



Assessment of relationship among Athlete Uniform Wearing and the impact on Student-Athlete Mental Health, mediated by Athlete Identity

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Introduction. The sporting industry accounts for millions of dollars annually from sporting events, media rights, and ticket sales (Parker, 2019). Sport programs invest in the athletic apparel for their athletes not only for their utilitarian purposes, but as a representation of the athletic program's identity. Since clothing is the closest to the body and the closest to an individual's inner self and values, so does uniforms (Niinimaki, 2010). Sport clothing has been used to create a connection to a sport culture and role identification of the sport (Dickson & Pollack, 2000). Individuals wearing uniforms are perceived as more professional and promoting more team spirit, as well as overall ability compared to those who aren't wearing uniforms (Harris et al., 1974). In particular, perception of student-athletes towards the uniform has been an important issue since student-athletes can struggle with multiple responsibilities including student and athlete. As the multiple roles such as academic demands, physical demands, and injuries are required to a student-athlete, the existing studies have explored factors that may impact student-athletic mental health (Etzel et al., 2006). So far, the effects of wearing uniforms among athletes are mixed, thus the present study aims to explore how years of wearing the uniforms may have an affect on developing positive identity, as well as mental health among student-athletes (Puri & Sood, 2018). To the best of our knowledge, there is no current literature that investigates the impact of an athlete's uniform on their mental health through an athlete identity.

Literature Review. Student-athlete refers to the population that is involved in academics and sports (Puri & Sood, 2018). In general, when student-athletes are required to wear their uniforms, it may increase exposure to greater risk of negative health due to athletic demands (e.g. practices, travel, season scheduled play). However, the athletes who progress through various levels of sport are more likely to develop coping behaviors to transform stressful situations into less stressful situations (Goss, 1994). Therefore, it is plausible to assume that the student-athlete's time spent wearing their uniforms can contribute to their mental health when a strong athlete identity mediates this relationship. Thus, we hypothesize that a student-athlete who has worn their athletic uniforms for a longer period of time are likely to show higher levels of positive mental health (H1). An individual's athlete identity refers to the extent an individual identifies more in their athlete role (Gapin & Petruzzello, 2011). Those who identify more in the athlete role place more importance on the athlete components in their life (Lamont-Mills & Christensen, 2006). It is known that athletic uniforms are used to establish identity not only for a university's sport program but also for the athlete who wears the uniform. Although the importance of identity establishment for student-athlete is discussed in previous studies, there has not been any research assessing the impact of wearing an athlete uniform on mental health through an assessment of athlete identity (Gapin & Petruzzello, 2011; Lamont-Mills & Christensen, 2006.)

Thus, we hypothesize that student-athlete who has worn their athletic uniforms for a longer period of time are likely to developing positive athlete identity than those who has worn the uniform less years (H2). Also, we expect that the student-athlete the years of wearing uniform will influence positive mental health through athlete identity (H3).

Methods. To examine the suggested relationships, this study employed the quantitative survey method. We recruited both current and former student-athletes in the online survey through snowballing sampling. An invitation email distributed to students at a southeastern university and national listserv of student-athlete academic advisors. The survey was also distributed through Amazon MTurk to recruit the target population (Minton et al. 2013). A small token was given to the Amazon Mturk participations with the successful completion of survey. To explore time spent wearing athletic uniform, athlete identity, and mental health, each participant was asked to answer their participation in sport and assessments regarding athlete identity and mental health. Measures were adapted from the existing studies and used a Likert-type scale, ranging from 1 being strongly disagree to 7 being strongly agree. 10 athlete identity ($\alpha=.74$) items (Brewer, Van Raatle, & Linder, 1993) and 9 mental health ($\alpha=.82$) related items (Lukat et al., 2016) were included in the survey.

Results. An online survey was conducted with a sample of 210 current or retired athletes, and the sample consists of 61.4% of male and 38.6% of female; ethnicity group of white/non-Hispanic (64.7%), Black/African American (19%), Hispanic (8.5%), Asian (5.9%), Other (1.9%); 57.3 % of graduated and 42.7% of current students. The results of one-way ANOVA showed that, the effect of year of wearing athlete wear on mental health was not significantly different by groups ($M_{High}= 5.11$, $SD=1.03$; $M_{Low}=5.00$, $SD=1.13$) ($F(1,208)=.58$, $p=.45$), and H1 is rejected. On the other hand, the level of athlete identify was significantly different by the groups who have worn the athlete wear longer period ($M_{High}= 4.78$, $SD=1.18$) as compared to shorter ($M_{Low}=3.69$, $SD=1.34$) ($F(1,208)=39.67$, $p<.05$), supporting H2. Next, mediating role of athlete identity between year of wearing uniforms and mental health was tested through bootstrapping method of regression. The results revealed that both direct effect of years of wearing uniform on mental health positively ($\beta=.093$, $p=.176$) and indirect effect ($\beta=.040$, $SE=.026$, 95% C.I. = [-.0008:.1002]) were not significant. And, only direct effects of years of wearing uniform on levels of athlete identity ($\beta=.212$, $SE=.101$, $p<0.5$) and the athlete identity on mental health ($\beta=.188$, $SE=.055$, $p<.05$) exist. Although the indirect effects is not significant at 95% C.I., the result found there was a moderately significant indirect effect at 90% C.I. ($\beta=.040$, $SE=.027$, 90% C.I. = [.005:.089]) between year of wearing uniforms and mental health, which, in turn, makes total effect moderately significant at ($\beta=.134$, $SE=.07$, $p=0.059$). Therefore, a full-mediation effect of athlete identity on the influence of year of wearing athlete wear on mental health was supported (H3).

Discussion. This research includes important contributions to the clothing and textile industry by providing evidence for relationship between clothing and self-identity in the context of sport clothing. Interestingly, years of wearing uniform does not have any influence on developing positive mental health, which may be explained that student-athletes still feel pressure of taking

the multiple roles as discussed in the literature. The results of the effects of wearing uniforms on development identity were confirmed, supporting the uniform supports the positive identity establishment. The finding also demonstrates that if an individual's clothing is positively associated with their identity, this will likely enforce positive mental health. This provides a further justification for product developing practices and identity branding in athletic wear. Athletic uniform designs and technological advances are key in the branding of an athletic program and can have an impact on the identity of its athletes. Studies should also explore the impact of uniform brands on identity and mental health.

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