Factors Influencing Track and Swimming Coaches’ Intentions to Use Sport Psychology Services

Rebecca A. Zakrajsek & Sam J. Zizzi
West Virginia University

ABSTRACT

This study is the first attempt at developing an instrument measuring coaches’ attitudes toward sport psychology modified from Martin, Kellmann, Lavallee, and Page’s (2002) Sport Psychology Attitudes-Revised (SPA-R) form. The Sport Psychology Attitude-Revised Coaches (SPA-RC) form was developed and examined through exploratory factor analysis (EFA) procedures. In addition, an exploratory model of service use was fashioned through regression analyses to help understand coaches’ intended use of sport psychology services. Coaches (n = 374) were surveyed regarding attitude, previous exposure, expectations of the consultation process, and intentions to use sport psychology services. EFA with the SPA-RC revealed a 3-factor solution (stigma tolerance, confidence in sport psychology consultation, and personal openness) accounting for 45% of the total variance. Results also showed initial support for the exploratory model, accounting for 38% of the total variance, with confidence (34%) as the most significant predictor of coaches’ intentions, followed by stigma tolerance (3%), and expectations of the process (1%).

Introduction

When exploring how to increase the use of sport psychology, past literature has primarily focused on athletes as the consumers of sport psychology (SP) services (Maniar, Curry, Sommers-Flanagan, & Walsh, 2001; Martin, 2005; Martin et al., 2002; Martin, Wrisberg, Beitel, & Lounsbury, 1997; Van Raalte, Brewer, Matheson, & Brewer, 1996). Although athletes are primary consumers, coaches often employ a sport psychology consultant (SPC) and decide if
work is initiated, continued or terminated (Partington & Orlick, 1987; Voight & Callaghan, 2001). Coaches hold a central and critical position within the athletic environment and SPCs cannot ignore how the coach-athlete relationship may influence athletes’ goals, beliefs, values, and expectations.

Coaches’ relationships with athletes go beyond teaching and instructing. Based on Kelley et al.’s (1983) definition of interpersonal relationships, the coach-athlete relationship can be viewed as a situation in which two peoples’ behaviors, emotions, and thoughts are interrelated. The interpersonal relationship formed between a coach and athlete is one of the most significant relationships within sport and an important factor in athlete development (Jowett, 2003; Jowett & Cockerill, 2003). Coaches are often viewed as a close friend, mentor, or father/mother figure and athletes often trust and respect their coach’s judgments (Dieffenbach, Gould, & Moffett, 2002; Jowett & Cockerill). Because of the relationship between coaches and athletes, coaches’ attitudes and opinions may influence whether or not an athlete seeks help or continues work with a SPC (Martin et al., 2001; Orlick & Partington, 1987). Given the significant role that coaches hold within the athletic environment and the continued growth of applied SP, it is important to gain an understanding of the potential variables influencing coaches’ use of SP services.

Attitudes toward Sport Psychology Consultation

Some studies have found that despite the inclusion of the word “sport,” athletes and non-athletes perceive sport psychologists as being similar to mental health professionals such as counselors, clinical psychologists, and psychotherapists (Linder, Brewer, Van Raalte, & DeLange, 1991; Van Raalte, Brewer, Brewer, & Linder 1993; Van Raalte, Brewer, Linder, & DeLange, 1990). From these results, it appears that the primary determinant of public perception is based on the term “psychology” which is often associated with examining vulnerabilities and weaknesses (Ravizza, 1988). However, research has also shown that not all athletes stigmatize an SPC as a head “shrink” (Maniar et al., 2001; Van Raalte, Brewer, Brewer, & Linder, 1992). Sport psychologists have been viewed as having more sport expertise than all other non-coaching professionals (Maniar et al.; Zizzi, Blom, Watson, Downy, & Geer, 2005). Maniar et al. suggested that the word “sport” within the professional title appeared to increase athletes’ willingness to seek help.

With the relationship between perceptions and help-seeking behavior, efforts have recently been extended toward developing a valid instrument to assess athletes’ attitudes regarding SP consultation (Martin et al., 1997, 2002). Martin and colleagues (1997) examined the counseling psychology literature and perception research in sport in order to develop a theoretically driven assessment of athletes’ attitudes toward SP consultation. Important constructs of attitudes toward help seeking behavior were developed and operationally defined: stigmatization, recognition of need, confidence of sport psychology, social desirability, and interpersonal openness. Items were then developed to match the theoretical definition under each construct. Exploratory and confirmatory factor analysis procedures with over 1500 athletes from the United States, United Kingdom, and Germany revealed a four factor solution of athletes’ attitudes toward seeking sport psychology consultation (Martin et al., 2002). The Sport-Psychology Attitudes-Revised (SPA-R) questionnaire is a 25-item four factor solution of athletes’ attitudes: stigma tolerance (expected negative consequences of seeking SP consultation); confidence in SPC (belief that SP
consultation and mental training is useful); personal openness (the willingness of the respondent to try SP consultation and mental training); and cultural preference (identity with own nationality, ethnicity, culture, or race). Internal consistency (Chronbach’s α) and test-retest reliability estimates were found to be adequate to good. The SPA-R appears to be a robust and stable measure of athletes’ attitudes toward seeking SP consultation.

