Female athlete endorsers: Determinants of effectiveness

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In drawing from social role theory and the match-up hypothesis, the purpose of this study was to determine influential variables regarding the effectiveness of female athlete endorsers. A 2 (gender appropriate/gender inappropriate) × 2 (sport related product/non-sport related product) experiment was conducted with 296 participants from four different universities throughout the United States. Results indicated that type of sport had little effect on credibility measures. Further, the athlete’s sport had no effect on athlete-product fit. The most important aspect relative to purchase intentions was the product being endorsed, not the sport in which the athlete competed. Results are discussed in terms of practical implications and theoretical considerations.

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Present day consumers are bombarded by advertising. In 2006, it was estimated the average city dweller was exposed to 3000–5000 messages per day (Petrecca, 2006), a number that has no doubt grown in recent years. To stand out amidst this clutter, companies often turn to celebrity endorsers to pitch their products or services. Star athletes have certainly benefited from the trend. In 2009, Tiger Woods earned $92 million dollars and Phil Mickelson earned over $46 million in endorsement money alone (Freedman, 2009). Lebron James and Dale Earnhardt Jr. garnered $28 and $22 million respectively. However, female athletes are chosen less often as endorsers and earn much less endorsement money than their male counterparts (Van Riper & Badenhausen, 2008). For example, Maria Sharapova was the highest earning female athlete in 2008 at $26 million. However, that figure includes both endorsements and tennis prize money. Further, the top female athlete money earners almost exclusively compete in golf or tennis. Thus, for athletes competing in team sports, such as the Women’s National Basketball Associations’ (WNBA) Diana Taurasi and Candace Parker, the disparity is even greater (Van Riper & Badenhausen, 2008).

There has been a wealth of literature that has examined the perceptions people hold of various sports (Hardin & Greer, 2009; Koivula, 2001; Metheny, 1965). For instance, sports such as football and wrestling are often perceived as “masculine” as they require demonstrations of speed and power, while sports such as figure skating and gymnastics are often perceived as “feminine” as they allow for demonstrations of grace and beauty. Researchers have purported that women who participate in such feminine sports are often more popular to the general public as “feminine” sports are more in line with traditionally accepted female gender norms and thus more palatable to the average consumer. Likewise women who participate in ‘masculine’ sports are often eschewed and labeled as “butch” or lesbian as their sport actions are in contrast to traditionally accepted gender norms (Messner, 2002). However, there has been little consideration of how these sport labels
might impact female athletes’ access to endorsement dollars. That is, are women who participate in “feminine” sports seen as more effective endorsers than women who compete in “masculine” sports? Much of the recent literature regarding endorser effectiveness has been guided by the match-up hypothesis, which asserts the most effective endorsements are those in which there is a fit between the endorser and the product (Agrawal & Kamakura, 1995; Boyd & Shank, 2004; Kamins, 1990; Till & Busler, 2000). This research has shown that the connection between the product and the endorser is absolutely key to the success of the endorsement campaign. However, societal expectations relative to appropriate gender norms may influence perceptions of fit, particularly for female athletes. Therefore, this study utilized tenants of social role theory and the match-up hypothesis to determine influential variables regarding the effectiveness of female athlete endorsers.

1. Endorser effectiveness

Endorser characteristic studies indicate that the more credible the source, the more effective the endorser (Ohanian, 1991; Tripp, Jenson, & Carlson, 1994). Source credibility can be defined as “a communicator’s positive characteristics that affect the receiver’s acceptance of a message” (Ohanian, 1990, p. 41). Source credibility has been found to stem from, and be enhanced by, a variety of factors including attractiveness, trustworthiness, and expertise (Baker & Churchill, 1977; Kahle & Homer, 1985; Ohanian, 1991; Tripp et al., 1994). Numerous studies have demonstrated the positive effects of these particular characteristics relative to endorser effectiveness. In fact, a recent meta-analysis of the endorser effectiveness literature examined a variety of endorser traits and found trustworthiness, expertise, and attractiveness (in that order) exercised the most positive influence on endorser effectiveness (Amos, Holmes, & Strutton, 2008). Thus, athletes deemed more trustworthy, expert (i.e. athletically talented), and attractive should make the most effective endorsers.

However, according to the match-up hypothesis, the most effective endorsements are those in which there is a natural fit between the endorser and the product being endorsed (Agrawal & Kamakura, 1995; Boyd & Shank, 2004; Kamins, 1990; Till & Busler, 2000). The effects of the match-up hypothesis can be explained by associative learning theory, which contends that links or associations between relatively unconnected pieces of information can be formed (Till & Busler, 2000). Configurations of concepts coupled together will develop a linked pattern system of memory, and this pattern will call upon each individual concept every time another linked concept is provoked (Klein, 1991). For instance, a particular celebrity or a product will bring to mind certain associations—or thoughts, feelings, and perceptions regarding the celebrity or product. In time, the coupling of the product/service and the endorser can become joined in a person’s “association set” so that when one is seen, the other comes to mind (Till & Busler, 2000). However, how quickly and strongly this link is formed is dependent upon how natural or intuitive the match between the endorser and the product being endorsed (Kamins, 1990; Lynch & Schuler, 1994).

