 11.57$, $SD = 3.01$). Results from the Mann-Whitney U tests are shown in Table 2. Analysis by monetary reward did not yield any significant difference in total AIMS scores between athletes who earned money and those who did not earn ($z = 1.61$, $p = 0.11$, $r = 0.10$). There was no significant difference in the self-identity ($z = 0.25$, $p = 0.80$, $r = 0.02$), social identity ($z = 1.18$, $p = 0.24$, $r = 0.07$), exclusivity ($z = 1.05$, $p = 0.29$, $r = 0.07$), and negative affectivity ($z = -0.134$, $p = 0.89$, $r = 0.01$) dimensions of the AIMS between athletes who earned money and those who did not. Results from the linear regression with athletic identity as the dependent variable and age as the predictor variable showed that age ($b = -0.06$, $SE = 0.22$, $p = 0.77$) had no significant relationship with athletic identity.

Table 1

Sample Description

Age Category	<i>M</i>	<i>SD</i>
13 - 17	16.00	0.77
18 - 23	20.19	1.43
24 - 29	26.41	1.62
30 - 35	30.33	0.49
Earn from Sports Participation	<i>n</i>	Percentage %
No	108	42%
Yes	148	58%
Type of Sports	<i>n</i>	Percentage %
Athletics	8	3%
Badminton	28	11%
Basketball	12	5%
Cycling	4	2%
Football	176	69%
Gymnastics	8	3%
Table Tennis	4	2%
Taekwondo	8	3%
Tennis	8	3%

Table 2*Descriptive Statistics and Mann-Whitney U Test for AIMS*

Variable	Earn Money	Does Not Earn Money	Total	<i>p</i> value
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>	
Total AIMS	59.48±14.25	59.10±13.38	59.30±13.86	0.11
Self-Identity	18.65±4.14	18.54±4.30	18.61±4.20	0.80
Social Identity	11.68±3.05	11.43±2.96	11.57±3.01	0.24
Exclusivity	17.31±4.75	16.97±4.60	17.15±4.68	0.29
Negative Affectivity	11.84±3.64	12.17±3.12	11.98±3.43	0.89

Discussion

The aim of this study was to investigate the relationship between monetary reward and athletic identity. We were interested in finding out the difference in athletic identity between athletes who earned money from sports participation and those who did not earn money from sports participation. The second objective of the study was to understand the relationship between age and athletic identity. Our first hypothesis that there will be a significant difference in athletic identity between athletes who earn money and those who do not earn money from sports participation could not be confirmed by our results. The second hypothesis that there will be a significant relationship between age and athletic identity could also not be confirmed by the results of our study.

Although our results revealed that monetary rewards did not yield any significant relationship with athletic identity, they should be interpreted with caution due to the low number of participants. Receiving monetary rewards or not did not differentiate the athletic identity of participants in this study. Monetary rewards are examples of extrinsic motivation (Gómez-López et al., 2014), which did not differentiate the level of athletic identity of athletes in our study. Results from other studies have suggested the importance of nonmonetary rewards to athletes over monetary rewards (Maier et al., 2015). Nonmonetary rewards such as recognition by others are seen as more important to these athletes than financial rewards.

Based on the result of a linear regression analysis, our study showed that age did not predict the athletic identity of athletes. Therefore, the age of athletes did not have a significant relationship with the level of athletic identity of the athletes in this study. However, the findings of this study were not supported by that of most studies that found that as age increases, athletic identity decreases (Martin & Fogarty, 2014). A recent study on elite student-athletes revealed no difference in the athletic identity of athletes based on their age category, supporting our result (Turkeli, 2020). Additionally, other studies have stated that athletic identity is a relatively stable personality trait that develops over time (Costa et al., 2020; Van de Vliet et al., 2008).

The findings of this study have implications for coaches, sports administrators, and sports psychologists. Many young athletes in Nigeria drop out of sports for reasons more profound than mere financial compensations. This is especially important in places like Nigeria, where few athletes are hardly paid and those that are paid, are paid little money. Hence, nonmonetary factors that lead to dropping out of sports should be considered. Sports psychologists should therefore consider other factors such as family support, peers, and coaches, since they promote the social identity of athletes. In addition, other factors such as injury, obstacles to regular training, and playing time may affect the exclusivity and negative affectivity degree of the athletic role of Nigerian athletes. Therefore, it is recommended that sports psychologists and sports administrators emphasize other important factors that make athletes feel accepted and recognized as athletes.

