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**Article Title:** Do Titles Matter in Sport Psychology? Performer Attitudes Toward Professional Titles and the Effect of a Brief Intervention

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## **Abstract**

Understanding the practitioner attributes that influence consumers' preferences is of vital importance to licensing organizations and individual practitioners in the field of sport psychology (Hamberger & Iso-Ahola, 2006; Van Raalte, Brewer, Matheson & Brewer, 1996). This study examined consumer preferences towards three professional titles (sport psychologist, life coach, and neuro-linguistic programming practitioner) and a range of other practitioner characteristics, as well as the extent to which a brief intervention impacted these preferences. Following an assessment of current preferences amongst athletes ( $N = 229$ ), researchers presented brief, educational vignettes formed of enhanced information regarding the three professions. Conjoint analysis was used to determine the relative importance of practitioner attributes pre- and post-intervention. Interpersonal skills emerged as the most important attribute prior to intervention. Several significant, post-intervention changes emerged in consumer preferences for practitioners, including an increased salience of professional title. The findings are discussed with an emphasis on implications for the training, professional development, and marketing of practitioners to potential clients.

In the domain of sport psychology, understanding athletes’ perspectives of the traits, appearance, and behavior of an effective sport and exercise psychology consultant (SPC) has been the focus of much applied research (Dunn & Holt, 2003; Gould, Tammen, Murphy, & May, 1991; Halliwell, 1990; Lovell, Parker, Brady, Cotterill, & Howaston, 2011). This understanding is of two-fold importance to applied researchers (Lubker, Visek, Watson, & Singpurwalla, 2012). Firstly, it leads to a more informed consideration of the factors that predict initiation of the formal consultation process (Hamberger & Iso-Ahola, 2006). Secondly, a knowledge of preferred characteristics can facilitate the development of appropriate training for practitioners, as well as educational and marketing materials designed for the consumer (Van Raalte, Brewer, Matheson & Brewer, 1996). Vitrally, individuals within the sport environment are now, more than ever, able to be discerning as to their choice of consultant, due to an increasing number of SPCs vying for financial stability, publicity and recognition (Lovell et al., 2011). Since 2009, the title ‘Sport and Exercise Psychologist’ has been protected in the United Kingdom, meaning individuals must meet certain training criteria to ensure that standards are maintained. Due to this protection, there is also an ever-increasing number of competing professions that offer services of a psychological nature (Warner & Bradley, 1991). Thus, an effective SPC should endeavor to be aware of, and possess, the characteristics and competencies that those within sport consider essential, as well as understanding how to appropriately and ethically promote themselves and their profession.

Following the research trend with counselors (Lewis & Walsh, 1978), physicians (Hash, Munna, Vogel, & Bason, 2003) and therapists (Dorn, 1984), sport psychology has examined the impact of both controllable and uncontrollable characteristics upon perceptions of SPCs, particularly with regard to their credibility and effectiveness. Intuitive commonalities, in the services they provide and the relationships they build, exist between

counselors and SPCs, despite often functioning in different capacities (Lubker, Vissek, Geer, & Watson, 2008). Thus, current SPC research can be informed by findings from the counseling domain.

Early studies focused on consumers' (i.e., potential clients) perceptions and preferences of uncontrollable characteristics such as race and gender (Martin, Wrisberg, Beitel, & Lounsbury, 1997), attractiveness (Bernstein & Figiolo, 1983), and similarity to one self (Esters & Ledoux, 2001). Whilst it seems evident that these factors are important in influencing perceptions and attitudes of clients, consultants have little to no direct control over them (Lovell et al., 2011), making the applicability of such research findings severely limited. Hence, to gain an insight and to integrate findings into practice it is most valuable to study controllable characteristics (Lubker et al., 2008). This conclusion has led to the study of both physical (i.e., build, attire, weight; see Lovell et al., 2011) and personal characteristics (i.e., sport-specific knowledge, interpersonal skills, professional status) and their impact upon perceived effectiveness and likelihood to seek consultant services.

Lubker and colleagues (Lubker, Watson, Vissek, & Geer, 2005, Lubker et al., 2008) attempted to translate previous qualitative findings, to build an empirically based, comprehensive image of the perceived characteristics of an effective SPC. Despite providing an insight into clients' perspectives, these studies failed to discern the relative importance of characteristics in relation to one another, as they assessed and analyzed desirable characteristics as individual factors, resulting in a positively skewed trend (see Lubker et al., 2012). To effectively address this, Lubker and colleagues used conjoint analysis to determine the relative importance of each characteristic and why consumers make one choice over another (Green, Kreiger, & Wind, 2001). Eight 'sport psychologist attributes' (gender, race, interpersonal skills, body build, attire, athletic background, professional status, sport knowledge) were combined to create 'sport psychologist profiles'. In their study of 464

college athletes in the United States, professional status was found to be the most influential attribute (23%), followed by athletic background (14%), interpersonal skills (14%), sport knowledge, (12%) and attire (12%).

Alongside an interest to explore consumer preferences within differing cultures, a logical step in extending this line of research is to deepen our understanding of physical and personal characteristics. Additional attributes suggested to merit further investigation include reputation, practical experience and professional title usage (Lubker et al., 2012). Research within the field of counseling has focused on the use and presentation of professional credentials and titles (Bernstein & Figiolo, 1983; Hoyt, 1996; Nasar & Devlin, 2011; Siegel & Sell, 1978), and their impact upon perceived expertness and clients' likelihood to seek consultation. Findings suggest that objective evidence of training (i.e., reputational cues; Hoyt, 1996) significantly contributes to clients' perceptions of expertness and participation in counseling (Atkinson & Carskaddon, 1975; Siegel & Sell, 1978; Strong, 1968; Strong & Dixon, 1971). When introduced with highly credible titles, consultants are rated greater in attractiveness, expertness, trustworthiness, confidence (Bernstein & Figiolo, 1983), and likelihood of visiting (i.e., using their services) (Paradise, Conway, & Zweig, 1986).