Several recent empirical studies support the tenants of the match-up hypothesis, particularly relative to athlete endorsers. Till and Busler (2000) found that athletes were more effective endorsers than actors for an energy bar. Veltri, Kuzman, Stotlar, Viswanathan, and Miller (2003) showed that 10–14-year-old consumers were more likely to be persuaded by an athlete endorser if she or he endorsed an athletic product. Boyd and Shank (2004) found that a match-up between the athlete endorser and a product used in her or his sport resulted in higher ratings of endorser expertise amongst female participants. Koernig and Boyd (2009) found that an unknown celebrity depicted as an athlete was deemed more effective than when depicted as a non-athlete when endorsing a sport related brand as opposed to a non-sport related brand. However, when they used a famous athlete as an endorser of a sport brand, it increased endorser liking and trust, but did not enhance evaluations of the brand or the advertisement. Fink, Cunningham, and Kensicki (2004) found an athlete’s expertise contributed more strongly than her attractiveness when examining participants’ perceptions of the most effective endorser for an upcoming softball event. However, in a similar study of a women’s tennis event, the female athlete’s expertise and attractiveness contributed significantly to endorser appropriateness (Cunningham, Fink, & Kenix, 2008). In fact, they determined there was an interaction effect: deficits in expertise were offset by the attractiveness of the athlete. They suggested this could be the result of how women’s tennis has been marketed, “Because promoters of women’s sport often attempt to exploit female athletes’ sex appeal, athlete attractiveness, expertise, and women’s tennis may all be a part of the same association set” (Cunningham et al., 2008, p. 376).

2. Female athlete endorsers

The match-up hypothesis would suggest female athletes paired with an appropriate product (i.e. sport related) should be effective endorsers given similar attributes to male athletes (i.e., attractiveness, expertise, and trustworthiness). However, given Cunningham et al. (2008) findings, how that “match” is forged might be more complex for female athletes. Indeed, female athletes are rarely chosen as endorsers. While athletes are used as endorsers in 11% of television advertisements, female athletes are used in only 3% of those 11% (Turner et al., 1995). A recent analysis of a wide range of magazines determined female athletes appeared in only 12% of advertisements featuring celebrity athlete endorsers (Grau, Roselli, & Taylor, 2007). Additionally, female athlete endorsers were most often participants in individual sports, portrayed as non-participants, and shown in stereotypical gender roles (Cuneen & Claussen, 1999; Cuneen & Sidwell, 1998; Lynn, Hardin, & Walsdorf, 2004) or in a manner that highlights their sexuality. For example, Grau et al. (2007) found that female athlete endorsers were portrayed in suggestive poses or were scantily clad in 81% of all advertisements. Such depictions were even
present in magazines solely devoted to women such as *Shape* and *Sports Illustrated for Women* (Grau et al., 2007; Lynn et al., 2004).

These differences in both the quantitative and qualitative depictions of female athlete endorsers may stem from the gender norms embedded in American culture (Hargreaves, 1994). Although girls’ and women’s participation in sport has grown exponentially since the implementation of Title IX (Acosta & Carpenter, 2010), sport is still viewed as a predominantly male domain (Messner, 2009). Sport, in general, is viewed as masculine and therefore, more “naturally” appropriate for men than women (Hardin & Greer, 2009; Koivula, 1995; Metheny, 1965). This can be explained by social role theory which suggests there are expectations regarding the roles men and women occupy as well as traits and behavioral propensities believed to be desirable for each gender (Eagly, 1987; Eagly, Wood, & Diekman, 2000). Indeed, research shows that people generally believe men and women possess different characteristics, and that these differences are hard-wired rather than socially constructed (Eagly, Wood, & Johanssen-Schmidt, 2004; Seguino, 2007). Men are thought to naturally possess such qualities as aggressiveness, forcefulness, dominance, and self-sufficiency while women are perceived to be more nurturing, gentle, and sympathetic (Eagly & Karu, 2002). Engaging in behavior not consistent with one’s gender role typically results in unfavorable evaluations from others (Heilman, 2001). Because sport is perceived as a male domain, girls and women who compete as athletes are seen as violating traditional gender roles and are subject to more negative evaluations (Crosset, 1995; Heilman, 2001; Messner, 2002).

However, over the years researchers have shown that some sports are deemed more feminine, and therefore, more appropriate for female participation. Metheny (1965) was the first to analyze the gender stereotypes of different sports. In this early work, she found the majority of sports were considered “masculine,” yet some sports were viewed to be more appropriate for women than men. These sports were deemed more stereotypically feminine as they were aesthetically pleasing and prohibited bodily contact. Masculine sports, on the other hand, were characterized by the use of physical force, contact in face to face situations, and an attempt to use physical force to overpower the opponent. Interestingly, this traditional gender-typing of sports has held rather steady throughout the years. For example, Koivula (2001) found that participants rated sports as masculine, feminine, or gender neutral based on the sports’ aesthetics, risk, and speed. Sports such as boxing, football, ice hockey and rugby were rated as masculine. Figure skating, gymnastics, and synchronized swimming were deemed feminine. Gender neutral sports included sports like golf, tennis, and swimming. Even more recently, Hardin and Greer (2009) reported a similar gender-typing of sports. They discovered that the sports fell into four factors: hyper masculine (e.g., football, rugby); masculine (e.g., motorcross, snowboarding); neutral (e.g., soccer, swimming), and feminine (e.g., gymnastics, volleyball).

