

# **A Comparison of Athletic Identity, Gender Role Orientation, and Drinking Behavior in Women from the United States and Australia**

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## **ABSTRACT**

The relationship between athletic identity, gender role orientation, and drinking behavior among college-aged women from the United States and Australia was explored in a sample of 301 female undergraduate students from the United States and Australia. Athletic identity refers to the extent to which individuals identify with an athletic role. Participants completed an anonymous, paper-and-pencil questionnaire addressing the variables noted above. ANOVA suggests that participants from the United States had both a higher mean masculine gender role orientation and a higher mean athletic identity. Participants from Australia reported a higher mean level of alcohol use. Moreover, participants scoring a higher mean athletic identity also reported a higher mean level of alcohol use in the last 30 days. Secondary analysis of the Athletic Identity Measurement Scale revealed that participants from the United States have a significantly higher socioathletic role in athletic identity than their counterparts from Australia. Future research should focus on clarifying the construct of athletic identity and its relation to variables such as the ones studied in this project. Keywords: Athletic identity, gender roles, alcohol use

## **INTRODUCTION**

Modern gender roles are seen as dynamic and malleable in terms of their cultural contexts and historical background. Gender roles, as defined by Matsumoto (1996) refer to the “degree to which a person adopts the gender-specific and appropriate behaviors ascribed by his or her culture” (p. 206). Consequently, gender roles are largely a product of the cultural contexts into which men and women are socialized. Thus, gender roles are susceptible to cultural beliefs and attitudes that change within historical time frames. The role of women has recently undergone a vast transformation in many cultures such that women have assumed roles and behaviors traditionally viewed as masculine. This meshing of feminine and masculine gender roles appear to predominate in Western industrialized countries (Matsumoto, 1996). For instance, altered gender role orientations have been linked with changes in behaviors such as athletic participation and alcohol consumption in women from both the United States and Australia. The purpose of the proposed study is to perform a cross-cultural comparison of gender role orientation, athletic identity, and drinking behavior among women from the United States and from Australia.

### Gender Role Orientation and Athletic Participation

Bem (1974) designed a measurement to assess gender role orientation whereby participants rate themselves on a variety of stereotypic masculine and feminine attributes (such as “assertive” or “sympathetic”). Because each participant rates themselves on both masculinity and femininity, it is possible for individuals to possess characteristics associated with both genders. Much of the research concerning gender role orientation and sport participation finds that women athletes generally possess a more masculine gender role orientation while non-athletes maintain a more feminine gender role orientation (Andre & Holland, 1995; Archer & McDonald, 1990; Eccles & Harold, 1991). In addition, these results have been replicated in Australia (Jackson & Marsh, 1986; Marsh & Jackson, 1986). However, research on women in sport has traditionally focused on a binary distinction between athletes and non-athletes (Andre & Holland, 1995). Brewer (1990) introduced the concept and a measure of “athletic identity” that assesses the degree to which a person identifies with an athletic role (Brewer, Van Raalte, & Linder, 1993). This innovation in the literature is important because it acknowledges a range of sport involvement and, therefore, can assess sport involvement that is not affiliated with recognized sport organizations (e.g., team sports). When explored in relation to gender roles, Lantz and Schroeder (1999) found that athletes and high athletic identifiers had higher masculine gender role orientations than did non-athletes and low athletic identifiers. The relationship between gender role orientation and athletic identity; however, remains largely unexplored in both the United States and Australia.

In addition, despite the fact that both United States and Australian women have experienced a liberalization of gender roles and an increase in sport participation, there are differences between the two countries that may suggest the potential for contrasting patterns of relationships. For example, Cohen (1993) notes that U.S. women involved in sport have a hard time finding sponsorship, network television coverage, and support for professional endeavors. In Australia, women have flourishing professional team sports programs as well as successful club organizations. Additionally, the notion that sport involvement extends beyond that of high school or intercollegiate athletics for women is somewhat foreign to the United States while it is widespread in Australia (Cohen, 1993). Thus, opportunities for involvement in sport are not only more numerous in Australia than they are in the United States, they are also available over a longer time frame.

### Gender role orientation and drinking behavior

In addition to athletic identity, drinking behavior among women has also changed as cultural norms change toward more acceptance of women’s alcohol use. Drinking behavior is traditionally measured in terms of alcohol consumed per drinking episode and the frequency in which one engages in drinking episodes. Although the United States and Australia appear to have similar cultural norms influencing the gender role orientation of women and their drinking behavior, the general cultural attitudes toward drinking appears to vary across cultures as may be reflected in the drinking ages of both countries. The United States has a drinking age of 21 whereas Australia has a drinking age of 18. This suggests that Australians may have a more relaxed attitude toward drinking behavior than their counterparts from the United States.