Sport psychology research regarding reputational cues has focused primarily on the use of professional titles. Van Raalte, Brewer, Linder, and DeLange (1990) investigated college athletes' perceptions of twelve practitioner titles, including psychological professions (sport psychologist, clinical psychologist, psychiatrist, counselor, hypnotist, and psychotherapist) and other performance-specialist professions (coach, performance consultant, nutritionist, sports medicine specialist, strength coach, and technical equipment advisor). The title 'sport psychologist' was considered to represent a non-sport/mental profession, with participants believing it to be involved with issues other than those directly linked to sport. The authors concluded that the term 'psychologist' was the primary perception determinant,

with little modification caused by the addition of ‘sport’. In contrast, Maniar, Curry, Sommers-Flanagan, and Walsh (2001) found that embedding ‘sport’ in the title increased athlete willingness to consult professionals. These findings may be explained by a lack of education concerning the training and roles of SPCs (Maniar et al., 2001), in particular regarding topics that fall outside of the general coaching domain (Pain & Harwood, 2004). This is an issue that has long plagued psychological professions, with individuals often lacking understanding of how psychology professionals perform within their specialized areas (McGuire & Borowy, 1979). Indeed, in a small scale follow-up study of British athletes, Van Raalte (Van Raalte, Brewer, Matheson & Brewer, 1996) corroborated her earlier findings that SPCs are perceived to be more similar to mental health professionals than to sport professionals.

Such studies (Maniar et al., 2001; Van Raalte et al., 1990, 1996) have focused on specific titles, with little background information regarding each. However, studies into the state of sport psychology within differing countries (Antonelli, 1989; Biddle, 1989; Bond, 1989; Halliwell, 1989) found that degree-holding psychologists, individuals with mental skills training, and individuals without any credentials co-exist (Sanchez, Godin, & De Zanet, 2005; Wylleman, Harwood, Elbe, Reints, & de Caluwe, 2009). Lubker and colleagues (2012) defined professional status as the consultant’s sport-psychology-related credentials, identifying three levels (certified and/or licensed, advanced degree, no credentials). Results indicated that participants preferred those with an advanced degree and who were certified. Whilst this may suggest a positive state of choice, the higher rating for an advanced degree suggests that participants regard this as the highest level of professional credentialing that could be earned (Lubker et al., 2012). Repeating the earlier research concerns, a lack of education surrounding the distinction between credentials was posited as an explanatory factor for this. To this end Hamberger and Iso-Aloha (2006) found that athletes’ knowledge

of sport psychology was significantly related to their attitudes toward SPCs; supporting the hypothesis of previous researchers surrounding a lack of education.

In summary, previous research has independently examined specific titles and levels of credentials. Therefore, the next logical step in deepening our understanding is to combine these two research designs into one that examines specific titles that inherently require different levels of credentials. A lack of education is one of the most commonly cited reasons for individual perceptions (McGuire & Borowy, 1979; Nasar & Devlin, 2011; Ravizza, 1988) and, therefore, a comprehensive study should also investigate whether education about each title, and the related credentials, impact upon attitudes and preferences for consultants.

Three specific titles that require differing levels of education, training and credentials are Life Coach (LC), Neuro-linguistic Programming (NLP) Practitioner, and Sport Psychologist (SP). For the purpose of scientific study, these three titles reflect clear differences in training and accreditation requirements and such professionals are acknowledged to actively promote themselves to sports performers and other individuals within the sporting environment (e.g., Sanchez et al., 2005). Life coaching is a solution-focused, result-orientated process centered around the enhancement of life experience and goal attainment (Grant, 2003). It is one that requires no formal credentials or training to practice. Neuro-linguistic programming is an approach to communication, personal development, and psychotherapy that claims a connection between neurological processes (neuro), language (linguistic), and experience-led behavior (programming) (Heap, 2008; Pegasus NLP, 2013). To become an NLP practitioner, twenty days or 120 hours of training are required by most training bodies.

A lack of knowledge concerning the intimate details of a professional's education, training, credentials and roles is consistently cited as an issue in applied sport psychology research. Hence it appears necessary and practical for professionals to provide consumers

with this information, rather than such lack of knowledge being attributed to the shortcomings of consumers. Providing educational vignettes, and assessing their impact upon perceptions, can identify whether this form of education is a viable and effective method of increasing individuals' knowledge base. Following from the results of Hamberger and Iso-Aloha (2006) we would contend that participants' attitudes towards certain professionals would be significantly altered following exposure to educational information.

In sum, the present study was designed to deepen our understanding of consumers' preferences for practitioners' attributes with respect to sport psychology-related services. Two key research questions were targeted. Firstly, what personal and professional characteristics are most salient in influencing participants' judgments on preference and likelihood to seek services? Secondly, to what extent does a short educational vignette offering enhanced information on professional title impact upon these preferences and attitudes?

## **Method**

### **Participants**

Participants for this study were male ( $N = 147$ ) and female ( $N = 82$ ) athletes currently involved in competitive sport. The sample consisted of athletes from a variety of team (e.g. rugby, cricket, rounders) and individual sports (e.g. swimming, athletics, trampolining). The 229 participants ( $M = 26.08$ ,  $SD = 7.99$ ) represented a range of competitive and professional levels, including; full-time elite international, national or professional athlete/team players ( $N = 13$ ), national level amateur or semi-professional athlete/team players ( $N = 34$ ), county and regional level amateur athlete/team members ( $N = 38$ ), and district and club level athlete/team members ( $N = 144$ ). Snowball sampling was utilized to gain access to this range of athletic populations. The athletic departments of four major sporting universities in the



United Kingdom were contacted and asked for assistance in distributing the on line study details to their range of sport contacts. These universities were chosen because of their role in hosting and supporting UK international athletes and teams beyond their student-athlete population. Subsequently, the resulting participants were asked to promote the study to teammates and acquaintances across other sports. The final sample of participants represented various countries including Great Britain ( $N = 176$ ), North America ( $N = 34$ ), Ireland ( $N = 12$ ), other European countries ( $N = 5$ ) (Austria, Denmark, France, Germany), and India ( $N = 2$ ). Twenty five participants failed to complete the full measure.

## **Instrumentation**

**Demographic measures.** Participants were asked to complete items relating to gender, age and nationality. Individuals were also asked whether they were currently participating in competitive sport, and if so, which sport this was and to what level.

**Attributes of practitioners questionnaire.** The first step in conducting research that requires conjoint analysis (see data analysis) is the intricate selection of attributes that are specific to the purposes of the study (Lubker et al., 2012). This process was conducted by including all relevant sport psychology, psychology, and counseling literature to identify potential characteristics. Through discussion between the authors and following suggestions of recent research (Lubker et al.), uncontrollable attributes, such as race and gender, were removed. Controllable characteristics were then considered, with recent findings being reviewed, resulting in four characteristics perceived to be of most salience to the investigation. These were (a) professional title, defined as the qualification and professional title used by the consultant; (b) interpersonal skills, defined as the ability of the consultant/practitioner to use his or her personality (e.g., approachable, respectful, caring) to build a positive working relationship with athletes and coaches; (c) athletic background, defined as the past athletic

experience of the consultant; (d) sport-specific knowledge, defined as the practitioner’s ability to speak your sport’s language and the depth of his/her knowledge of both the demands of your sport and the specific mental skills required for development and performance.