Although the SPA-R was not directly linked with use of SP services, Martin and colleagues (2002) suggested the instrument could assist consultants in measuring athletes’ interest and receptiveness to using services. Anderson, Hodge, Lavallee, and Martin (2004) recently extended the work of Martin et al. (2002) and used the SPA-R as a measure of attitudes within the Theory of Planned Behavior and Theory of Reasoned Action to predict athletes’ intentions. Confidence in SP consulting, perceived behavioral control, and subjective norms were found to be independent predictors and accounted for nearly 40% of the variance in athletes’ intentions. These results support Martin and colleagues (2002) suggestion that measuring athletes’ attitudes can provide useful information regarding intentions to use SP services.

Research regarding athletes’ attitudes and how it relates to intentions to use SP services is more developed compared to research with coaches. Research with coaches has been limited and has primarily involved qualitative approaches in terms of gauging coaches’ perceptions and attitudes toward SP services. Partington and Orlick (1987) interviewed Canadian Olympic coaches and found that one challenge to the profession is the negative connotations that coaches may associate with SP. Specifically, some coaches may view SPCs as professionals working with “head cases” or “problem athletes” (Ravizza, 1988). Furthermore, some coaches may not be open to working with a SPC, perceiving the interaction between an athlete and consultant as undermining their authority (LaRose, 1988; Silva, 1984). Conversely, some coaches have been open to working with a SPC and indicate that SP could assist in the development of athletic potential (Silva). For instance, Sullivan and Hodge (1991) found that out of 46 coaches surveyed, 94.9% felt that athletes would perform better if SPCs conducted a mental training program with their athletes. Although qualitative research with coaches is useful, it would be beneficial to develop an instrument that taps into coaches’ attitudes towards sport psychology consultation. It only makes sense that tapping into coaches’ attitudes toward sport psychology would be developed from a similar theoretical framework as athletes’ attitudes. Therefore, modifying an existing instrument, the SPA-R, for coaches could reveal useful information regarding attitudes and possibly link coaches’ attitudes with SP service use.

Perhaps due to gender role socialization in sport (Curry & Strauss, 1994), men have been found to be more likely than women to stigmatize psychological services (Martin, 2005; Martin et al., 1997; Yambor & Connelly, 1991). Therefore, gender may be a factor influencing coaches’ attitudes toward SPCs. Recognizing the potential gender differences in attitudes, Martin and colleagues (2002) examined if the factor structure of the SPA-R was applicable with men and women by conducting multiple group measurement invariance tests. The researchers concluded that the SPA-R was consistent and stable across groups; however, gender differences in attitudes were not specifically reported. In a follow up study, Martin (2005) examined gender differences using the SPA-R with high school male and female athletes. Results were consistent with previous literature in which male athletes stigmatized sport psychology consultants more than female athletes. Anderson and colleagues (2004) also used the SPA-R to assess gender
differences in attitudes. Female athletes were found to be more open to utilizing SP and more
certain in SP consultation than male athletes. Since previous literature has suggested a gender
effect, researchers may consider exploring and comparing attitudes between men and women in
the coaching profession.

Previous Exposure to Sport Psychology

Previous exposure to SP may be another variable that influences coaches’ intentions to use
SP services. The primary means for coaches to gain exposure and knowledge in SP may include
attending organized clinics, academic courses, presentations or reading textbooks. Sullivan and
Hodge (1991) found that the majority of coaches sampled (65%) reported having previous
exposure (e.g., attended clinics or courses) with SP and 98% indicated an interest in using SP
services. Similarly, Rice (1996) found that 65% of coaches surveyed had previous exposure
(attending workshops, clinics, and courses) to SP and 93% of coaches indicated an interest and
willingness to use SPCs. Although the vast majority of coaches were interested in working with a
SPC, only 21% of coaches reported using SP services, which suggests that various barriers may
be inhibiting service use among coaches.

Previous exposure appears to play some role in coaches’ attitudes; however, simply giving
knowledge about the content of SP skills may not be enough to actively translate a mental skills
program into practice. Gould, Petlichkoff, Hodge and Simons (1990) found that a psychological
skills workshop immediately enhanced interest and intended use of mental skills by athletes.
Although previous exposure seemed to have an influence on athletes’ interest and intended use,
this intention decreased over time. The skills learned were not actively implemented into training
programs. These findings suggest that educational programs regarding the content of SP may
serve to increase awareness and interest; however, it may, or may not, translate to actual service
use by coaches. The relatively low use of SP services, as reported by Rice (1996), suggests that
there may be important information that coaches are not receiving. For instance, coaches may be
receiving information about the content of sport psychology; however, they may not know how
SP works, how to gain access to SP services, and they may not be receiving information
regarding how to use a SPC most effectively.

Expectation of Consultation Process

Interviews and surveys with elite coaches have identified that coaches preferred consultants
who worked individually with athletes, exchanged and communicated ideas with the coach, and
acted as a facilitator and gave feedback to athletes (Gould et al., 1990; Orlick & Partington, 1987;
Partington & Orlick, 1987). Coaches also indicated that they desired the consultant to initiate
meetings for improving communication with athletes and staff, identify individual strengths and
weaknesses of athletes, counsel athletes and coaches on coping with stress, and increase contact
with coaches (Gould et al.; Partington & Orlick). In addition to coaches’ preferences, elite
athletes have suggested that an effective mental skills training program should begin two to three
years prior to the Olympics to ensure optimal preparation (Orlick & Partington). Within these
findings, coaches and athletes have identified key factors involved in the process of SP
consultation including the onset and timeframe for the consultation, the roles of the consultant,
and the communication patterns of the consultant, coach, and athlete. Literature appears to
support the notion that some coaches have accurate knowledge about certain aspects of the consultation process. However, because the interviews were conducted with elite coaches who have already worked with a SPC, it is unclear what coaches’ knew or expected prior to their experience.