Studies indicate this gender typing of sports affects attitudes about the sport participants themselves. For example, Kane (1988), using Metheny’s (1965) classification, found that females who participated in more traditionally feminine sports (e.g., golf, tennis) garnered higher social status amongst their peers than those participating in more traditionally masculine sports. Holland and Andre (1994) found similar results as females who participated in more feminine sports were significantly more likely to be preferred by males as a date, and by females as a friend, compared to those who participated in more masculine sports. Further, Kane (1987) found that perceptions of a female athlete’s attractiveness were dependent upon the sport she played. Females in gender appropriate sports (e.g., golf, tennis, volleyball) were considered more attractive than those in gender inappropriate sports (e.g., basketball and softball). It appears female athletes violating their “appropriate” gender roles by engaging in more masculine sports are, indeed, subject to negative evaluations. This leads to our first hypothesis:

**H1.** The sport in which a female athlete competes will influence participants’ perceptions of her credibility as an endorser. A female athlete endorser in a gender appropriate sport will receive higher credibility ratings (i.e., attractiveness, expertise, trustworthiness) than a female athlete in a gender inappropriate sport.

As mentioned previously, while credibility ratings are important to endorser effectiveness, so too, is the fit between the endorser and the product (e.g., Fink et al., 2004; Till & Busler, 2000; Veltri et al., 2003). A female athlete endorsing an athletic product should produce a greater fit in consumers’ minds than a female athlete endorsing a non-athletic product. However, considering that previous literature indicates female athletes participating in more masculine sports receive negative peer evaluations, we propose our second hypothesis:

**H2.** There will be an interactive effect on ratings of athlete-product fit: Female athletes in gender appropriate sports endorsing an athletic product will receive significantly higher ratings of fit than will female athletes in the other conditions (i.e., gender appropriate/non-sport product; gender inappropriate/sport product; gender inappropriate/non-sport product).

Of course, the ultimate goal for a company using an endorser is to achieve a positive response from consumers. These responses should be enhanced when there is a good fit between the endorser and the product (Till & Busler, 2000). Because it is easier to build an association set between a sport endorser and sport product such relationships should be more effective than sport endorsers coupled with a non-sport product (Kamins, 1990). In fact, “fit” has been found to be vital to the success of endorsement campaigns in previous studies even beyond the effects of trustworthiness, expertise, and attractiveness of the endorser (e.g., Cunningham et al., 2008; Fink et al., 2004; Veltri et al., 2003). Thus, we propose our last hypothesis:

**H3.** After controlling for the credibility variables (e.g., trustworthiness, expertise, and attractiveness), athlete-product fit will positively impact participants’ intentions to buy the product.
Very few female athletes are offered endorsement deals (Grau et al., 2007), and yet, the match-up hypothesis suggests that female athletes, if coupled with the appropriate product, should be effective as endorsers (Till & Busler, 2000). Few studies have been undertaken relative to female athlete endorsers, but previous research relative to female athletes shows that those participating in “gender inappropriate” sport are perceived more negatively than female athletes in gender appropriate sports (Kane, 1988). This study seeks to fill a void in the literature by examining the impact the type of sport played by the female athlete might have on consumers’ perceptions of her source credibility characteristics (i.e., attractiveness, expertise, trustworthiness) and athlete–product fit. It should explain whether traditionally held gender norms impact a female athletes’ effectiveness as an endorser.

3. Method

3.1. Participants

Participants were undergraduate students (N = 297) in sport management classes in four universities across the United States (2 universities in the Northeast, 1 in the Southwest, 1 in the Midwest). Most of the participants were White (80.4%), 6.1% were Hispanic, 5.1% Asian, and 4.4% African American. Sixty percent of respondents were men, and the average age was 20.29 years (SD = 1.88).

3.2. Procedures

We employed a 2 × 2 full factorial design in which participants were randomly assigned to one of four conditions: gender-appropriate sport, sport product (n = 78); gender-appropriate sport, non-sport product (n = 74); gender-inappropriate, sport product (n = 71); gender-inappropriate, non-sport product (n = 73).

An original advertisement featuring a fictitious athlete needed to be designed in order to control for any pre-existing subject biases regarding known athlete endorsers as well as any products they endorse. Thus, we created four print advertisements which featured a fictitious female athlete. These advertisements served as our instruments. The photograph of the athlete remained identical in all four advertisements, while the copy (i.e., written message) differed relative to the product endorsed (i.e., sport-related; non-sport-related), and the type of sport the athlete played (i.e., gender-appropriate; gender-inappropriate).