The next step taken was to determine the appropriate levels for each of the attributes (Lubker et al., 2012). Based on a review of previous research and investigator discussion, the following levels were selected for use in this study: professional title (Sport psychologist, SP; Life coach, LC; or Neuro-Linguistic Programming Practitioner, NLP), interpersonal skills (high or low), athletic background (athlete or non-athlete), and sport-specific knowledge (high or low). The combination of all levels produced 24 practitioner profiles (see Figure 1) that formed the Attributes of Practitioners Questionnaire (APQ). When completing the APQ in stage one (pre-education) and stage two (post-education) of the study, participants were asked to rate their preference for each of the 24 practitioner profiles on an 11-point scale ranging from 0 (*Very low preference*) to 10 (*Very high preference*). To reduce the potential complexity of presenting all 24 profiles together, the APQ was divided into four equal sections of six profiles each in the online format.

**Educational vignettes.** For the educational vignettes, online resources and published journal papers were reviewed. The following information was extracted; (a) protection of title; (b) minimum training time required; (c) pre-requisites (e.g. bachelor’s degree); (d) basic explanation of role; (e) description of techniques and strategies used, where possible in relation to sport. Every effort was made to ensure that all vignettes were fair and unbiased by only using material created and developed by each profession, displayed within easily accessible resources. The length of the three passages were also controlled with the SPC and NLP practitioner profiles being 279 words, and the LC profile being 276 words long (see Figure 2).

## **Pilot testing**

After gaining institutional ethical board approval, the first draft of information and guidance for participants, demographic questions, the APQ, and educational vignettes were entered into SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)) for online pilot testing of the full study completion process. Ten postgraduate students studying sport-related subjects and fifteen members of the general public were asked to complete all questions in stage one and two of the process and provide feedback on completion time, clarity of questions and ease of response. The resulting feedback led only to minor wording changes and improved grammar to increase the clarity of selective information. It was also identified that being presented with six profiles at a time was “simpler and less intimidating” than the full 24 profiles together. The pilot testing determined that the time required to complete stage one and stage two of the process was approximately 15 to 20 minutes.

## **Procedure**

As part of appropriate online informed consent procedures, participants were notified that the general purpose of the study was to explore their views of different types of sport practitioner and profession. Having consented to participate, respondents then completed stage one (current preferences; pre-intervention) and stage two (post-education intervention preferences) outlined below.

**Stage one.** Having completed their demographic information, basic definitions of the three professions (as stated earlier) were presented to ensure all participants had a rudimentary understanding of each profession, without unduly influencing current preferences.

The basic definitions presented were: ‘Sport psychology is “the study of how psychological factors affect performance and how participation in sport and exercise affects

psychological and physical factors”. Sport psychologists work with athletes, coaches, and parents on all psychological aspects of an individual and/or team.’ (Weinberg & Gould, 2010, p. 4); ‘Neuro-Linguistic Programming is an approach to communication, personal development, and psychotherapy that claims a connection between three factors. Neurological processes (neuro), language (linguistic), and experience led behaviour (programming). NLP claims that these can be manipulated to achieve specific life goals.’ (Heap, 2008; Pegasus NLP, 2013); ‘Life coaching is a solution focused, result-orientated process in which the coach facilitates the enhancement of life experience and goal attainment in the personal and/or professional life of nonclinical clients. Empowerment of the client and subjective guidance without instruction are the principles and aims of life coaching’ (Grant, 2003).

Participants were then required to respond to items relating to their previous experience with each profession, specifically whether they had worked with any of these professions in the past. Subsequently, each practitioner attribute was defined for participants (e.g., interpersonal skills) alongside the choice of levels (e.g., high/low), before participants were asked to rate their preference for each of the 24 practitioner profiles on the aforementioned 11-point scale.

**Intervention.** Having completed their preference ratings for each profile in stage one, participants were presented with the three educational vignettes, one at a time, in a randomized order. They were asked to read the information carefully about each specific profession.

**Stage two.** Following exposure to the three educational vignettes, participants were asked to re-complete the APQ, rating their preference for each of the 24 practitioner profiles a second time. At the end of the questionnaire, participants were given the option to note any

further preferential characteristics or factors that they considered important that may not have been covered within the study.

## Data Analysis

Data were downloaded into SPSS 21.0.0 and checked for any missing or incorrect responses. Certain sport responses were altered to ensure consistent analysis. For example, if participants had quoted Football as their sport, this was changed to Soccer, to avoid confusion with American Football. A conjoint analysis was undertaken on individuals' rating data. This is a technique that allows sport scientists to produce more robust data than previous rank order techniques (Lubker et al., 2012). The relative importance of each attribute and level is assessed by asking participants to trade off features, one against another (IBM, 2012), and successfully estimates the structure system of a consumer's preferences (Green & Srinivasan, 1978, p.104). Simulation can then be used to predict individuals' future decisions.

This form of data analysis produces utility (part-worth) scores and relative importance scores. Utilities are a quantitative measure of the preference for each factor level, and are expressed in a common unit, allowing the addition of utility part-worths together to give the total utility of any combination (IBM, 2012). The mathematical equation for this is:

$$Y = u_1 x_1 + u_2 x_2 + u_3 x_3 \dots u_i x_i + e$$

Where Y represents the total utility of a combination, U, the utility part-worth of each attribute, x the specified attribute, and e the constant. For example, if assessing an individual's preference for a practitioner who is an LC, has high interpersonal skills (HIS), low athletic background (LAB), and low sport-specific knowledge (LSK) the equation would be:

$$\text{Total utility} = \text{utility(LC)} + \text{utility(HIS)} + \text{utility(LAB)} + \text{utility(LSK)} + \text{constant}$$

Once the conjoint analysis was completed, Student's t-tests and factorial Analyses of Variance (ANOVA) were conducted to analyze the effect of the educational intervention and subgroup differences in terms of gender (male/female), nationality (British/North American/Other European and Indian), level of competition (full time elite/National level amateur/county or regional/district or club), and type of sport (individual/team). Qualitative analysis of the optional responses regarding any further characteristics that would affect preferences for consultation was also conducted.