The accuracy of coaches expectations prior to consultations may influence their attitudes and intended use of SP services. If athletes and coaches enter the consultation with different expectations of the process than the consultant, conflict and termination can occur (Martin et al., 2001). Martin et al. (2001) surveyed 111 athletes (64 males, 47 females) and 166 nonathletes (72 males, 94 females) regarding their expectations about SP consulting. Results suggested that athletes and non-athletes may not have realistic expectancies toward the process of SP consultation. For instance, it appears that respondents may expect the consulting process to be directive and quick at solving problems. Although not explored in their initial study, Martin and colleagues (2001) suggested that expectations can influence willingness to seek SP consultation. With coaches in the position of hiring a SPC and their influence over athletes’ expectations, it would be important to measure coaches’ expectations about SP consultation and how this may impact service use.

Limitations in Previous Research

Previous research has been limited in a variety of ways. First, previous research has focused on athletes’ attitudes toward sport psychology. Although athletes are consumers of sport psychology services, coaches are often in the position of hiring a sport psychology consultant. Additionally, coaches’ attitudes and opinions may filter down to the athletes. Therefore, it is important to understand coaches’ attitudes toward sport psychology services. Quantitative research regarding coaches’ attitudes has been limited within sport psychology; therefore, it is further important to develop a standard means of assessing coaches’ attitudes. Second, through qualitative means, other variables have been hypothesized to influence service use, such as previous exposure and expectations of SP consultation. In order to gain a clear picture of coaches and sport psychology, it is important to understand coaches from a variety of angles: attitudes, previous exposure, and expectations of SP consultation. Third, research is limited regarding the impact that previous exposure and attitude has on SP service use and expectations has only been theorized to impact SP service use. It is important for attitudes, previous exposure, and expectations to be directly assessed and linked to use of SP services. Because assessing actual behavior may not be feasible for many researchers, studying intentions may provide a means of understanding the antecedent of overt behavior (Greaser, 1992). Lastly, previous literature has primarily used a one-dimensional, atheoretical approach, studying concepts in isolation from each other, thus preventing the development of a model for predicting service use.

Based upon the reviewed literature, the current study had two primary purposes. The first purpose was to examine the appropriateness of modifying an existing instrument used to assess athletes’ attitudes toward SP consultation (SPA-R) to measure coaches’ attitudes. It was hypothesized that the factor structure of the modified instrument would demonstrate the same four factors as the SPA-R. Gender was explored as a factor possibly influencing coaches’ attitudes toward SP services, with women hypothesized to have a more positive attitude toward SP consultation than men. The second purpose was to develop an exploratory model of service
use. Multiple variables are hypothesized to predict coaches’ intentions to use SP consultation including attitudes, previous exposure, and expectations of the process of SP consultation. Assuming the same four factors of the SPA-R represented coaches’ attitudes in the modified instrument, it was hypothesized that confidence, stigma tolerance, and personal openness would predict intentions to use SP consultation, with confidence as the strongest predictor. Cultural preference was not hypothesized to predict coaches’ intentions.

**Method**

**Participants**

Approximately 113 swimming coaches attended the College Swimming Coaches Association of America (CSCAA) national convention and 104 participated in the study, representing a 92% response rate. Approximately 370 track coaches signed up with the US Track Coaches Association at the national convention and 272 participated in the study, representing a 74% response rate. However, due to incomplete data, two participants were eliminated resulting in a subsample of 270 track coaches. Thus, the final sample included a total of 374 participants.

Of the 374 track and swimming coaches, 278 were men and 74 were women. Ages spread across the following categories: 21-29 (n = 65), 30-39 (n = 95), 40-49 (n = 95), and 50+ years (n = 107). Within the selected sample, 287 were Caucasian, 57 were African-American, 4 were American Indian, 3 were Hispanic, 3 were Asian/Pacific Islander, and 4 specified other. The sample included Division I (n = 142), Division II (n = 44), and Division III (n = 75) level coaches. Ninety-nine coaches specified other (junior college, NAIA, NJCAA, NSCAA, high school, club, and Olympic) levels of coaching. Some coaches did not specify gender, age, ethnicity, or level of coaching, resulting in some missing data regarding the demographic variables.

Participants had a mean of 17.94 years (SD = 11.62) coaching experience. On average, coaches trained their athletes 16.12 hours a week (SD = 4.49) and spent < 25% of the time on mental training. On a 6-point scale, ranging from 1 (not at all important) to 6 (very important), coaches reported that strong mental skills were very important to their teams success (M = 5.42, SD = .82). Two hundred ninety seven (79%) of coaches had at least some training in SP (e.g., courses, workshops, degrees, consulting, supervision), 161 (43%) coaches had access to SP services, and 82 (22%) had a SPC currently working with their team. Descriptive statistics by sport and gender are presented in Table 1.
The instrument used to assess coaches’ attitudes was modified from Martin and colleagues’ (2002) Sport Psychology Attitude-Revised Form (SPA-R) questionnaire, which has established reliability and validity. The SPA-R’s internal consistency (Chronbach’s $\alpha$) estimates were .84 (stigma tolerance), .82 (confidence in SPC), .61 (personal openness), and .66 (cultural preference). Test-retest reliability estimates with regards to intra-class coefficients were .90 (stigma tolerance), .83 (confidence in SPC), .71 (personal openness), and .70 (cultural preference) across an 8-week period.