Limitations

The sample size of this study, which is relatively low, is the major limitation of this study. Most of our samples are within the age category of 18 and 23 and partake mostly in team sports. Our data showed that football had more respondents compared to the other sports. This is because, in Nigeria, football is the number one sport. Most young people in Nigeria participate more in team sports, such as football and basketball, than in individual sports such as athletics, Taekwondo, table tennis, and gymnastics. One reason for this is the lack of available facilities and equipment that those sports require. For these reasons, care should be taken in generalizing the findings of this study. The lack of female participation in sports in Nigeria also reduces female athletes' representation. There are very few sports competitions for girls. For this reason, this study did not look at possible gender differences; hence, more studies are required in this regard. Additionally, the study used a self-report scale, which makes it difficult to draw any causal conclusions.

Another limitation of this study is the use of survey data collected at a single point in time. Access to participants was limited due to their training schedule. Because data were collected at one time, it was difficult to measure changes in athletic identity that might take place later. Additionally, survey data generally cannot provide strong evidence of cause and effect. Therefore, our result should be treated with caution because they cannot provide evidence for the direction of effects among the variables under investigation.

Conclusion

From the results of our study, it seems that earning monetary rewards from sports participation is not related to athletes' athletic identity. According to the results of our research, whether an athlete receives financial incentives for sports participation or not would not affect their level of athletic identity. These results should inform practitioners to pay attention to other factors that maintain the level of athletic identity in athletes. For example, discovering why athletes are interested in their sports could help practitioners better support young athletes as they pursue their sports careers. Our data also showed that age did not predict the athletic identity of athletes. This finding has practical implications for sports psychologists who work with athletes at any level of competition. Athletes identify with their athletic role at any age, as studies have revealed (Costa et al., 2020; Van de Vliet et al., 2008), hence sports psychologists need to help athletes develop their sports personality because it is what gives them satisfaction and a sense of meaning (Hadiyan & Sheikh, 2015; Souter et al., 2018).

