

# Gender Comparisons of Preferred Coaching Behaviors in Australian Sports

Cheyne A. Sherman & Robert Fuller  
Deakin University

Harriet D. Speed  
Victoria University

*This study investigated the preferred coaching behaviors of athletes from three distinct Australian sporting contexts (single-gender male, single-gender female, dual-gender male and female), and discussed the significance of the findings in relation to the Multidimensional Model of Leadership (Chelladurai, 1990; Chelladurai & Salah, 1980). The coaching preferences of 317 athletes (Australian football n = 110, netball n = 88, and basketball n = 114) were obtained using the Leadership Scale for Sport (Chelladurai & Saleh, 1978, 1980). As previous studies using the Scale reported many gender-based inconsistencies, comparisons between athletes' preference scores were examined on this variable. Despite some small differences between the groups of athletes, the results revealed an overwhelmingly high level of similarity in the coaching preferences between all athletes regardless of gender. Athletes from all three sports indicated that Positive Feedback, Training & Instruction and Democratic behavior were preferred coaching behaviors and that Social Support and Autocratic behavior were not preferred. This study established that athletes participating in some single-gender sporting environments in Australia share similar preferences for coaching behavior to athletes participating in sports of a dual-gender nature, and, that if there are unique socialization processes occurring in the two distinct sporting environments of Australian football and netball, they have little or no effect on the coaching preferences of the athletes. The results of the study challenge the number of member (athlete) characteristics claimed by Chelladurai to determine preferred coaching behavior, and have important practical implications for coaching sport, particularly in Australia.*

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Address Correspondence To: Dr. C.A., Sherman, School of Health Sciences, Deakin University, 221 Burwood Hwy, Burwood 3125, Australia. Telephone (03) 9244 6474; Fax (03) 9244 6017. Email: [sherm1@deakin.edu.au](mailto:sherm1@deakin.edu.au)

One of the more important roles of the coach in competitive sport is to assist athletes to become more proficient in their performance (Martens, 1987). This role can encompass a wide range of tasks from sequential development and mastery of basic skills for beginners, to the more specialized physical, technical, tactical and psychological preparation of elite athletes (Bompa, 1983). These functions are normally accomplished by the coach engaging in leadership behavior that effectively elicits appropriate actions from the athlete towards achieving set goals, in competitive or practice situations. The type of leadership behavior displayed by the coach can have a significant effect on the performance and psychological well being of the athlete (Horn, 1992). The context of the sport situation and the characteristics of the coach and the athletes themselves dictate appropriate leadership behavior. Consequently, effective coaching behavior varies across specific contexts as the characteristics of the athletes and the prescribed situation change (Chelladurai, 1978).

To achieve improvement in athletic performance, it may be necessary for the coach to engage in coaching behaviors to which the athlete is receptive. What may be an appropriate coaching behavior to one athlete may be an ineffective approach for another. Similarly, specific behavior by the coach may be more productive of certain outcomes than others (Tinning, 1982). Different needs and preferences from individual athletes within the team confront coaches of team sports. The coach may adopt either a homogenous approach that treats all athletes equally, or alternatively create a heterogeneous style that provides differential treatment to individual athletes. As a result of this, it is important for the coach to be aware of the coaching preferences of his/her athletes in order to provide satisfactory experiences and improve athletic performance. According to Chelladurai and Carron (1978), if a coach adapts his or her behavior to comply with the athletes' preferred behavior, the athlete may be more readily inclined to repay the coach through an improved performance.

To specifically examine leadership effectiveness in a sporting context, Chelladurai (1990) developed the Multidimensional Model of Leadership. The Model incorporates the conceptual frameworks of trait, behavioral and situational leadership theories (Fiedler, 1967; Hersey & Blanchard, 1969, 1977; House, 1971; Osborn & Hunt, 1975; Vroom & Yetton, 1973; Yukl, 1971), to address the interactions of the coach and athlete in a sporting environment. **Earlier theories had concentrated independently on the leader, the group members, and the situation, whereas the focus of the Multidimensional Model was to place equal emphasis on all three of these elements by considering their interaction and interdependence as they relate directly to a sporting context.** The Multidimensional Model of Leadership was the focus of the present research.