The advertisement designed and distributed to study participants portrayed the athlete in workout clothing. She was dark haired, dark eyed, very fit (i.e., “cut”), and, overall, attractive. The advertisement copy for the gender-appropriate (i.e., tennis) and gender-inappropriate (i.e. boxing) sport conditions read as follows:

Meet Jordan Wilson, professional tennis player. Practices twice daily. Over 1000 balls hit per practice. Conditions and lifts weights between practices. Holds 12 singles titles. Serve was once clocked at over 100 m.p.h. Is known for her quick feet and lightening fast serves. Currently one of the top 5 WTA tour money leaders. Sobe Tea (or Gatorade) drinker.

Meet Jordan Wilson, professional boxer. Practices twice daily. Over 1000 punches thrown per practice. Conditions and lifts weights between practices. Professional record of 28-0-1 (15 KO’s). Once knocked out an opponent in 10 seconds. Is known for her quick feet and lightening fast jabs. Currently one of the top 5 IWBF money leaders. Sobe Tea (or Gatorade) drinker.

Participants were students enrolled in upper-level sport management courses who volunteered to participate. Data collection took place within the classroom setting during regularly scheduled class time. Participants were instructed to peruse the advertisement randomly assigned to them by the course instructor and respond to the questionnaire items which sought their opinions about the athlete, product, and the endorsement.

3.3. Measures

The questionnaire ascertained demographic variables (age, race, gender) and the variables of interest in the study. The variables of interest included perceptions of the athlete’s attractiveness, trustworthiness, and expertise. Additionally, we were interested in athlete–product fit and participants’ intentions to buy the endorsed product. Involvement with the sport and drink frequency were also measured and served as control variables. The mean of the items represented the final score for each measure. The manner in which these variables were measured is described below. Further, reliability estimates (Cronbach’s alpha) for each measure in the questionnaire were calculated and are reported below.

3.3.1. Endorser credibility measures

We used Ohanian’s (1990) scale to assess the perceived trustworthiness, attractiveness, and expertise of the athlete. Items from the three scales were preceded by the phrase, “the athlete in the advertisement is...” and utilized 9-point semantic differential scales. For the trustworthiness scale, the endpoints were “dependable–dependable,” “honest–dishonest,” “reliable–unreliable,” “sincere–insincere,” and “trustworthy–untrustworthy.” For the attractiveness scale, the endpoints were “unattractive–attractive,” “not classy–classy,” “ugly–beautiful,” “plain–elegant,” and “not sexy–sexy.” For
the expertise scale, the endpoints were “not an expert–an expert,” “inexperienced–experienced,” “unknowledgeable–knowledgeable,” “unqualified–qualified,” and “unskilled–skilled.” Reliability coefficients for the trustworthiness ($\alpha = .86$), attractiveness ($\alpha = .86$), and expertise ($\alpha = .85$) measures were high.

3.3.2. Athlete-product fit
The fit of the athlete with the product was measured using Till and Busler’s five item scale (2000). A sample item is “I think the athlete is an appropriate endorser of the advertised product.” Items were measured on a 9-point Likert-type scale ranging from 1 (strongly disagree) to 9 (strongly agree), and the reliability estimate was high ($\alpha = .86$).

3.3.3. Purchase intentions
Till and Busler’s (2000) three item semantic differential scale was used to measure intentions to purchase the endorsed product. Participants responded to the following, “How likely is it that you would consider purchasing __________ (the product)?” The phrase was anchored by 9-point semantic differential scales with endpoints “definitely would not-definitely would,” “unlikely–likely,” and “improbable–probable.” The reliability estimate for the measure was high ($\alpha = .96$).

3.3.4. Involvement
To serve as a control variable relative to participants’ interest in the sport, we adopted Parker and Fink’s (2008) involvement scale. The scale was a 9-point, 3-item summated rating scale with the stem of “how would you rate yourself as a fan of this sport” and anchors of “not a fan at all-big fan,” “do not follow-follow closely,” “not at all involved-very involved.” The reliability estimate for this measure was high ($\alpha = .92$).

3.3.5. Drink frequency
To serve as a control variable relative to the endorsed product, we included a one-item measure to ascertain participants’ use of the product. It was a 9-point (1 = never–9 = very often) Likert-type scale with the stem “How often do you drink this product?”

4. Results
4.1. Manipulation checks
To ensure both advertisements portrayed similar levels of expertise, the wording was pre-tested with a sample of 25 graduate students at one of the institutions. The two advertisement messages were randomly distributed to the pre-test participants, who were asked to rate the athlete’s level of expertise on a 9-point semantic differential scale (not an expert–an expert). The photo of the athlete was not included and any reference to the gender of the athlete was omitted.

To ensure the efficacy of the experimental manipulation, three weeks before the manipulation was conducted, participants were given two short surveys. In the first survey, 17 different sports were listed and participants were asked to rate on a 7-point scale (not at all appropriate, very appropriate) how appropriate it was for girls/women to participate in each of the sports. The list included boxing and tennis. In the second survey, 14 different drinks were listed and subjects were asked to rate them on a 7-point scale (from 1 = not at all related to 7 = very related) relative to how closely related they were to sport and physical activity. Gatorade and SoBe Tea were included in the list.