Research on the relationship between gender role orientation and drinking behavior suggests that women with a more masculine gender role orientation tend to engage in more frequent and problematic drinking behavior while women with a more feminine gender role

orientation engage in infrequent and less problematic drinking behavior (Ricciardelli, Williams, & Keirnan, 1998). These results reflect adherence to the culturally instilled gender roles that associate drinking behavior with masculinity.

#### Athletic identity and drinking behavior

Finally, research exploring sport participation and drinking behavior abounds, although the results are inconsistent. Some research suggests that sports participants are less likely to use alcohol (Collingwood, Reynolds, Kohl, Smith, & Sloan, 1991), whereas others have suggested that participation in sport increase alcohol use (Eccles & Barber, 1999). Additional sources indicate no relation between sports participation and alcohol consumption (Spreitzer, 1994). Moreover, while much research investigates the relationship between sport participation and drinking behavior, only one study has examined the relationship between athletic identity and drinking behavior (Mehlorn, 1996). To date, no research exists that considers the relationship between the athletic identity and drinking behavior from a cross-cultural standpoint. Thus, this proposed study hopes to examine the relationship of drinking behavior to sport participation in two cultures at a more complex level by measuring sport participation with the athletic identity scale mentioned above.

#### Hypotheses

1. In both the United States and Australia, women with a high athletic identity will also have a more masculine gender role orientation than women with a low athletic identity.
2. Considering the greater opportunities for women to be involved in sports, it is expected that women in Australia will score higher both in athletic identity on the Athletic Identity Measurement Scale and in masculinity on the Bem Sex Role Inventory than their United States counterparts.
3. It is believed that gender role orientation will have a less significant relation to drinking behavior in Australia than in the United States.
4. Women with a more masculine gender role orientation will report more frequent and problematic drinking behaviors than will women with a more feminine gender role orientation both in the United States and in Australia.
5. It is believed that athletic identity will have a direct relationship with drinking behavior (when gender role orientation is controlled for) in women from both the United States and Australia.

## **METHOD**

### Participants

Two hundred forty-eight female undergraduates participated in this study. One hundred eighty-eight were from the University of Wisconsin- LaCrosse in Wisconsin, United States (75.8%) and sixty were from La Trobe University in Melbourne, Australia (24.2%). Education level for all participants ranged from 1- 4 years of post- secondary education. Forty-one percent of participants were first year students ( $n= 109$ ), 35.6% percent of participants were second year students ( $n= 94$ ), 16.7% of participants were third year students ( $n= 44$ ), and 6.4% were fourth year students ( $n= 17$ ). The mean age for participants from UW- LaCrosse was 19.59 years ( $SD = 1.07$ ) and the mean age for participants from La Trobe University was 19.38 years ( $SD = .96$ ).

### Procedure

Participants from UW- LaCrosse were solicited from the general psychology class. Female student arrived at lecture 10 to 15 minutes early to complete an anonymous pencil- and- paper survey. When finished, the surveys were immediately collected and the participants received class credit for participation. Participants from La Trobe University were solicited from selected first and second year courses. Prior to each class, a brief description of the study was given and an anonymous pencil- and- paper survey was distributed to all interested female students. Due to university regulations, the participants were asked to complete the survey on their own time and to return the surveys to a drop box in the psychology office.

### Instruments

#### **Athletic Identity Measurement Scale (AIMS)**

The AIMS was designed by Brewer (1990), which consists of a 10- item, seven-point likert scale that assesses the degree to which a person identifies with an athletic role. A rating of one on the scale indicates that the individual “strongly disagrees” with the item while a rating of seven indicates that the individual “strongly agrees” with the item. Sample items include: I consider myself an athlete, I need to participate in sport to feel good about myself, and I feel bad about myself when I do poorly in sport. Total scores for the AIMS can range from 10 to 100. A reliability analysis revealed an alpha of .85 for this sample.

#### **Bem Sex- Role Inventory Scale (BSRI)**

The BSRI was created by Bem (1974). For this study it was used to measure gender- role orientation. It consists of a 60- item survey of personality characteristics: 20 represent masculinity, 20 represent femininity, and 20 correspond with social desirability. Participants rate the degree to which they believe the characteristics represent them based on a 7-point Likert scale. Participants are then placed into one of three categories: masculine, feminine, or neutral. Reliability analysis of the BSRI for this sample yielded an overall alpha level of .81.