Permission was granted by the author to use and modify the SPA-R with coaches. The Sport Psychology Attitude-Revised Coaches form (SPA-RC) is a 25 item self-administered questionnaire for assessing coaches’ attitudes on the same four factors as the SPA-R: stigma tolerance (seven items), confidence in SP (eight items), personal openness (six items), and cultural preference (four items). No items were deleted from the SPA-R. Revisions of the SPA-R included keeping the original wording of 13 items and modifying 12 items to make the questions more relevant for assessing coaches’ attitudes. For instance, “I think a sport psychology consultant would help me perform better under pressure” was modified to “I think a sport psychology consultant would help my team perform better under pressure.”

After item modifications, five experts in the field of SP reviewed the items within the SPA-RC. Three experts used for this study had obtained a doctorate level degree, had been teaching in the field of sport psychology, and were AAASP certified consultants. The other two experts were doctoral level students who were familiar with research related to perceptions and attitude, had

| Table 1. Means and Standard Deviations by Sport and Gender for All Primary Variables |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                      | Swimming ($n=104$) | Track ($n=270$) | Men ($n=278$) | Women ($n=174$) | Overall ($n=374$) |
|                                      | Mean | SD  | Mean | SD  | Mean | SD  | Mean | SD  | Mean | SD  |
| Stigma Tolerance                     | 1.58 | .63 | 1.65 | .68 | 1.65 | .67 | 1.47 | .61 | 1.62 | .66 |
| Confidence in SPC                    | 4.34 | .76 | 4.42 | .71 | 4.36 | .74 | 4.50 | .72 | 4.40 | .73 |
| Personal Openness                    | 3.18 | .80 | 3.15 | .82 | 3.22 | .76 | 2.87 | .97 | 3.15 | .83 |
| Experience with SP                   | 10.68 | 4.93 | 8.71 | 4.91 | 9.30 | 4.98 | 8.98 | 4.64 | 9.10 | 4.89 |
| Expectations of the Process of SP Consultation | 4.79 | .55 | 4.64 | .56 | 4.65 | .56 | 4.86 | .49 | 4.68 | .56 |
| Intended Use of SP Consultation      | 17.75 | 5.64 | 17.35 | 5.34 | 17.72 | 5.64 | 18.78 | 4.34 | 18.00 | 4.54 |
| Total Years Coaching                 | 17.20 | 10.66 | 18.50 | 11.89 | 19.55 | 11.59 | 11.76 | 9.76 | 17.94 | 11.62 |

Instrumentation

**Attitude.** The instrument used to assess coaches’ attitudes was modified from Martin and colleagues’ (2002) Sport Psychology Attitude-Revised Form (SPA-R) questionnaire, which has established reliability and validity. The SPA-R’s internal consistency (Chronbach’s $\alpha$) estimates were .84 (stigma tolerance), .82 (confidence in SPC), .61 (personal openness), and .66 (cultural preference). Test-retest reliability estimates with regards to intra-class coefficients were .90 (stigma tolerance), .83 (confidence in SPC), .71 (personal openness), and .70 (cultural preference) across an 8-week period.

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After item modifications, five experts in the field of SP reviewed the items within the SPA-RC. Three experts used for this study had obtained a doctorate level degree, had been teaching in the field of sport psychology, and were AAASP certified consultants. The other two experts were doctoral level students who were familiar with research related to perceptions and attitude, had
been teaching in sport psychology, and working toward AAASP certification. Experts were given operational definitions of the four subscales and instructed to categorize each item, presented in random order, with the appropriate subscale. Possible items of concern include “at times I have felt lost and would have welcomed professional advice for a personal problem,” and “there is something respectable in the attitude of athletes who are willing to cope with their conflicts and fears without resorting to professional help.” For the first question, all five experts identified the item to be placed in another subscale other than confidence in the SPC, and for the later, three out of the five experts identified the item to be placed in another subscale other than personal openness. However, after reviewing the questions and subscale definitions, all experts agreed with the placement of items in each subscale.

The 7-point scale was modified to a 6-point scale, omitting the neutral option for the purpose of improving the reliability of responses (Dillman, 2000; Gilljam & Granberg, 1993). Gilljam and Granberg have found that the “don’t know” category includes responses by individuals who really have attitudes regarding the item but avoid expressing them. For those individuals who do not have opinions that are well-formed, the current scale includes a slightly disagree/agree category to allow for some expression of uncertainty. Scores for each subscale are obtained by averaging the responses within each subscale. Higher scores on the subscales indicate a more negative attitude toward seeking consultation (stigma tolerance), a stronger belief that mental training is useful (confidence), an unwillingness to be involved in SP consultation and mental training (personal openness), and a stronger identity to the respondent’s own nationality, ethnicity, culture, or race (cultural preference).

Expectations. This instrument was designed by the authors to measure the perceptions of coaches’ expectations regarding the process of SP consultation. The instrument consists of 17 items, of which four items were modified from the Expectations About Sport Psychology Consulting (EASPC) questionnaire (Martin et al., 2001). The EASPC was not used in the present study for several reasons. In addition to the length of the questionnaire (66 items), there was concern about low internal reliability estimates (<.60) for two of the subscales. Further, because the EASPC was modified from another instrument, it did not address several key features of the SP consultation process (i.e., confidentiality, onset of consultation, communication patterns, and roles). Finally, since coaches typically either refer athletes to an SPC or hire a consultant to work with their team, the EASPC was not a good fit because it is designed to be answered directly by clients. Thirteen new items were generated based on researching recent readings on psychological skills training programs (Weinberg & Williams, 2001) as well as discussions with an expert and certified consultant in sport psychology. Example items include “I would expect my athletes to never need consulting again after working once with a sport psychology consultant,” and “I would expect the sport psychology consultant to fix problems quickly.” The responses range from 1 (strongly disagree) to 6 (strongly agree). Higher scores reflect a more realistic expectation of SP consultation. Seven of the items were reversed scored. Several experts in SP were asked to review the items in order to establish content validity. Additionally, moderate internal reliability was found within the expectation items, revealing a coefficient $\alpha$ of .77.