## **Results**

An individual conjoint analysis was conducted on the total data set of participants' pre-education and post-education responses. Student's independent t-tests and two-way ANOVA were conducted on the resulting data to establish intervention effect and subgroup differences respectively.

### **Stage 1: Pre-intervention responses**

Conjoint analysis indicated that the most preferred practitioner attribute was interpersonal skills (35%), followed by sport-specific knowledge (26%), professional title (22%), and athletic background (17%). The most preferred practitioner was an SP who had high interpersonal skills, a high level of sport-specific knowledge and understanding, and previous experience in training and competing to at least a junior county/regional level. Previous experiences with specific consultants resulted in higher average mean ratings for those consultants than those that had no previous experiences (7.4 vs. 4.6; respectively). Significantly, the average mean rating for profiles that had high interpersonal skills were rated higher than those that had low interpersonal skills (6.3 vs. 3.2; respectively;  $p < 0.05$ )

Specific conjoint analyses and post-hoc two-way ANOVA were used to determine if there were any differences between subgroups regarding gender, nationality, level of

competition, type of sport and previous experience with each of the three professions.

Individuals that had previous experience with a LC rated SPs significantly ( $p < 0.01$ ) lower than those that had not (0.422 vs. 0.687; respectively), and LC as higher than those that had not (-0.186 vs. -0.284; respectively) (see Table 1). No significant differences were found between any other subgroups ( $p > 0.05$ ).

## **Stage 2: Post-intervention responses**

Conjoint analysis on individuals' post-intervention responses was conducted and indicated that, after being presented the educational vignettes, professional title was the most preferred practitioner attribute (41%), followed by interpersonal skills (34%), sport-specific knowledge (13%), and athletic background (12%). There was no change in the most preferred profile as stated in the previous section. No differences emerged between those that had previous experience and those that had no previous experiences with any of the practitioners. Differences in mean ratings for high interpersonal skills profiles and low interpersonal skills profiles (6.5 vs. 5.4 respectively) were no longer statistically significant.

Specific conjoint analyses and post-hoc two-way ANOVA were conducted to determine if there were any subgroup differences post-intervention. No significant difference was found for gender, nationality and type of sport. However, a post-hoc Bonferroni analysis found a significant difference within the level of competition groups. In particular, this significant difference was found between the utility part-worths for the SP title between athletes competing as a national level amateur or semi-professional athlete and those at the county and regional amateur level (see Table 2). National level/semi-pro athletes indicated a stronger preference for the SP title than athletes competing at a county standard (1.931 vs. 1.478; respectively,  $p = 0.003$ ). Once again, individuals that had previous experience with a LC rated SPs significantly ( $p < 0.01$ ) lower than those that did not (1.174 vs. 1.725;

respectively), and LC as higher than those that had not (-0.769 vs. -1.206; respectively) (see Table 1).

### **Intervention effects**

To further evaluate the impact of the educational vignettes upon participants' attitudes and preferences toward practitioners, a conjoint analysis was conducted on all data pre- and post-intervention. A post-hoc t-test was conducted on each attribute to assess change over time. This analysis found that there was a significant change across the two time points in relation to professional title, athletic background and sport-specific knowledge ( $p < 0.01$ ). With regards to professional title, the part-worth utility of SP significantly increased (0.671 vs. 1.699;  $p < 0.01$ ), whereas the utility scores for NLP practitioner (-0.393 vs. -0.894;  $p < 0.0005$ ) and LC (-0.278 vs. -0.804;  $p < 0.01$ ) significantly decreased.

Part-worth utility scores significantly decreased for both high athletic background (0.545 vs. 0.390;  $p < 0.01$ ) and high sport-specific knowledge (0.877 vs. 0.464;  $p < 0.01$ ). This indicates a reduction in relative importance of athletic background and sport-specific knowledge (17% vs. 12% and 26% vs. 13%; respectively). However, no significant difference across time was found for the interpersonal skills attribute (1.168 vs. 1.171;  $p = 0.70$ ), indicating that the relative importance of high interpersonal skills remained stable across the two time points (35% vs. 34%).

### **Additional characteristics**

Basic qualitative content analysis was conducted on individuals' responses regarding any further characteristics or factors that would be included in their decision between practitioners. Coding of similar responses led to the emergence of four distinct factors; cost of consultation ( $N = 15$ ), knowledge in a specialized area ( $N = 13$ ), reputation ( $N = 10$ ), and recommendation from friends/significant others ( $N = 4$ ).



## **Discussion**

This study aimed to build upon previous research to deepen our understanding of consumers' preferences for consultant attributes in the provision of services related to sport psychology. It also examined the attitudes towards three professional titles with differing levels of credentials, education and training, as well as investigating the extent to which a short, innovative educational intervention impacted upon consumer preferences.

### **Practitioner attributes**

To the authors' knowledge, this is the first study to apply a brief consumer education intervention to determine its effects on pre-existing consumer preferences for practitioners. The informational vignettes led to significant differences in consumer preferences for three of the four professional practitioner attributes, with no change for the relative importance rating of interpersonal skills. These results will be discussed in relation to each attribute independently.

**Professional title.** Exposure to the vignettes regarding professional training, roles and protection of title led to a significant increase in the relative importance ranking of the professional title attribute, resulting in a shift from third to first most influential attribute. Despite being part of the most preferred overall practitioner profile prior to further education, the SP title possessed a significantly higher utility rating post-intervention, indicating that, once presented with the educational material, consumers rated potential practitioners higher if they were an SP as opposed to other competing professions. The utility scores of the remaining two levels, LC and NLP practitioner, significantly decreased after the intervention stage, suggesting that being informed of the aspects of the profession outlined in the vignettes negatively influenced individuals' attitudes towards these practitioner titles. In terms of optimizing the exposure and interest in registered or certified sport psychology services, these

findings carry beneficial implications for the field of sport psychology. Specifically, if athlete consumers are educated in the nature of these professions, the findings imply that they would prefer to consult with an SP over other potential competing practitioners. Interestingly, participants that had previous experience with life coaching preferred LCs than those that had not, a finding that remained stable post-intervention. Positive previous experiences with a professional may mediate the effect of education surrounding the profession, and this may also serve to explain why the same subgroup (i.e., those with LC experience) rated SPs significantly lower than those that had no experience of this type of practitioner. No firm conclusions can be drawn as to why NLP practitioners possessed the lowest utility scores at both time points.