Multiple analyses of variance were computed to test the efficacy of the manipulations. The participants provided with the gender-neutral advertising messages for the boxing and tennis conditions scored them similarly. The mean scores for expertise in the two advertisements were not significantly different (Tennis $M = 7.81, SD = 1.20$; Boxing $M = 7.43, SD = 1.61$), $F(1, 23) = .015, p = .987$ indicating the two conditions portrayed similar levels of expertise. Consistent with the expectations, participants rated tennis ($M = 6.82, SD = .47$) as significantly more gender appropriate than boxing ($M = 4.42, SD = 1.82$), $F(1, 295) = 136.52, p < .001, \eta^2 = .121$. Additionally, they rated Gatorade as significantly more related to sport ($M = 6.90, SD = .404$) than SoBe Tea ($M = 2.98, SD = 1.63$), $F(1, 296), 160.82, p < .001, \eta^2 = .427$. These results indicate the experimental manipulation was successful.

4.2. Hypothesis testing
Means, standard deviations, and bivariate correlations of the variables of interest are presented in Table 1. Hypothesis 1 predicted that a female athlete endorser in a gender appropriate sport would receive higher credibility ratings (i.e., attractiveness, expertise, trustworthiness) than one in a gender inappropriate sport. This was tested with a MANCOVA, controlling for age, gender, race, and drink frequency and involvement. The overall MANCOVA was significant $F(3, 276) = 4.95, p < .001$. Follow up univariate analyses revealed that the only control variable that was significant was gender $F(3, 276) = 3.75$ and this explained 3.6% of the variance. Gender of the participants significantly impacted perceptions of expertise, $F(1, 278) = 6.06, p < .05, \eta^2 = .028$. Female participants rated the endorser as more expert. Type of sport was also significant, $F(3, 278) = 3.14, p < .05, \eta^2 = .039$. This variable significantly impacted perceptions of attractiveness $F(1, 286) = 7.88, p < .01$ and explained 3% of the variance in this variable. Ratings of attractiveness were statistically higher when the athlete was portrayed as a tennis player ($M = 6.58, SD = 1.30$) than when she was portrayed as a boxer ($M = 6.05$,
Table 1
Means, standard deviations, and bivariate correlations of variables of interest.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.488**</td>
<td>–</td>
<td>.616**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>.492**</td>
<td>.325**</td>
<td>.327**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fit</td>
<td>.260**</td>
<td>.333**</td>
<td>.411**</td>
<td>.554**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase intentions</td>
<td>.355**</td>
<td>.194**</td>
<td>.113</td>
<td>.369**</td>
<td>.301**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Drink frequency</td>
<td>.116</td>
<td>.141†</td>
<td>.106</td>
<td>.111</td>
<td>.173**</td>
<td>.173**</td>
<td>–</td>
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<tr>
<td>Involvement</td>
<td>.199**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mean</td>
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<td>7.12</td>
<td>6.28</td>
<td>6.08</td>
<td>4.01</td>
<td>3.57</td>
<td>3.32</td>
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<tr>
<td>SD</td>
<td>1.34</td>
<td>1.61</td>
<td>1.20</td>
<td>1.89</td>
<td>2.14</td>
<td>2.64</td>
<td>2.09</td>
</tr>
</tbody>
</table>

* p < .05.
† p < .01.

Table 2
Means and standard deviations of attractiveness, expertise, and trustworthiness by sport.

<table>
<thead>
<tr>
<th></th>
<th>Attractiveness</th>
<th>Expertise</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boxing</td>
<td>6.05 (1.32)</td>
<td>6.99 (1.77)</td>
<td>6.25 (1.20)</td>
</tr>
<tr>
<td>Tennis</td>
<td>6.58 (1.30)</td>
<td>7.24 (1.43)</td>
<td>6.31 (1.21)</td>
</tr>
</tbody>
</table>

SD = 1.32. Perceptions of trustworthiness and expertise were not significantly impacted by sport. Therefore, this hypothesis was only partially supported. The means on ratings of attractiveness, expertise, and trustworthiness by the sport condition are displayed in Table 2.

The second hypothesis predicted a sport by product interaction and suggested the female athlete in the gender appropriate sport endorsing a sport product would receive the highest ratings of fit. This was tested with an ANCOVA with the experimental condition (tennis/Gatorade; tennis/Sobe; boxing/Gatorade; boxing/Sobe) as the independent variable and perceptions of fit as the dependent variable and age, gender, race, and drink frequency, involvement, attractiveness, expertise, and trustworthiness as controls. The overall ANCOVA was significant, F(8, 279) = 19.59, p < .01, η² = .362. None of the control variables were significant, but the experimental condition was significant, F(3, 284) = 14.69, p < .01, η² = .235. The follow-up post hoc tests revealed the product being endorsed drove the differences. Table 3 shows the means of fit by condition and Table 4 shows the results of the Scheffe’s post hoc tests. The mean for the tennis/Gatorade condition (M = 7.01, SD = 1.62) did not significantly differ from the boxing/Gatorade condition (M = 6.99, SD = 1.23). However, both of these means were significantly different from the tennis/Sobe (M = 5.06, SD = 1.61) and boxing/Sobe (M = 5.28, SD = 1.82) conditions. Further, tennis/Sobe and boxing/Sobe mean scores were not significantly different from one another.