Exposure and intentions. Items used to measure coaches’ previous exposure and intentions to use SP services were modified from previous research regarding psychological skills training and consultation with athletes (Zizzi & Perna, 2002). Previous exposure to sport psychology was
assessed with a series of four questions relating to coaches’ level of training, personal experience, and use of sport psychology. A sample item is “please rate your level of formal training in SP (e.g., courses, workshops, degrees, consulting, supervision)” from 1 (no training) to 6 (considerable training). Scores are added to obtain an overall score, with higher scores reflecting more exposure to sport psychology. Coaches’ intentions were assessed by summing four questions with responses ranging from 1 (not at all likely) to 6 (very likely), with higher scores reflecting higher intentions to utilize SP services. A sample item is “if one were available to your team, how likely is it that you would contact a SPC in the next week.” Internal consistency (Chronbach’s $\alpha$) estimates were .67 (previous exposure) and .77 (intentions).

**Procedures**

After institutional review board approval, permission was obtained from the deputy executive director of the College Swimming Coaches Association of America and the U.S. Track Coaches Association for the primary investigator to recruit coaches for participation in the study. A brief explanation of the study and instructions regarding the consent form and questionnaire were presented to coaches at the registration table. Coaches were informed that participation was voluntary and there was no penalty for not participating in the study. Coaches who agreed to participate signed the consent form and completed the questionnaire packet at tables located near the registration table or returned them later in the conference. The questionnaire packet took approximately 10 to 20 minutes to complete. In order to increase coaches’ participation, small incentives (e.g., t-shirt, discount vouchers, hand paddles) were provided by vendors attending the conference who agreed to sponsor the research project.

**Results**

**Exploratory Factor Analysis (EFA) of the SPA-RC**

Exploratory factor analysis procedures were viewed as more appropriate compared to confirmatory factor analysis because the current study was interested in allowing the observed data discover the underlying factors of coaches’ attitudes toward SP consultation (Bryant & Yarnold, 1995; Tabachnick & Fidell, 1996). Furthermore, this is the first attempt at developing an instrument measuring coaches’ attitudes toward SP. Principle axis factoring with promax rotation was performed with the original 25 items of the SPA-RC to identify item clusters corresponding to specific attitudes of coaches toward SP consultation. The following criteria were used to determine the number of factors to rotate: (a) factors with eigenvalues of at least 1.0; (b) the scree test; (c) the percentage of variance accounted for by each retained factor; and (d) the number of interpretable factors. These criteria are based on suggestions provided by Bryant and Yarnold (1995) and Fabrigar, Wegener, MacCallum, and Strahan (1999). Item means, the degree of overlap among the scales, and internal consistency of each scale were also considered. Items were retained if loadings were above .40 and if crossloadings were not greater than .30.

Exploratory factor analyses revealed a 3-factor solution accounting for 40% of the total response variance and a 4-factor solution accounting for 45% of the total variance, both with simple structure. Factor 1 corresponded to items of stigma tolerance in the SPA-R, factor 2 represented confidence in SP consultation, and Factors 3 and 4 represented personal openness...
items. Based on the criteria employed for EFA and because Factors 3 and 4 represented all personal openness items, these two factors were combined. In addition, factors 3 and 4 were linked conceptually and internal consistency measures revealed that the combined factor produced the strongest reliability estimates. Of the 21 items retained, 7 items were assigned to the stigma tolerance subscale, 8 were assigned to confidence in SP consultation, and 6 were assigned to personal openness (4 items from factor 3 and 2 items from factor 4). All items were assigned to the same scales as used by Martin et al. (2002) with the SPA-R. The four cultural preference items of the SPA-R were removed due to not meeting selection criteria.

Coefficient αs of .84 (stigma tolerance), .80 (confidence), and .63 (personal openness) showed similar estimates as those found in the SPA-R. In sum, validity and reliability estimates demonstrated initial support for the SPA-RC with the exception of less than desirable internal consistency in the personal openness subscale. Table 2 represents the factor structure of the SPA-RC, including eigenvalues, percentage of variance for each factor, and factor reliability.

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<th>Table 2. Final Factor Solution of the SPA-RC</th>
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Note: Factors 3 and 4 are combined and represent all personal openness questions. The coefficient α of .63 represents the combined factor.
Gender and Attitude

It was hypothesized that female track and swimming coaches would have a more positive attitude toward SP consultation than male coaches, as measured by the SPA-RC. The results of independent samples t-tests indicated a significant difference between men and women on stigma tolerance, \( t(340) = 2.06, p = .04 \), and personal openness, \( t(97.62) = 2.80, p = .006 \). However, the effect size for stigma tolerance \( (d = .22) \) and personal openness \( (d = .32) \) were small. Based on these results, gender was included as a possible predictor of coaches’ intentions.