#### **Drug and Alcohol Survey (DAS)**

The items assessing alcohol used for this study were adapted items on the Adolescent Drug and Alcohol Survey (ADAS) developed by Oetting and Beauvais (1990). Sample items appearing on the DAS include: How old were you the first time you got drunk; How often in the last month have you had alcohol to drink; and Which best describes your drinking behavior.

## **RESULTS**

### AIMS

Total scores on the AIMS for this sample ranged from 10 to 93, out of a potential 10-100. For this study, the extreme group method was used to create a category of high athletic identifiers (HAI) and a category of low athletic identifiers (LAI). The HAI category consisted of participants with the top 1/3 of scores on the AIMS and the LAI category consisted of participants with the bottom 1/3 of scores on the AIMS. The HAI group consisted of 84 participants scoring between 10 and 23 on the AIMS and the LAI group consisted of 78 participants scoring between 39 and 93.

### BSRI

Results of the BSRI were computed using only the participants scoring in either the masculine or the feminine category. There were 98 (37.7%) participants who scored in the

masculine category, 150 (57.7%) participants who scored in the feminine category, and 12 (4.6%) participants who scored neutral.

### DAS

For analysis of drinking behavior, items 7 (How often in the last month have you gotten drunk?) and 8 (How do you like to drink?) of the DAS were standardized and summed to create a variable labeled "alcohol use".

### **Hypotheses**

Hypothesis 1: For both countries, participants with a high mean score on the AIMS did not have a significantly higher representation in the masculine gender role orientation than participants with a low mean score on the AIMS. However, participants from the United States ( $M=96.87$ ,  $SD=12.35$ ) did report a significantly higher mean masculine gender role orientation than participants from Australia ( $M=90.48$ ,  $SD=15.76$ ),  $F(1, 247)=10.58$ ,  $p<.001$ .

Hypothesis 2: Mean AIMS scores for participants in Australia were not significantly higher than mean AIMS scores for participants in the United States. In fact, opposite was found. In this sample, mean scores on the AIMS were significantly higher for women from the United States ( $M=32.89$ ,  $SD=13.14$ ) than mean AIMS scores for women from Australia ( $M=27.97$ ,  $SD=12.51$ ),  $F(1, 247)=6.56$ ,  $p<.05$ .

Hypothesis 3: Gender role orientation had no significant relationship with drinking behavior for participants in both countries.

Hypothesis 4: In either country, participants with a higher mean masculine gender role orientation reported no significant differences in the frequency of



alcohol use or in the level of problematic drinking behavior than participants with a higher mean feminine gender role orientation. However, ANOVA suggests that participants from Australia ( $M=4.38$ ,  $SD=1.7$ ) reported a higher mean level of alcohol use than participants from the United States ( $M=3.81$ ,  $SD=2.09$ ),  $F(1,244)=3.90$ ,  $p<.05$ .

**Hypothesis 5 ( Research Question):**

Partial significance was found for the relationship between athletic identity and drinking behavior. High athletic identifiers ( $M=1.65$ ,  $SD=.95$ ) reported a significantly higher mean level of alcohol in the last month than Low athletic identifiers ( $M=1.37$ ,  $SD=.84$ ),  $F(1,161)=4.00$ ,  $p<.05$ .

**Secondary Analyses**

For secondary analyses, a factor analysis of the AIMS was performed. Two subscales of athletic identity were found. Item numbers 1, 2, 3, and 7 question a construct labeled socio- athletic role. This subscale is consistent with previous factor analyses of the AIMS (Hale, James, & Satlarveldok, 1999). Item numbers 5, 6, 8, 9, and 10 relate to a construct labeled athletic investment .

ANOVA of the factor analyzed categories on the AIMS by location revealed that U.S. participants ( $M=16.04$ ,  $SD=5.98$ ) scored significantly higher on the socioathletic role factor than Australian participants ( $M=11.63$ ,  $SD=5.67$ ),  $F(1,247)=25.36$ ,  $p<.05$ .