The third hypothesis predicted “fit” would influence purchase intentions of the endorsed product beyond any effects from attractiveness, expertise, and trustworthiness, or those attributed to the endorsed product, the endorser’s sport, and the interaction of the two. This was tested via a hierarchical regression. Table 5 shows the results of the hierarchical regression. The controls accounted for 12.3% of the variance (p < .001) and, as in the previous test, only drink frequency (β = .299, p < .001) and gender (β = .164, p < .001) contributed significantly in this step. Those who consumed the product more frequently, and females, had higher purchase intentions. The second step accounted for an additional 15.8% of the variance (p < .001), but only attractiveness (β = .166, p < .01) and trustworthiness (β = .291, p < .01) were significant. Thus, higher levels of perceived attractiveness and trustworthiness of the endorser resulted in higher purchase intentions. The third step of the regression was significant (p < .01) but only explained 2.2% additional variance. Sport played by the endorser was significant (β = -.148, p < .01) and the negative relationship indicates intentions to purchase were significantly higher when the athlete was portrayed as a boxer than as a tennis player. The sport × product interaction step was not significant. Finally, the last step was significant and athlete-product fit accounted for an additional 12.3% of the variance in purchase intentions (β = .277, p < .001), indicating as perceptions of fit increased so did the intent to purchase the endorsed product.
Table 4
Results of Scheffe’s post hoc analyses.

<table>
<thead>
<tr>
<th>(I) Condition</th>
<th>(J) Condition</th>
<th>Mean Difference (I – J)</th>
<th>Std. error</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
<td>Boxing-Gatorade</td>
<td>Tennis-Gatorade</td>
<td>−.0217</td>
<td>.23708</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Tennis-Sobe</td>
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<td>.23943</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Boxing-Sobe</td>
<td>1.7033</td>
<td>.28008</td>
<td>.000</td>
</tr>
<tr>
<td>Tennis-Gatorade</td>
<td>Boxing-Gatorade</td>
<td>.0217</td>
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<tr>
<td></td>
<td>Tennis-Sobe</td>
<td>1.9454</td>
<td>.26323</td>
<td>.000</td>
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<td></td>
<td>Boxing-Sobe</td>
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<td>.30068</td>
<td>.000</td>
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<td>Boxing-Gatorade</td>
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<td>.23943</td>
<td>.000</td>
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<td></td>
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*p < .05.

Table 5
Results of hierarchical regression on purchase intentions.

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<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>Adjusted R²</th>
<th>R² change</th>
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<td>Drink frequency</td>
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<td>.299***</td>
<td>.123**</td>
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<td>.164***</td>
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<td>−.054</td>
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<td>Involvement</td>
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<td>.119</td>
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<td>Attractive</td>
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<td>.097</td>
<td>.165**</td>
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<td>.158***</td>
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<td>.089</td>
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<td>Trustworthy</td>
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<td>.119</td>
<td>.291***</td>
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<td>Product</td>
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<td>.294</td>
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<td>.277</td>
<td>.418</td>
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P < .01.

5. Discussion

Hypothesis 1 predicted that type of sport played by the female athlete endorser (gender appropriate versus gender inappropriate) would significantly impact perceptions of the endorser’s attractiveness, expertise, and trustworthiness. However, this variable only significantly influenced perceptions of attractiveness which was significantly lower for the female athlete depicted as a boxer. It is interesting that only attractiveness ratings were influenced by the type of sport played. In previous studies (Holland & Andre, 1994; Kane, 1988), participation in a gender inappropriate sport by a female athlete resulted in lower ratings of social status, thus we anticipated this variable would impact all of the source credibility variables, not just attractiveness. As this is the first study that used “type of sport” as an experimental condition, we are unsure why the female athlete in the gender inappropriate sport received lower ratings only on attractiveness. Research has shown that labels affect perceptions of attractiveness (Kowner, 1998). That is, how an individual is classified (i.e., social deviant, non-social deviant) impacts how physically attractive they are rated by others. This phenomenon holds true even if the individual was previously rated as very attractive. When the social deviant label is applied, their attractiveness ratings decreased.

While we did not specifically label the boxer a social deviant, social role theory would argue that she is participating in a traditionally masculine sport and thus crossing boundaries of what is seen as traditionally acceptable social behavior for women. This boxer label may have been enough to alter attractiveness ratings from participants in this study. The fact that participants all viewed the exact same athlete in the exact same manner does indicate that perceptions of female
attractiveness are still somewhat influenced by the sport in which they compete and females competing in gender inappropriate sports are considered less attractive merely due to the sport in which they participate.