In the Model, Chelladurai proposes that athletic performance and satisfaction are the two main consequences of interaction between three types of coaching behavior: (a) required

behavior; (b) actual behavior; and (c) the preferred behavior of the athlete. The greater the degree of congruence between these three states of coaching behavior, the greater the athlete performance and satisfaction. Moreover, the Model states that the three perspectives of coaching behavior are directly influenced by three factors or antecedents: (a) situational characteristics; (b) coach characteristics; and (c) athlete characteristics. The required behavior of the coach is dictated by the parameters set by situational characteristics. That is, limits or boundaries on the coach's behavior are determined by both the organizational structure and its environment, and include such variables as type of sport, size/level of team, task variability, and conditions of play. The actual behavior of the coach is believed to be affected directly by the coach's personal characteristics including age, gender, personality, ability, and experience, as well as being dictated by the situation demands. Furthermore, the coaching behavior preferred by the athlete is also a result of an interaction between the situational characteristics and the individual characteristics of each athlete - including again, the age, gender, personality, ability, and experience of the individual.

To accompany the Multidimensional Model, Chelladurai and Saleh (1978, 1980) developed an inventory to measure the relationship between coaching behavior and athlete motivation. Titled the Leadership Scale for Sport (L.S.S.), the instrument was created as a sport-specific tool to address coaching behavior through five separate dimensions: (a) Training and Instruction - coaching behavior aimed at improving athlete performance by emphasizing and facilitating hard and strenuous training; (b) Democratic Behavior - allows greater participation by the athletes in decisions pertaining to group goals, practice methods, and game tactics/strategies; (c) Autocratic Behavior - the coach keeps apart from the athletes and stresses his/her authority in dealing with them; (d) Social Support - characterized by a concern for the welfare of individual athletes, positive group atmosphere, and warm interpersonal relations with members; and, (e) Positive Feedback - the coach reinforces an athlete by recognizing and rewarding good performance, regardless of the outcome of their performance. These five dimensions of the L.S.S. were statistically derived by Chelladurai and Saleh (1978; 1980), and reflect the multidimensionality of their model of leadership in sport, in that they synthesize and extend to the athletic context, the organizational (and uni-dimensional) leadership models of Fiedler (1967), House (House, 1971; House & Dressler, 1974), Osbourne and Hunt (1975) and Yukl (1971). For a review, readers are directed to Chelladurai & Riemer (1999).

The practicality of the L.S.S. for testing the interactions of variables in the Multidimensional Model has generated a considerable number of studies on coaching behavior. Researchers have examined specific elements of the Model, with most attention concentrating on athlete characteristics and their influence on coaching preferences. Athlete gender has been tested across a wide-range of team and individual sports (Chelladurai & Arnott, 1985;

Chelladurai & Saleh, 1978; Erle, 1981; Massimo, 1980; Terry, 1984; Terry & Howe, 1984). Overall, the results from these studies have contained a number of inconsistencies in relation to the coaching preferences of athletes. Chelladurai's Model proposes that the gender of the athlete is a contributing factor to athlete preferences for coaching behavior and also affects the required behavior of the coach. Early research on gender differences was conducted in the late 1970's (Chelladurai and Saleh, 1978; Neil & Kirby, 1979; Tutko & Richards, 1971) and while providing valuable and relevant information for the time, the shifting attitudes of society toward gender roles may have created an entirely new set of circumstances for athlete participation in sport. For instance, the traditional stigmas and limitations to female sport participation are slowly changing, as there is a growing belief that sport is now viewed equally as being a male and female domain (Le Unes & Nation, 1993). To test the influence of gender on coaching behavior in the Multidimensional Model, Terry and Howe (1984) investigated the coaching preferences of male and female varsity athletes. In examining the preferences of 160 athletes (male = 80; female = 80) from 16 sports, the authors found considerable similarities between the two genders. Responses indicated that preference scores of the male athletes were significantly higher than those of the female athletes for Autocratic Behavior only. In a similar study, Terry (1984) investigated the coaching preferences of elite male and female intercollegiate athletes participating in a number of dual-gender sports, including basketball, volleyball, track & field and swimming. Again, results indicated that male athletes prefer more Autocratic Behavior than female athletes do. This partially supports Chelladurai and Saleh's (1978) findings that male athletes prefer more Autocratic and Social Support Behavior, and female athletes prefer more Democratic Behavior.

In summary, the degree of similarity or difference between genders in their coaching preferences is unclear and requires further investigation. Overall, previous gender research has shown that gender among athletes, at most, only partially influences preferences for coaching behavior, and that generally there is an overall similarity between the coaching preferences of male and female athletes. These findings support recent speculation that people, regardless of gender, share overlapping psychological characteristics, and that similarities between males and females far outweigh differences (Anshel, 1995; Plaisted, 1995).