**Interpersonal skills.** The educational intervention led to no significant difference to the relative importance rankings or utility scores of the interpersonal skills attribute. In Lubker et al., (2012), interpersonal skills was equally as influential as athletic background (14%) but significantly less influential than professional status (23%). In this study, however, it was the most influential characteristic in participants’ pre-existing preferences, only dropping to second most influential following enhanced education on each profession. This absence of change over time reiterates the importance of interpersonal skills, with counselor personality characteristics more often the basis of clinical success than specific techniques (Pope, 1996). It is interesting to note that professional title and interpersonal skills together accounted for 75% of the influence on consumer preferences post education. With 34% of the decision alone based on the ability to build a positive working relationship, the consistent importance placed upon interpersonal skills highlights the necessity to develop this key personal competency within professional training programs.

**Sport-specific knowledge.** In support of previous research, participants preferred consultants that had a high level of sport-specific knowledge (Lubker et al., 2012). Indeed,

the relative importance ranking for this attribute was higher than professional title prior to the provision of education. The salience of this knowledge, however, significantly decreased post-intervention, heavily superseded by the value placed on professional title. This resultant decrease does not necessarily mean that athletes’ no longer view high sport-specific knowledge on behalf of the practitioner as important. In overall terms (particularly when one considers pre-intervention perceptions), it is evident that potential athlete clients favor practitioners who understand ‘the language of the sport’ (Lubker et al., 2005; 2008) and its specific technical, physical and psychological aspects (Anderson et al., 2004).

**Athletic background.** Possessing a high athletic background positively affected consumers responses as indicated in previous research (Lubker et al., 2012). However, despite being an element of the most preferred practitioner profile throughout the study, the relative importance ranking and utility scores for athletic background were lower than other characteristics, and further reduced post-intervention. Despite such a modest influence on consumer preferences, relative to other personal characteristics, the results still suggest that some athletes see value in a practitioner who possesses a sporting background. This may be due to a perception that such practitioners are able to relate to the individuals’ competitive experiences, and better understand the demands of the sporting environment.

### **Implications for practitioners and organizations**

When appraising the overall findings of the current study, there are several further implications for practitioners and sport psychology organizations to consider. Firstly, when professionally marketing themselves to potential consumers, SPs may benefit from an emphasis on their interpersonal skills and the characteristics of their professional title. In particular, presenting potential clients with information regarding the protection of their title, the training they have completed and a summary of the profession may increase the

likelihood of business compared to other professions, or failing to provide this information.

Idiosyncratic to this study, findings also suggest that practitioners market themselves differently to county and national standard athletes, perhaps stressing more sport-specific knowledge (if appropriate) to county standard competitors who placed a higher relative importance on this attribute in practitioners. There is no clear explanation for this finding apart from a speculative note that higher and lower level athletes may differ in their technical knowledge of the sport and therefore demand slightly differing requirements of consultants. County standard athletes may perceive themselves to have greater sport-specific improvements to make, and therefore be more inclined to prefer a practitioner who has greater sport-specific knowledge from which they can benefit. This explanation is tentative and requires further research in order to inform appropriate marketing strategies for different levels of athlete-client.

Importantly, this study also provides the organizations that govern sport psychology qualifications and certifications with information that may help them to market, advertise and increase consumer knowledge and confidence regarding the field and its professionals. As indicated by previous studies (Maniar et al., 2001; McGuire & Borowy, 1979; Nasar & Devlin, 2011; Van Raalte et al., 1990, 1996), we should not expect individual consumers to know the differences between certain professions that offer psychology-oriented services in sport, or even between someone with a degree in psychology and a licensed or registered practitioner. Therefore, a short educational piece drawing from the vignettes presented in this paper may act as a means by which to educate consumers about differing professions, informing them of the intricate details of becoming a registered, certified or accredited sport psychology practitioner, and including the standards of quality that have to be met. In terms of training requirements, the findings of the current study reiterate the importance of interpersonal skill development as a fundamental competency objective in qualification

pathways. With such high regard for this characteristic, it is imperative for neophyte practitioners with low or underdeveloped interpersonal skills to begin strengthening such face-to-face qualities early in the training process. Whilst interpersonal skill development may form a standard and extensive part of training within the feeder fields for sport psychology in other educational systems (e.g., through counselling psychology in North America), this is not necessarily the case within qualifications in the United Kingdom. When one takes a critical look at messages from the pre-intervention data, it is evident that licensing organizations could improve the public education surrounding the credentials, training and requirements of those practitioners entitled to call themselves sport psychologists. Additionally, these organizations (beyond the practitioner him or herself) have a responsibility to provide guidance to existing member practitioners regarding the effective promotion of themselves and their profession.

### **Limitations and future directions**

Despite seeking to offer new knowledge to this domain of applied sport psychology, the present study was limited in a number of ways. Firstly, although the investigation strived for high levels of ecological validity, confidence in the actual impact of education upon consumers' future choices is restricted. As post-intervention responses were taken directly after exposure to the educational vignettes, consumers' preferences and future choices made at longer time intervals cannot be predicted. Examining participant preferences with longitudinal follow-up measurements to test educational retention effects would address this limitation in future studies. In addition, the generalizability of the findings is limited to athlete perceptions of practitioners. Clearly this information is highly relevant when athletes self-refer and seek psychological services on their own volition. However, the selection of a practitioner is often the responsibility of (or controlled by) others within the sporting

environment, specifically coaches, managers, or parents. Therefore, a worthy extension of this research would include assessments of the preferences of third parties who may make the decisions for athletes based on their own values, experience, biases, and knowledge. In addition, behavioral research into consumer preferences should also be considered to identify those practitioners that individuals (i.e., athletes, coaches, and parents) actually choose to consult with, why such practitioners were chosen, and how post educational vignettes may impact actual consumer behavior.

Whilst an extension of the current research may target third party or organizational decision makers, a further limitation to improve upon is the methodological capacity to discern the precise aspect of the educational vignettes that influenced participants' preferences. Future research that is able to assess the influence of individual aspects of the vignette (i.e., protected title; qualification and training; scope of roles) on consumer preferences would assist in the development of knowledge for more effective marketing. It is relevant to note here that following qualitative analysis of additional characteristics that would impact upon certain individuals' preference for a practitioner, four new factors (cost, specific specialism, reputation, and third party recommendation) were volitionally forwarded for consideration. It would be prudent for future research to consider exploring these factors to build a more comprehensive picture of consumer preferences.