However, given previous literature (Holland & Andre, 1994; Kane, 1987, 1988), we had anticipated this variable would have much more influence. Our methods were slightly different from two of these studies (i.e., Holland & Andre, 1994; Kane, 1988), however, as we showed an actual photograph of the athlete. In the other studies, only a description of the athlete was provided, so participants had to imagine what the athlete looked like based on the description. Perhaps this previous work resulted in greater reliance on stereotypes. That is, when given only a description of a female in a gender-inappropriate sport, participants relied solely on stereotypes and pictured a more masculine female. While the athlete in our advertisement was muscular, she was small-boned, thin, and had shoulder length hair. Had we used a more “masculine looking” female, perhaps that may have served to further trigger perceptions of social role violations and we would have obtained similar results on the variables of trustworthiness and expertise.

Hypothesis 2 predicted an interaction between sport and product, more specifically that the endorser depicted as a tennis player endorsing Gatorade would have the highest ratings of athlete-event fit. However, the interaction term was not significant. In fact, the product the athlete endorsed was the only significant variable after accounting for the effects from the control variables and the credibility variables. As would be expected given the tenants of the match-up hypothesis, perceptions of athlete-product fit were significantly higher when the athlete endorsed Gatorade than when she endorsed Sobe Tea. Obviously, it is easier for a consumer to forge a connection with an athlete and a sports drink than an athlete and a non-sport product.

The fact that sport type (gender appropriate versus gender inappropriate) played no role in perceptions of athlete-product fit was unexpected. Through decades of studies, boxing has been deemed to be a “masculine” sport (Koivula, 1995, 2001; Metheny, 1965). Our pre-test indicated that participants perceived tennis to be more gender appropriate for females than boxing. However, this played no significant role in athlete–product fit, or purchase intentions. It is also interesting to note that while tennis was deemed to be more appropriate for females than boxing in the pre-test measure, the mean score for boxing (4.42) was above the midpoint of the “appropriateness” scale. Perhaps these findings are a result of slight changes in gender norms. As Koivula (2001) stated,

...assumptions about gender and gender categories are in turn based on socially constructed, historically specific, and cultural representations of the social interactions that occur among gendered individuals through their relations to others. These concepts and constructs are thereby sometimes subject to change. (p. 378)

Title IX has been in effect since 1972 and the rate of girls and women participating in all types of sport has increased exponentially since that time period (Acosta & Carpenter, 2010). Further, the greatest increase in sports participation by women has been in sports considered neutral or masculine (Hardin & Greer, 2009). Such consistent participation in these types of activities may serve as a strong challenge to traditional notions of “appropriate” activities for females.

While our results indicate that type of sport was not significant in terms of producing higher perceptions of athlete-product fit, the fact remains that most endorsement deals are awarded to female athletes in what are typically considered gender appropriate sports (Van Riper & Badenhausen, 2008). Nine of the top ten earning female athletes competed in golf or tennis, with Danica Patrick (NASCAR) being the lone exception. Of course, the choice of an athlete endorser also depends upon the sport’s appeal to the larger public. However, Scarborough Sports Marketing indicated that the Ladies Professional Golf Association (LPGA) and the Women’s National Basketball Association (WNBA) have the same percentage of loyal fans (McClung, 2005). Thus, in light of the findings amongst our sample, female athletes participating in the WNBA should be as effective as LPGA endorsers as sport related product. And yet, there are no WNBA players in the top 10 earning female athletes. In fact, no “team sport” female athlete made the list (Van Riper & Badenhausen, 2008).

An interesting finding was discovered in the analysis of the second hypothesis. Given previous literature, we anticipated that all source credibility variables would contribute significantly to perceptions of fit, yet only trustworthiness was found to be significant. Other studies of female athlete endorsers have found expertise and attractiveness to be important components of fit (Cunningham et al., 2008; Fink et al., 2004); however, in those studies the athlete was endorsing a sporting event, not a product. Perhaps “fit” for an athlete endorsing a sporting event is different than when she endorses a sport product. Trustworthiness is defined as the “degree of confidence consumer’s place in a communicator’s attempt to convey the assertions s/he considers most valid” (Amos et al., 2008, p. 215). This trait may be more important in persuading consumers to try a sport product because, unlike when an athlete endorses her own sport, consumers cannot be certain that an athlete actually uses the sport product she is endorsing. Thus, the more the athlete comes across as trustworthy, the greater the degree of fit is produced. Further, in conjunction with the findings of the first hypothesis, these perceptions of trustworthiness are not influenced by the athlete’s sport (i.e., boxing versus tennis). The female boxer was deemed just as trustworthy as the female tennis player. Determining the components that drive perceptions of trustworthiness of a female athlete endorser appears to be an important endeavor relative to endorser effectiveness. For example, does it matter if a consumer views the endorser as a trustworthy citizen, or is it enough to be seen as simply a reliable (trustworthy) spokesperson for a particular product? In this study, regardless of the sport played, the athlete was perceived to be trustworthy most likely because she was seen as a knowledgeable source about the sport beverage.