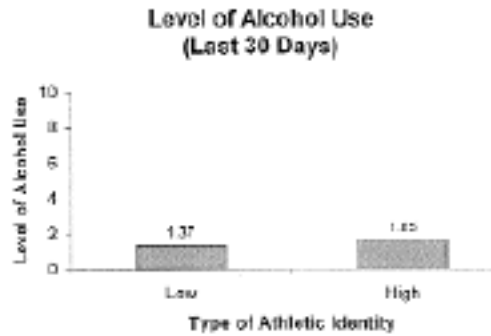


Figure 4



Figure 5

**DISCUSSION**

Results of this research carry important undertones for the variables considered in this project. Primarily, results of this research highlight the necessity for refining and developing further the concept of athletic identity and for studying the cross- cultural implication for the concept of athletic identity. Most importantly, this project highlights the implications of athletic identity as a concept as it relates to other constructs, such gender role or drinking behavior. For example, results of this project do not support previous research relating a masculine gender role to sport participation (Andre & Holland, 1995; Eccles & Harold, 1991). However, participants from the United States were found to have a more masculine gender role orientation as well as having a higher athletic identity. One possible explanation for this may be that the AIMS has not been widely used as a measure of sport participation.

Paramount, however, research from this project reveals subfactors within the concept of athletic identity and their potential relationship with drinking behavior among those who participate in athletics. Secondary analysis of the AIMS revealed both socioathletic role and athletic investment as composition factors for the concept of athletic identity. Socioathletic role refers to one's social identity as an athletic person. It involves the extent to which one believes others perceive him/her as athletic and the degree to which others characterize them within an athletic role. It may also involve the extent to which one engages in athletic activities for social or extrinsic means. A person, for example, engaging in athletics for the purpose of forming a social network would assume a predominant socioathletic role.

Athletic investment encompasses the extent to which one participates in athletics for intrinsic purposes. Such a person considers athletics as their primary form of identity, subordinating many other social forms of identity. Moreover, anything that may serve as a deterrent to prime athletic performance or as a distracter to any intrinsic athletic goal is strictly avoided because it disrupts one's athletic identity.

Thus, it is possible that these two subfactors within athletic identity may relate to different drinking behaviors. For example, one scoring high on socioathletic role may be more influenced by social and environmental factors and, therefore, may be persuaded to engage in drinking behavior, especially if it is sanctioned by others within an athletic social context. However, one scoring higher on athletic investment may show more intrinsic athletic beliefs and behaviors. Consequently, for these individuals, considering the time, effort, and dedication involved in athletics, engaging in drinking behavior may seem contradictory to performance goals and infringe on athletic goals.

This possible relationship is certainly intriguing and may serve as answer to conflicting research regarding the effectiveness of athletic programs as alcohol and drug use prevention programs. Some previous research sites that those involved in athletic programs are less likely to engage in drug and alcohol use (Collingwood, Reynolds, Kohl, Smith, & Sloan, 1991). However, existing research has also noted that drug and alcohol use is positively related to participation in athletics (Eccles & Barber, 1999). Additionally, Spreitzer (1994) found no relation between athletic programs and drug and alcohol use. To date, most research considering these variables uses team affiliation as measure of sport participation.

However, using athletic identity and its subfactors as a measure of sport participation may incur different results. For example, if athletics are undertaken for intrinsic and personal reasons, as described by athletic investment, it stands that these sport programs may serve as effective drug and alcohol use prevention programs. However, if athletics are used as a social event devoid of personal goals, sport programs may in fact promote drinking behavior. The AIMS, then, could serve as key source for identifying which athletic programs may serve as effective alcohol and drug prevention programs and, more specifically, which individuals might best respond to an athletic prevention program.

## LIMITATIONS

As in all research, this project is not without limitations. To begin with, both samples consisted of samples of convenience. Each set of data collected came from female undergraduate students. Therefore, generalizations of this research to females in general as well as distinctions made between countries must be carefully considered. Secondly, 188 participants were from the United States while only 60 were from the Australia. This may have limited statistical power. This discrepancy in sample size resulted from the methodological

techniques used to collect data in the US and in Australia. Participants from the United States completed the questionnaires and returned them immediately, resulting in a 100% response rate. Due to university regulations in Australia, however, participants were given the questionnaire to complete and return on their own time, thus dramatically lowering the response rate of Australian participants.

Thirdly, it is important to note that the mean age for participants in both countries was 19 years. The legal drinking age in the United States is 21 years while the legal drinking age in Australia is 18 years. Given the mean age of this sample, it would be legal for the participants from Australia to engage in drinking behavior but illegal for participants from the United States to engage in drinking behavior. Therefore, legal drinking age may account for the discrepancy found between the United States and Australia in the level of alcohol use.

Lastly, the University of Wisconsin- La Crosse is widely recognized for its program in physical education and exercise and sport science. Moreover, it has a strong and successful division three athletic program. As a result, athletic-minded individuals are drawn to this campus. This may have influenced the finding that participants from the United States had a higher athletic identity than did participants from Australia.

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