Exploratory Model of Service Use

Track and swimming coaches’ attitudes (confidence in SP consultation, stigma tolerance, and personal openness) toward sport psychology, expectations of the process of SP consultation, previous exposure to sport psychology, and gender were all hypothesized to predict coaches’ intentions to use SP services. Bivariate correlations between all independent variables and collinearity statistics (i.e., tolerance, VIF) indicated that multicollinearity of independent variables was not a problem. Bivariate correlations among predictor variables and the dependent variable are shown in Table 3. In relation to the SPA-RC subscales, significant correlations were found between intentions and the following variables: confidence \( (r = .60, p < .001) \), expectations \( (r = .45, p < .001) \), stigma tolerance \( (r = -.33, p < .001) \), personal openness \( (r = -.23, p < .001) \), and previous exposure to SP \( (r = .22, p < .001) \), all in the hypothesized directions.

| Table 3. Bivariate Correlations with Independent and Dependent Variables |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                             | Confidence in SPC | Stigma Tolerance  | Personal Openness | Expectation of SPC Process | Experience with SP | Gender | Intentions to use SPC |
| Confidence in SPC           | 1                 | -27**             | -20**             | .53**              | .22**             | .08                | .60**             |
| Stigma Tolerance            |                   | 1                 | .34**             | -.51**             | -.24**             | -.11               | -.33**            |
| Personal Openness           |                   |                   | 1                 | -.43**             | -.22**             | -.17               | -.23**            |
| Expectation of SPC Process  |                   |                   |                   | 1                  | .20**             | .16**              | .45**             |
| Experience with SP          |                   |                   |                   |                    |                   | -.92               | .22**             |
| Gender                      |                   |                   |                   |                    |                   |                    | 1                 |
| Intentions to use SPC       |                   |                   |                   |                    |                    |                    |                   |

Note. Numbers represent Pearson Correlation Coefficients. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level
The stepwise multiple regression provided initial support for the exploratory model of service use revealing a three variable solution \( F(3) = 57.71, p < .001 \) that accounted for 38% of the total variance in intentions. Confidence in SP consultation (\( \beta = .48, p < .001 \)) was the most significant predictor of coaches’ intentions and accounted for 34% of the variance, followed by stigma tolerance (\( \beta = -.15, p < .001, 3\% \)), and expectations of the SP consultation process (\( \beta = .12, p < .05, 1\% \)). As confidence in SPC increased, stigma tolerance decreased, and expectations of the SP consultation process increased coaches’ intentions to use sport psychology services also increased. Personal openness, previous exposure, and gender were removed from the regression equation, indicating that they did not significantly predict coaches’ intentions to use SP services in the current sample.

**Discussion**

Cultural preference was the only factor not upheld in the EFA of the SPA-RC. This result is not consistent with previous literature that suggests an individual’s identity to his/her own nationality, ethnicity, culture, or race may influence perceptions and attitudes toward seeking psychological help (Atkinson & Gim, 1989; Atkinson & Lowe, 1995; Martin, 2005; Martin et al., 2002). Perhaps cultural preference is not as strong of a factor in the perceptions of coaches toward SP. Coaches often hire a SPC to work with a variety of individual athletes that compose a team, and thus may not express a strong preference for a consultant to be more similar to him/herself. If this is true, measuring a coaches’ cultural preference may not be necessary as one of the primary aspects of assessing attitude toward working with a SPC. Perhaps the coach takes his/her athletes’ cultural preference into consideration and may look to hire a consultant more similar to his/her athletes. However, it is also possible that the current instrument did not tap into coaches’ cultural preference effectively or that there is a difference when measuring cultural preference of track and swimming coaches in comparison to coaches from other sports. Further research is needed in this area to explore if cultural preference impacts coaches’ attitudes toward SP consultation.

*Gender Differences and the SPA-RC*

Consistent with previous literature with athletes (Anderson et al., 2004), women were found to have less stigma toward SP consultation and were more open and willing to work with SPCs compared to men. However, given the small effect size with stigma tolerance (\( d = .22 \)) and personal openness (\( d = .32 \)), these differences may not be large enough to have a meaningful impact on service use. It is possible that a larger effect size may have been found if the sample was more balanced between men and women. The small number of women (\( n = 74 \)), compared to men (\( n = 278 \)), that were sampled may have impacted the current results. Therefore, further research with a more balanced sample is needed before a definite conclusion can be made regarding gender differences in attitude and its impact on service use.

Previous literature has suggested the difference between men and women athletes’ attitudes is associated with gender role socialization in sport (Yambor & Connelly, 1991). Due to the “macho” dimension of sport participation, men may form negative perceptions of SP consultation because they may view self-disclosure as a sign of weakness, jeopardizing their masculine image (Good & Wood, 1995; Yambor & Connelly). In the present study, this “macho” dimension was
not supported since both men and women coaches’ mean scores for stigma tolerance and personal openness were below the midpoint, indicating that the overall sample had a relatively favorable view of SP consultation.

The type of sport could be a factor influencing coaches’ attitudes in this sample. Although the magnitude of the effect was low, Martin (2005) found that athletes participating in physical contact sports were more likely to stigmatize sport psychology consulting compared to participants in non-contact sports. Football and wrestling were found to have the greatest stigma toward sport psychology consulting. Perhaps the types of sport athletes are socialized in influence gender roles and attitudes. The current sample included coaches from non-contact sports who also coach both men and women athletes. Seventy-four percent of the track and swimming coaches surveyed work with both men and women athletes; perhaps surveying coaches that do not have as much exposure to both genders, as well as those from various types of sports, would reveal stronger gaps in attitude.