Hypothesis 3 predicted that perceptions of fit would explain a significant amount of variance beyond the control variables, the credibility variables, and the sport/product variables in intentions to purchase the product. This hypothesis
was supported. The fact that fit explained over 12% of the variance in purchase intentions beyond these variables indicates the importance of perceived fit in the success of the endorsement strategy. This finding is consistent with other athlete endorser studies (Cunningham et al., 2008; Fink et al., 2004; Veltri et al., 2003). It appears that the most effective athlete endorsement campaigns will be those in which the female athlete endorses some type of sport product. This is not surprising given the tenants of the match up hypothesis. Still, many athletes endorse products that are not sport related. The key to success, however, is finding a match between the player’s qualities and the product’s qualities. As Anita Elberse, associate professor at Harvard Business School stated (as cited in Gilbert, 2007):

Companies try to find athletes with brand attributes that match those of the products the athlete is asked to endorse, or at least that match the attributes the company hopes to associate with those products. For example, Canon chose Sharapova to promote its PowerShot digital camera because she possesses a number of qualities that fit with the brand – being powerful, but with precision, and having a sense of style. (Marketing Maria, para. 25)

Our results suggest that the type of sport played (gender appropriate versus gender inappropriate) played no role in this formula. Although it explained only a small amount of variance in purchase intentions beyond source credibility variables (i.e., 2.2%), the fact that the athlete depicted as the boxer generated greater purchase intentions than the tennis player is interesting and, again, provides some evidence that notions of what constitutes “appropriate” activities for female athletes may be changing.

6. Conclusions, limitations, suggestions for future research

This study makes several contributions to the existing literature relative to athlete endorsers, particularly female athlete endorsers. Our highly controlled experimental study showed that female athletes in gender “inappropriate” sports are still perceived to be statistically less attractive than their counterparts in more traditionally held gender “appropriate” sports. However, the sport in which the female athlete participated had no bearing on perceptions of her expertise and trustworthiness. Additionally, the type of sport played by the female athlete endorser had no impact on perceptions of athlete-product fit. These findings were incongruent with our hypotheses and suggest that gender “norms” may be changing. Further, athlete-product fit was the most important determinant of purchase intentions for the advertised product which is consistent with the match-up hypothesis. Interestingly, the sport played by the female athlete endorser had no role in purchase intentions. These findings suggest that female athletes in any sport (not just traditionally feminine sports) can be effective endorsers as long as there is a congruency between the athlete and the product advertised. However, currently, very few female athletes receive endorsement deals, and most female athletes who are used as endorsers come from more “traditionally feminine” sports such as golf and tennis. Our results indicate that female athletes are effective endorsers and that the pool of effective female athlete endorsers goes beyond those participating in the “traditionally feminine” sports. Practically speaking, our results suggest a company could choose a less utilized female athlete for less cost and receive the same influence from the endorsement.

As with any study, there were limitations to our research. First, we used a sample of college students majoring in sport management. Their views of female athletes could differ from the rest of the general population. However, this sample also falls into a well-known key demographic, the 18–34 age bracket, which marketers go to great lengths to attract due to their buying power, loyalty, and persuasiveness (Broughton, 2010; Knight, 2007). Further, given the principles of target marketing, companies advertising products with athlete endorsers should be interested in capturing a market involved in sports – otherwise, the endorser would be less effective. Additionally, our participants’ high involvement in sport makes them similar to many other Americans in the population as a recent poll showed that 63% of Americans described themselves as sport fans (Carroll, 2005). Perhaps these are a few reasons that student samples have been used in many recent, influential studies of athlete endorsers (e.g., Boyd & Shank, 2004; Fink et al., 2004; Koernig & Boyd, 2009; Til & Busler, 2000).

Second, we used a fictitious athlete in order to control for numerous threats to internal validity. As such, the generalizability to actual female athlete endorsers is unknown. Our results suggest that, all other things being equal, the type of sport played by the athlete will have no bearing on athlete endorser effectiveness. However, future studies should attempt to replicate the study with real athletes in sports deemed “appropriate” and “inappropriate” for females.

Additionally, the present study did not manipulate the attractiveness of the female athlete as attractiveness was a dependent variable for the first hypothesis. However, given the role of attractiveness in previous findings relative to female athlete endorsers (Cunningham et al., 2008; Fink et al., 2004), it would be interesting to determine how such a manipulation might influence the results of this study. That is, would perceptions relative to the other source credibility variables (e.g., trustworthiness, expertise) differ with such a manipulation? Perhaps we would see an interaction effect between attractiveness and type of sport played.

Future studies should also examine how “gender appropriateness” of the sport affects perceptions of male athlete endorsers. That is, would a male athlete in a more traditionally “feminine” sport like figure skating receive lower source credibility ratings than an athlete in a more traditionally “masculine” sport? Would it impact their effectiveness as endorsers?

Future studies should also try to uncover what makes an athlete “trustworthy” in the eyes of a consumer. Given the role that trustworthiness played in perceptions of fit and purchase intentions in the present study as well as in endorsement
studies outside of sport (Amos et al., 2008), it appears to be a key factor in endorser effectiveness. However, we know very little about why consumers perceive some endorsers to be more trustworthy than others.

References