References

- Brewer, B. W., & Cornelius, A. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale. *Academic Athletic Journal*, *15*, 103–113.
- Brewer, B. W., Van Raalte, J. L., & Linder, D. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, *24*, 237–254.
- Çetinkaya, T., & Yetim, A. (2017). Different variables investigation of athletic identity in team sport. *PEOPLE: International Journal of Social Sciences*, *1*(1), 1345–1353. <https://doi.org/10.20319/pijss.2015.s21.13451353>
- Costa, S., Santi, G., di Fronso, S., Montesano, C., Di Gruttola, F., Ciofi, E. G., Morgilli, L., & Bertollo, M. (2020). Athletes and adversities: athletic identity and emotional regulation in time of COVID-19. *Sport Sciences for Health*, *16*(4), 609–618. <https://doi.org/10.1007/s11332-020-00677-9>
- Edison, B. R., Christino, M. A., & Rizzone, K. H. (2021). Athletic identity in youth athletes: A systematic review of the literature. *International Journal of Environmental Research and Public Health*, *18*(14), 7331. <https://doi.org/10.3390/ijerph18147331>
- Gómez-López, M., Granero-Gallegos, A., Baena-Extremera, A., & Arturo Abrales, J. (2014). Goal orientation effects on elite handball players motivation and motivational climate. *Procedia-Social and Behavioral Sciences*, *132*, 434–440. <https://doi.org/10.1016/j.sbspro.2014.04.333>
- Hadiyan, M., & Sheikh, M. (2015). How different sports establish different athletic identity levels. *International Journal of Kinesiology and Sports Science*, *3*(3), 28–32. <https://doi.org/10.7575/aiac.ijkss.v.3n.3p.28>
- Hatamleh, M. R. (2013). The life transitions of high performance athletes retirement from sport. *European Scientific Journal*, *99*(1111), 1857–7881. <https://doi.org/10.19044/esj.2013.v9n11p%25p>
- Hawkins, C., Coffee, P., & Soundy, A. (2014). Considering how athletic identity assists adjustment to spinal cord injury : A qualitative study. *Physiotherapy*, *100*, 268–274. <https://doi.org/10.1016/j.physio.2013.09.006>
- Henriksen, K., Stambulova, N., & Roessler, K. K. (2010). Holistic approach to athletic talent development environments: A successful sailing milieu. *Psychology of Sport and Exercise*, *11*(3), 212–222. <https://doi.org/10.1016/j.psychsport.2009.10.005>
- Lamont-Mills, A., & Christensen, S. A. (2006). Athletic identity and its relationship to sport participation levels. *Journal of Science and Medicine in Sport*, *9*(6), 472–478. <https://doi.org/10.1016/j.jsams.2006.04.004>
- Maier, C., Woratschek, H., Ströbel, T., & Popp, B. (2016). Is it really all about money? A study on incentives in elite team sports. *European Sport Management Quarterly*, *16*(5), 592–612. <https://doi.org/10.1080/16184742.2016.1188841>
- Martin, L. A., & Fogarty, G. J. (2014, July). The impact of age and gender on the self-identity and athletic identity of elite athletes [Conference session]. 19th Annual Congress of the European College of Sport Science, Amsterdam, The Netherlands. <http://www.ecss-congress.eu/2014/14/>
- Martin, L. A., Fogarty, G. J., & Albion, M. J. (2014). Changes in athletic identity and life satisfaction of elite athletes as a function of retirement status. *Journal of Applied Sport Psychology*, *26*(1), 96–110. <https://doi.org/10.1080/10413200.2013.798371>
- Mitchell, T. O., Nesti, M., Richardson, D., Midgley, A. W., Eubank, M., & Littlewood, M. (2014). Exploring athletic identity in elite-level English youth football: A cross-sectional approach. *Journal of Sports Sciences*, *32*(13), 1294–1299. <https://doi.org/10.1080/02640414.2014.898855>
- Proios, M. (2012). Athletic identity and achievement goals of gymnastics athletes. *Science of Gymnastics Journal*, *4*(3), 15–24. https://www.fsp.uni-lj.si/mma_bin.php?id=20121022090621
- Reifsteck, E. J., Gill, D. L., & Brooks, D. L. (2013). The relationship between athletic identity and physical activity among former college athletes. *Athletic Insight*, *5*(3), 271–284. <https://core.ac.uk/download/pdf/345079142.pdf>
- Samuel, R. D., Tenenbaum, G., Mangel, E., Virshupski, R., Chen, T., & Badir, A. (2015). Athletes' experiences of severe injuries as a career-change event. *Journal of Sport Psychology in Action*, *6*(2), 99–120. <https://doi.org/10.1080/21520704.2015.1012249>
- Sanders, G., & Stevinson, C. (2017). Associations between retirement reasons, chronic pain, athletic identity, and depressive symptoms among former professional footballers. *European Journal of Sport Science*, *17*(10), 1311–1318. <https://doi.org/10.1080/17461391.2017.1371795>

- Souter, G., Lewis, R., & Serrant, L. (2018). Men, mental health and elite sport: A narrative review. *Sports Medicine - Open*, 4, 1–8. <https://doi.org/10.1186/s40798-018-0175-7>
- Turkeli, A. (2020). An Examination of the athletic identities of high school students. *Asian Journal of Education and Training*, 6(3), 426–432. <https://doi.org/10.20448/journal.522.2020.63.426.432>
- Van de Vliet, P., Van Biesen, D., & Vanlandewijck, Y. C. (2008). Athletic identity and self-esteem in Flemish athletes with a disability. *European Journal of Adapted Physical Activity*, 1(1), 9–21. <https://doi.org/10.5507/euj.2008.001>
- Yukhymenko-Lescroart, M. A. (2014). Students and athletes? Development of the Academic and Athletic Identity Scale (AAIS). *Sport, Exercise, and Performance Psychology*, 3(2), 89–101. <https://doi.org/10.1037/spy0000009>

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