**The Building of an Exploratory Model of Service Use among Coaches**

Data from the present study offers support for an exploratory model of service use among coaches (see Figure 1). Specifically, confidence in SP consultation, stigma tolerance, and expectations of the process of SP consultation were found to be significant predictors of coaches’ intentions to use SP services. Although personal openness, previous exposure, and gender did not emerge within the model as significant predictors of coaches’ intentions to use SP services, these factors may indirectly impact intentions and should be considered in future studies with coaches.

**Attitude.** The data suggest that confidence controls substantially more variance in predicting intentions to use SP services (34%) when compared to stigma tolerance (3%). A large portion of previous research has primarily focused on addressing the negative stigma attached to SP (Linder, Pillow, & Reno, 1989; Martin et al., 2002; Van Raalte et al., 1990; Webb & Speer, 1986); however, the current study and more recent literature supports the significant impact that confidence may have with regards to service use (Anderson et al., 2004). Interested SP professionals may want to invest effort in exploring factors that could positively impact coaches’ belief in the effectiveness of SP consultation. This process could involve directly linking mental skills to positive performance outcomes, using real world examples from elite athlete’s use of mental skills, or having other coaches recount their positive experiences with SP consulting.

The current study suggests that for track and swimming coaches, personal openness does not directly predict service use. Personal openness may indirectly influence intentions, however, by contributing to coaches’ confidence, stigma tolerance, and expectations. In support of this hypothesis, significant correlations were found between personal openness and expectations (r = .43, p < .001), stigma tolerance (r = -.34, p < .001) and confidence (r = -.20, p < .001). Therefore, personal openness may moderate coaches’ intentions to use SP services through other predictor variables (see Figure 1).
Although gender differences were found with coaches’ attitudes toward SP consultation, gender was not found to be a significant predictor of coaches’ intentions to use SP services. The effects were small, indicating that attitude differences between men and women coaches may not be strong enough to influence their intentions to use SP services. In addition, the main differences were found with stigma tolerance, which contributed a small amount to predicting coaches’ intentions, and personal openness, which did not significantly predict coaches’ intentions. Gender differences have not been previously explored in relation to coaches’ use of SP services. While gender differences may exist, it is beneficial to know if these differences impact SP service use. However, before firm conclusions can be made, further investigation is needed.

Expectations. The current study found coaches’ expectations of the process of consultation to be the third predictor of intentions to use SP services, with intentions slightly increasing as their expectations of the consultation process became more realistic. In the current study, previous exposure to SP and realistic expectations were poorly correlated \((r = .20)\), suggesting that professionals should not assume that previous exposure to SP means that coaches clearly understand the consultation process. At the onset of consultations, addressing areas such as confidentiality, communication patterns, and the roles of the consultant may be beneficial to help educate coaches on the consultation process. With competent consultants addressing the process of consultation, coaches’ expectations may be more realistic, which can decrease frustration, and improve trust, rapport, and service use. On a six-point scale, track and swimming coaches had a mean expectation score of 4.68. Although the mean score is slightly above the midpoint, this suggests areas for improvement in the education of coaches. For example, coaches expected the consultant to openly discuss an athlete’s problem \((M = 3.2, SD = 1.5)\), suggesting that coaches may not have accurate expectations regarding issues of confidentiality. As a potentially important factor in coaches’ intended use of SP services, and as a new area of study within the realm of SP services.
consultation, further attention is needed regarding the role of coaches’ expectations. Due to brevity and adequate reliability, this version of coaches’ expectations has potential to contribute to future research.

Previous exposure. The present study did not find previous exposure to be a significant predictor of coaches’ intentions to use SP consultation. Interestingly, past literature has suggested a relationship between previous exposure and attitude. Partington and Orlick (1987) found that the two coaches who felt most negative toward SP services also had no prior exposure or experience. More recently, Martin (2005) found that athletes who had previous experience with sport psychology consulting were more likely to be confident about seeking services and had less stigma toward sport psychology consulting compared to athletes without previous experience (Martin, 2005). Bivariate correlations in the current investigation showed small correlations between previous exposure and confidence in SP consultation ($r = .22, p < .001$) and stigma tolerance ($r = -.24, p < .001$). This data suggests that although previous exposure was not found to be a predictor of coaches’ intentions to use SP services, it may moderate intentions through interrelationships with other attitudinal variables such as confidence, stigma tolerance, and expectations.

In the present study, 87% of the sample indicated having some form of previous exposure to SP and 22% of the sample was currently working with a SPC. Rice (1996) found similar results where 65% of coaches surveyed had previous exposure with SP and 21% indicated using SP services. Some coaches indicated that they did not utilize SP services because a qualified SPC was not available. With about 1 in 5 coaches utilizing SPCs, it appears that the first step for professionals in SP involves directing attention toward increasing coaches’ access to competent consultants. Currently, the Association for the Advancement of Applied Sport Psychology (AAASP) is the only North American organization that certifies SPCs. As a growing field, it is important for professionals in SP to become certified to increase the pool of competent service providers, although becoming certified does not guarantee competence. Increased access and exposure to competent professionals has the potential to increase the pool of people who can positively influence coaches’ attitudes and increase their intentions to use SP services.