Finally, we endeavored in this research to take great care not to dismiss the work or credibility of the other professionals chosen for this study (i.e., life coaches and NLP practitioners). The purpose of the investigation was to enhance knowledge surrounding the relative importance of varying consultant characteristics, and to consider the findings in the context of professional development and practice with a particular emphasis on what this means for sport psychology as a profession. To this end however, it was critical to limit susceptibility to bias. In order to decrease such susceptibility, we developed the vignette

descriptions by carefully selecting and utilizing promotional materials that were constructed by these various professional fields and available to the general public. Further, the vignettes were purposefully kept to a strict, low word count to ensure complete parity in quantity of information presented, as well as in an attempt to promote the professions in a manner that would be read by consumers in their entirety. Although we attempted to offer objectively accurate and authentic definitions and details of all three professions, we appreciate that extended validity checks (e.g., with practitioners from each profession) may have further strengthened our method. Additionally, the titles utilized in this study were not intended to wholly represent the list of professions that promote psychologically-oriented services to athletes, rather ones that were deemed as contemporary. Counselling and psychiatry professionals have also recently drawn upon their fields to provide services in sport, and it is important for future research to examine sport consumer perceptions and knowledge of such practitioners and their services.

In conclusion, this study contributes salient knowledge to the profession of applied sport psychology in a number of ways. Firstly, from 24 differing practitioner profiles, the study revealed that a sport psychologist who had high interpersonal skills, a high level of sport-specific knowledge, and a previous athletic background was most preferred by athletes. Secondly, given the focus of the investigation on controllable personal characteristics, the study counsels practitioners to attend carefully to interpersonal skill development as this personal attribute maintained high levels of relative importance in consumer thinking throughout the study. Thirdly, the pre-existing preferences of athletes showed professional title to be of modest relative importance such that interpersonal skills was more relevant than whether the practitioner was a sport psychologist, life coach or NLP practitioner. Indeed these titles were only as relevant as the levels of sport-specific knowledge possessed by the practitioner. Such findings serve as a warning shot to professional sport psychology

organizations that the title ‘sport psychologist’ may indeed not matter (that much). However, the study demonstrates that the potential solution lies in initiatives to better educate the consumer. The application of brief, educational material offering enhanced details on each professional title substantially altered consumer preferences such that title did indeed matter, and the sport psychologist mattered a great deal. We hope that the implications of these findings assist practitioners, organizations, and applied researchers in continuing work that assists the professional development and promotion of the field of applied sport psychology.



## References

- Anderson, A., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? *Psychology of Sport and Exercise*, 5, 255-277. doi:10.1016/S1469-0292(03)00005-0
- Antonelli, F. (1989). Applied sport psychology in Italy. *Journal of Applied Sport Psychology*, 1, 45-51. doi.org/10.1080/10413208908406402
- Atkinson, D. R., & Carskaddon, G. (1975). A prestigious introduction, psychological jargon, and perceived counselor credibility. *Journal of Counseling Psychology*, 22, 180-186. doi.org/10.1037/h0076711.
- Bernstein, B. L., & Figiolo, S. W. (1983). Gender and credibility introduction effects on perceived counselor characteristics. *Journal of Counseling Psychology*, 30, 506-513. doi.org/10.1037/0022-0167.30.4.506
- Biddle, S. (1989). Applied sport psychology: A view from Britain. *Journal of Applied Sport Psychology*, 1, 23-34. doi.org/10.1080/10413208908406399
- Bond, J. W. (1989). Applied sport psychology in Australia: History, current status and future issues. *Journal of Applied Sport Psychology*, 1, 8-22.
- Dorn, F. J. (1984). The social influence model: A social psychological approach to counseling. *Personnel & Guidance Journal*, 62, 342-345. doi.org/10.1111/j.2164-4918.1984.tb00221.x
- Dunn, J. G. H., & Holt, N. L. (2003). Collegiate ice hockey players' perceptions of the delivery of an applied sport psychology program. *The Sport Psychologist*, 17, 351-368.
- Esters, I. G., & Ledoux, C. L. (2001). At-risk high school students' preferences for counselor characteristics. *Professional School Counseling*, 4, 165-170.
- Gould, D., Tammen, V., Murphy, S., & May, J. (1991). An evaluation of U.S. olympic sport psychology consultant effectiveness. *The Sport Psychologist*, 5, 111-127.
- Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality*, 31, 253-264. doi.org/10.2224/sbp.2003.31.3.253
- Green, P., Krieger, A. M., & Wind, Y. J. (2001). Thirty years of conjoint analysis: Reflections and prospects. *Interfaces*, 31, S56-S73. doi.org/10.1287/inte.31.4.56.9676
- Green, P., & Srinivasan, V. (1978). Conjoint analysis in consumer research: Issues and outlook. *Journal of Consumer Research*, 5, 103-123. doi.org/10.1086/208721
- Halliwell, W. (1989). Applied sport psychology in Canada. *Journal of Applied Sport Psychology*, 1, 35-44. doi.org/10.1080/10413208908406401
- Halliwell, W. (1990). Providing sport psychology consulting services in professional hockey. *The Sport Psychologist*, 4, 369-377.