Limitations

Results of the current study may not generalize to other sports beyond swimming and track. Swimming and track share many similarities; they include both individual and team events as well as men and women. In addition, findings may not generalize to other swimming and track coaches not present at the conference and there may be a difference between coaches who chose to complete the questionnaire and those who did not. Because this study was conducted with swimming and track coaches, it is unclear if the model would hold across different sports or levels of coaching. Second, the study investigated intentions to use SP services and not actual behavior. Although intentions were not translated to actual behavior, intentions may lead to behavior and reflect a willingness to enact a given behavior (Greaser, 1992). Additionally, Leffingwell, Rider, and Williams (2001) found that athletes’ readiness to engage in SP consultation was linked to subsequent participation in psychological skills training. Finally, confidence in SP consultation, stigma tolerance, and expectations of the consultation process accounted for 38% of the total variance in coaches’ intentions. Although this may be viewed as
adequate, we are left to question what accounts for the other 62% of service use.

Applied Relevance

The data suggests that a more holistic approach may be emphasized when developing educational programs for coaches. Traditionally, educational approaches include information on the content of SP topics (e.g., goal setting, leadership, concentration). Although this is helpful and may increase awareness of SP, providing information regarding the content of SP may not provide coaches with enough knowledge to feel comfortable utilizing SP services. Educational programs may need to go beyond providing content to including areas to build confidence in SP consultation as well as address the stigma associated with SP and what to expect within the consultation process.

Practitioners may consider investing most of their efforts in building confidence among coaches and their belief in the effectiveness of SP. Anecdotes of professional athletes’ or high profile coaches’ use of SP may prove beneficial during educational programs with coaches. More time needs to be spent demonstrating the value of SP. Additionally, coaches may gain a better understanding of SP if some time was spent removing negative connotations of SP and addressing important aspects regarding the consultation process. For instance, coaches may expect the consultant to openly discuss an athletes’ problem. Coaches often talk among themselves about their athletes’ problems (Speed, Andersen, & Simons, 2005); therefore, within the athletic culture, confidentiality may be an area that is more difficult to understand. Educational programs with coaches may benefit from explaining what the consultation process is about as well as why confidentiality is so important in gaining trust and working more effectively with the athletes.

The present findings may also be useful to consultants during initial meetings with coaches. Partington and Orlick’s (1987) interviews with coaches found that one coach remarked, in hindsight, that it would have been beneficial to meet and plan out a strategy with the SPC in order to know how to use the services. Rather than approaching coaches with “menus” of SP topics, Speed et al. (2005) have found that the most effective means of selling SP services to coaches involved telling coaches’ how SP consultations work, as well as providing some real-life stories coaches can relate to. Approaching coaches in the initial meeting with “menus” of various topics does not provide them with any information regarding how you are going to work with their athletes. As opposed to simply doing a needs assessment or reviewing what interventions are available, the current study provides additional support for spending some time talking with coaches on how to use SP services most effectively and what to expect within the consultation process. Although further psychometric evidence is needed, using the SPA-RC may provide SPCs with a useful tool to help understand additional areas to target at the onset of consultations.

Future Directions

Coaches spend a large amount of their time with athletes and their influence within the athletic environment cannot be ignored. Researchers are encouraged to expand upon the current findings and continue to develop research regarding coaches’ and SP services. The current study provides initial support for a measure of coaches’ attitudes toward SP consultation. However, it
would only be appropriate to conduct further analysis on the SPA-RC, including split sample exploratory and confirmatory factor analyses, to determine if the factor structure could be replicated with a different sample of coaches across various sports and competitive levels. Further modifications may also include adding more items to the personal openness and cultural preference factors to improve internal consistency and content validity in these areas. With regards to cultural preference, researchers may consider adding items that ask coaches if he/she considers the athlete’s cultural preference or would prefer hiring a consultant who is more similar to his/her athletes. Researchers are encouraged to continue developing a robust measure of coaches’ attitude toward SP services.

The current study offered an exploratory model of SP service use and it would be beneficial to continue exploring variables that impact coaches’ intentions to use services. Thirty eight percent of the total variance in coaches’ intentions was accounted for by confidence in SP consultation, stigma tolerance, and expectations of the consultation process; therefore, there must be additional variables contributing to coaches’ intentions. Funding and accessibility has been identified as the most common reason for not using SP services (Pain & Harwood, 2004; Voight & Callaghan, 2001). Other barriers that may impact SP service use include time constraints, SPC’s knowledge of the sport, and SPC’s ability to blend in with the environment (Pain & Harwood, 2004).

Coaches’ readiness to engage in SP consultation may also be a variable impacting intention to use services. The Transtheoretical Model of Behavior Change (TTM) is a process with predictable stages: precontemplation, contemplation, preparation, action, and maintenance. Leffingwell et al. (2001) explored the TTM in relation to athletes’ attitudes and behaviors regarding SP consultation and found stage of change to be related to subsequent participation in psychological skills training. Although the TTM was explored with athletes, it would be beneficial to explore how coaches’ readiness impacts subsequent SP service use.

It is suggested that personal openness, gender, and previous exposure may moderate coaches’ intentions to use SP services. In order to continue developing a model of service use, interviews with coaches would provide valuable information regarding factors that influence coaches’ decisions to use SP services. Additionally, future researchers are encouraged to explore the relationships between variables as well as what variables directly impact service use through the use of structural equation modeling (SEM). Future research may also consider linking factors of the exploratory model of service use with actual behaviors involved in SP service use (e.g., number of contacts, number of referrals, interventions used).

Further testing and development of the SPA-RC and the exploratory model are needed to fully understand contributing factors toward SP service use. Overall, the present study generally concludes that coaches’ attitudes are complex when in comes to making decisions regarding SP service use, and therefore a multi-dimensional, theoretical approach should be taken when examining variables that contribute to the use of SP services.
References