- Hamberger, M., & Iso-Ahola, S.P. (2006). Factors affecting athletes' attitudes toward sport psychology consultants. *Journal of Contemporary Athletics*, 2, 57-77.
- Hash, R. B., Munna, R. K., Vogel, R. L., & Bason, J. J. (2003). Does physician weight affect perception of health advice? *Preventive Medicine*, 36, 41-44.  
doi:10.1006/pmed.2002.1124
- Heap, M. (2008). The validity of some early claims of neuro-linguistic programming. *Skeptical Intelligencer*, 11, 1-8.
- Hoyt, W. T. (1996). Antecedents and effects of perceived therapist credibility: A meta-analysis. *Journal of Counseling Psychology*, 43, 430-447. doi.org/10.1037/0022-0167.43.4.430
- IBM Corporation. (2012). *IBM SPSS conjoint 21*. Retrieved from:  
[ftp://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/21.0/en/client/Manuals/IBM\\_SPSS\\_Conjoint.pdf](ftp://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/21.0/en/client/Manuals/IBM_SPSS_Conjoint.pdf)
- Lewis, K. N., & Walsh, W. B. (1978). Physical attractiveness: Its impact on the perception of a female counselor. *Journal of Counseling Psychology*, 25, 210-216.  
doi.org/10.1037/0022-0167.25.3.210
- Lovell, G. P., Parker, J. K., Brady, A., Cotterill, S. T., & Howatson, G. (2011). Looking the part: Female sports psychologists' body mass index and dress influences athletes' perceptions of their potential effectiveness. *The Sport Psychologist*, 25, 82-93.
- Lubker, J. R., Visek, A. J., Geer, J. R., & Watson II, J. C. (2008). Characteristics of an effective sport psychology consultant: Perspectives from athletes and consultants. *Journal of Sport Behavior*, 31, 147-165.
- Lubker, J. R., Visek, A. J., Watson, J. C., & Singpurwalla, D. (2012). Athletes' preferred characteristics and qualifications of sport psychology practitioners: A consumer market analysis. *Journal of Applied Sport Psychology*, 24, 465-480.  
doi.org/10.1080/10413200.2012.694968
- Lubker, J. R., Watson, I. J., Visek, A. J., & Geer, J. R. (2005). Physical appearance and the perceived effectiveness of performance enhancement consultants. *The Sport Psychologist*, 19, 446.
- Maniar, S. D., Curry, L. A., Sommers-Flanagan, J., & Walsh, J. A. (2001). Student-athlete preferences in seeking help when confronted with sport performance problems. *The Sport Psychologist*, 15, 205-223.
- Martin, S.B., Wrisberg, C.A., Beitel, P.A., & Lounsbury, J. (1997). NCAA Division I athletes' attitudes toward seeking sport psychology consultation: the development of an objective instrument. *The Sport Psychologist*, 11, 201-218.
- McGuire, J. M., & Borowy, T. D. (1979). Attitudes toward mental health professionals. *Professional Psychology*, 10, 74-79. doi.org/10.1037/0735-7028.10.1.74
- Nasar, J. L., & Devlin, A. S. (2011). Impressions of psychotherapists' offices. *Journal of Counseling Psychology*, 58, 310-320. doi.org/10.1037/a0023887

- Pain, M.A., & Harwood, C.G. (2004). Knowledge and perceptions of sport psychology within English soccer. *Journal of Sports Sciences*, 22, 813-826. doi.org/10.1080/02640410410001716670
- Paradise, L. V., Conway, B. S., & Zweig, J. (1986). Effects of expert and referent influence, physical attractiveness, and gender on perceptions of counselor attributes. *Journal of Counseling Psychology*, 33, 16-22. doi.org/10.1037/0022-0167.33.1.16
- PegasusNLP. (2013). What is NLP? Retrieved from <http://www.nlp-now.co.uk/nlp-what.htm>
- Pope, V. T. (1996). Stable personality characteristics of effective counselors: The Counselor Characteristic Inventory (Doctoral dissertation, Idaho State University, 1996). *Dissertation Abstracts International*, 57, 1503.
- Ravizza, K. (1988). Gaining entry with athletic personnel for season-long consulting. *The Sport Psychologist*, 2, 243-254.
- Sanchez, X., Godin, P., & De Zanet, F. (2005). Who delivers sport psychology services? Examining the field reality in Europe. *The Sport Psychologist*, 19, 81-92.
- Siegel, J. C., & Sell, J. M. (1978). Effects of objective evidence of expertness and nonverbal behavior on client-perceived expertness. *Journal of Counseling Psychology*, 25, 188-192. doi.org/10.1037/0022-0167.25.3.188
- Strong, S. R. (1968). Counseling: An interpersonal influence process. *Journal of Counseling Psychology*, 75, 215-224. doi.org/10.1037/h0020229
- Strong, S. R., & Dixon, D. N. (1971). Expertness, attractiveness, and influence in counseling. *Journal of Counseling Psychology*, 78, 562-570. doi.org/10.1037/h0031753
- Van Raalte, J. L., Brewer, B. W., Linder, D. E., & DeLange, N. (1990). Perceptions of sport-oriented professionals: A multidimensional scaling analysis. *The Sport Psychologist*, 4, 228-234.
- Van Raalte, J.L., Brewer, D.D., Matheson, H., & Brewer, B.W. (1996). British athletes' perceptions of sport and mental health practitioners. *Journal of Applied Sport Psychology*, 8, 102-108. doi.org/10.1080/10413209608406311
- Warner, D. L., & Bradley, J. R. (1991). Undergraduate psychology students' views of counselors, psychiatrists, and psychologists: A challenge to academic psychologists. *Professional Psychology: Research and Practice*, 22, 138-140. doi.org/10.1037/0735-7028.22.2.138
- Weinberg, R. S. & Gould, D. (2010). *Foundations of Sport and Exercise Psychology* (5<sup>th</sup> ed.). Champaign, IL: Human Kinetics.
- Wylleman, P., Harwood, C.G., Elbe, A.M., Reints, A., & de Caluwe, D. (2009) A perspective on education and professional development in applied sport psychology. *Psychology of Sport and Exercise*, 10. 435-446. doi.org/10.1016/j.psychsport.2009.03.008

### Attributes of Practitioners Questionnaire

**Individuals may have varying preferences for consultants in terms of different levels of certain attributes. The following table contains a number of consultant ‘profiles’. By combining each consultant attribute with a possible level, 24 combinations of profiles are formed.**

**Please rate the preference of each consultant profile on the following scale:**

**0 = Do Not Prefer    ↔    10 = Strongly Prefer**

Profile	Professional Title	Interpersonal Skills	Athletic Background	Sport Knowledge	Rating (1-10)
1	NLP	High	Athlete	Low	
2	SP	Low	Non-athlete	Low	
3	LC	High	Athlete	Low	
4	NLP	High	Athlete	High	
5	LC	Low	Athlete	Low	
6	NLP	High	Non-athlete	Low	
7	NLP	Low	Non-athlete	Low	
8	LC	High	Non-athlete	High	
9	LC	Low	Non-athlete	Low	
10	SP	Low	Athlete	High	
11	SP	High	Non-athlete	High	
12	LC	Low	Non-athlete	High	
13	NLP	Low	Non-athlete	High	
14	SP	Low	Athlete	Low	
15	NLP	Low	Athlete	High	
16	LC	High	Non-athlete	Low	
17	SP	High	Athlete	High	
18	NLP	High	Non-athlete	High	
19	NLP	Low	Athlete	Low	
20	SP	High	Non-athlete	Low	
21	SP	High	Athlete	Low	
22	LC	High	Athlete	High	
23	LC	Low	Athlete	High	
24	SP	Low	Non-athlete	High	

**Figure 1.** Sample illustration of the Attributes of Practitioners Questionnaire (APQ).

a.	<p><b>Protected Title:</b> Yes</p> <p><b>Training Time:</b> ~6-7 years</p> <p><b>Pre-requisites:</b> Related undergraduate degree (e.g. BSc Sport Psychology, BSc Psychology, BSc Sport Science), accredited Master's degree (e.g. MSc Sport and Exercise Psychology), period of supervised professional practice (at least 2 years in duration).</p> <p>Sport and exercise psychology claims to improve athletic performance alongside improving general well-being. It does this through focusing on a number of areas of interest, and can be applied to individuals of all ages, experience, playing level and sport. Techniques, theories and models used within sport and exercise psychology are scientifically tested and constructed through research and applied use of research.</p> <p>Sport psychologists can work with individuals in a variety of ways, in particular through one-to-one and group sessions. Consultation follows a path of assessment techniques, such as observations, interviews and questionnaires. From this a programme of work is developed and certain strategies are used to implement this work, whereas group workshops are often of an educational format. Coaches, parents and other players' influences upon the individual or team are all considered within the assessment and programme of work. Sport and exercise psychologists can also take more of a support role as well as a performance enhancement one.</p> <p>Strategies used within sport psychology can include imagery, anxiety regulation (arousal regulation) and goal setting. These can be used for a variety of reasons that include injury rehabilitation, dealing with pressure, to enhance motivation, and the learning of new skills and tactics. Sport psychology is also interested in areas such as mental toughness, transitions between stages of the sporting career, coach-athlete relationships and developing high performing teams. These lists are not exhaustive, with other areas of research and practical work existing.</p>
b.	<p><b>Protected Title:</b> No</p> <p><b>Training Time:</b> ~20days/120 hours</p> <p><b>Pre-requisites:</b> Training involves workshop style learning, taught by a certified NLP trainer. Assessment of an 'appropriate level of skill' for certification must be completed. 'Fast track' training is also available from various organisations. There is a guild of training organisations, whose members claim to provide a gold standard of NLP training; however standards are not rigorously examined, and are not measured in non-members.</p> <p>NLP claims to be a very effective approach to personal and professional development, which examines the methods behind successful human performance. Within sport it aims to enable the individual to manage their 'mind-body link' in order to establish the best mental and physical state for performing successfully and enjoying it. Techniques used within NLP are not scientifically developed, and do not claim to be.</p> <p>NLP practitioner training involves presenting techniques within workshops and participants using these practically to become proficient at using them. NLP consultation takes place on a one-to-one basis, with consultations available for all roles (i.e. coaches, parents and individuals) involved in sport. The aim of the process is to analyse successful sporting performance in order to further the 'skills-attitude blend', and to assess which elements of unsuccessful performance should be modified.</p> <p>Various strategies are used by NLP practitioners in order to complete the consultation process. The key technique used within NLP is modelling which is a process that involves imitating the aspects that cause a successful individuals performance. Other techniques used in NLP include redirecting negative thoughts, using different perceptual positions to mentally review a situation from a number of standpoints, and reframing, a process of reviewing and relabeling destructive thoughts and emotions into constructive ones.</p>
c.	<p><b>Protected Title:</b> No</p> <p><b>Training Time:</b> None necessary</p> <p><b>Pre-requisites:</b> Whilst no training is necessary, courses in Life Coaching are available. Additionally, speciality life coaches can hold qualifications in other areas such as psychology, counselling, dream analysis and hypnosis.</p> <p>Life Coaching claims to increase sporting performance and success. It aims to do this through the central principles of subjectivity, empowerment and guidance. Empowering the client to make, meet and exceed personal and professional goals is the key intention of an individual.</p> <p>Life coaching sessions are conducted on a one to one basis and can be completed face to face, over the telephone. The number and frequency of sessions is up to the discretion of the client. Directive instructions are avoided, in their place, Life coaches aim to guide the client to a self-realisation of factors. A typical session involves the life coach asking what you want to get out of life, what areas you are unhappy with, and where you would like to end up. The coach's role is often to encourage self-reflection and challenge upon certain ideas. Life coaching claims to be concerned with all areas of life, including personal, relationship, business and performance issues. Techniques used by Life Coaches are not scientifically developed, and do not claim to be.</p> <p>These techniques used can include modelling successful individuals, improving understanding of the self, creating a view of the future, assessing transferable skills, and setting goals. Life coaching is also concerned with, and attempts to address the following areas specific to sport: discovering peak performance, dealing with stressful situations and developing champion behaviours and mind-set. These techniques and interests are not exhaustive and are not intended to be.</p>

**Figure 2.** Educational vignettes used during intervention stage; (a) Sport Psychologist, (b) Neuro-linguistic Programming Practitioner, (c) Life Coach

**Table 1.** Sub-group Analysis of the Effect of Previous Experience with Life Coach

Attribute	<u>Pre-intervention</u>		<u>Post-intervention</u>	
	Experience	No Experience	Experience	No Experience
	Utilities	Utilities	Utilities	Utilities
	(Part-Worth)	(Part-Worth)	(Part-Worth)	(Part-Worth)
<b>Professional Title</b>				
Sport Psychologist	0.422*	0.687*	1.174†	1.725†
NLP Practitioner	-0.236	-0.403	-0.405	-0.519
Life Coach	-0.186	-0.284	-0.769	-1.206
<b>Interpersonal Skills</b>				
High	1.425	1.152	1.140	1.172
Low	-1.425	-1.152	-1.140	-1.172
<b>Athletic Background</b>				
High	0.464	0.550	0.284	0.396
Low	-0.464	-0.550	-0.284	-0.396
<b>Sport-specific Knowledge</b>				
High	0.858	0.878	0.436	0.466
Low	-0.858	-0.878	-0.436	-0.466

*Note.* \*difference:  $p < .05$ , †difference:  $p < .05$

**Table 2.** Sub-group Analysis of the Effect of Competition Level

Attribute	<u>County</u> Utilities (Part-Worth)	Relative Importance Rankings	<u>National</u> Utilities (Part-Worth)	Relative Importance Rankings
Professional Title		40%		45%
Sport Psychologist	1.478*		1.931*	
NLP Practitioner	-0.798		-0.977	
Life Coach	-0.680		-0.955	
Interpersonal Skills		33%		32%
High	1.096		1.136	
Low	-1.096		-1.136	
Athletic Background		12%		11%
High	0.371		0.391	
Low	-0.371		-0.391	
Sport-specific Knowledge		15%		12%
High	0.502		0.433	
Low	-0.502		-0.433	

*Note.* \*difference:  $p < .05$ .