The purpose of the current study was to examine and explore any gender similarities or differences in the coaching preferences between two distinct single-gender contexts, namely Australian football and netball, and to compare and contrast athletes participating in a dual-gender sport (basketball). Australian rules football and netball are sports that enjoy two of the highest participation rates in Australia (Australian Bureau of Statistics, 1997). Both sports are unique in terms of their sporting cultures, having long histories as single-gender sports not only in participation, but also in coaching and administration. Basketball is also a high partici-

pation sport in Australia, but unlike Australian Rules football and netball, has a long history as a dual-gender sport (separate participation by both males and females). The results of studies by Terry and colleagues (Terry, 1984; Terry and Howe, 1984), suggest that gender similarities in the coaching preferences of athletes in a dual gender sport greatly outweigh the differences. It is therefore hypothesized that the coaching preferences of male and female basketball players will exhibit strong similarities, with any differences that do exist being only small. However, whether the different sporting cultures within which Australian Rules football and netball have evolved and grown has influenced athletes' preferred coaching practices is unknown. The significance of the findings presented here is discussed in relation to the Multidimensional Model of Leadership.

## **Method**

### *Participants*

A total of 312 athletes participated in the study, and included 110 male Australian football players, 88 female netball players, and 54 female and 60 male basketballers. The ages of players ranged between 18 - 35 years, with female and male athletes having comparable age distributions. Although the levels of competition of the three sports were not identical, every effort was made to include comparable levels. **These roughly equitable levels of competition across the three sports were ascertained through discussions with accredited coaches, coaching directors, development officers, and leading participants with extensive experience in their respective sports.**

### *Instrumentation*

The data collection instrument used in this study was the Leadership Scale for Sports (L.S.S.). The L.S.S. is a 40 - item questionnaire developed by Chelladurai and Saleh (1978, 1980) to assess the five separate dimensions of leadership behavior in a sport environment. The L.S.S. consists of two decision-style factors (Democratic and Autocratic Behavior) with a total of 14 items, two motivational factors (Social Support and Positive Feedback) with 13 items, and one direct task factor (Training & Instruction) with 13 items. Although there are 3 versions of the original questionnaire (i.e. athlete preference, athlete perception, and coach perception version) **the 'athlete preference' version was used in the current study, with each item of the questionnaire preceded by the phrase "I prefer my coach to.....".**

Psychometrically, the 'athlete preference' version of the L.S.S. has been shown to have good internal reliability and validity (Chelladurai & Saleh, 1980; Chelladurai, 1986; Chelladurai, Imamura, Yamaguchi, Oinuma & Miyauchi, 1988; Isberg & Chelladurai, 1990). In the present

study, inter-item reliability was high in 4 of the 5 L.S.S. subscales with Alpha reliability coefficients ranging between 0.71 (Social Support) and 0.82 (Positive Feedback). As has frequently been the case in previous studies, a lower Alpha coefficient (0.59) was obtained for the Autocratic Behavior subscale (for a review see Chelladurai, 1990). The characteristic low internal consistency score for Autocratic Behavior is thought to reflect the fact that two or three distinct facets of leadership behavior are included within the Autocratic Behavior scale (Chelladurai & Riemer, 1999).

The L.S.S. requires the participants to respond to each questionnaire item by grading their preferences on a 5 - point Likert scale ranging from 1 (*Never*) to 5 (*Always*). The scoring of each item is as follows: 1 = *Never*; 2 = *Seldom* (about 25% of the time); 3 = *Occasionally* (about 50% of the time); 4 = *Often* (about 75% of the time); 5 = *Always*. (Note: The original scoring format developed by Chelladurai and Saleh (1978) was from 5 (*never*) to 1 (*always*). In the present study, scoring was reversed as the data was considered more easily interpreted with a score of 5 as 'high' and a score of 1 as 'low'.)

### *Procedure*

With consent from the three respective basketball, Australian football, and netball organizations, coaches of the respective teams were contacted and a suitable time to administer the questionnaires was arranged. The questionnaire was explained, administered and supervised at the conclusion of a designated training session during the respective competition seasons of each sport. All participants were given a Plain Language Statement, informed consent was obtained, and subjects were briefed about the procedures involved prior to the administration of the questionnaire. Demographic details including the age, name of the team, and experience in years for each subject were obtained prior to each subject commencing the L.S.S. part of the questionnaire. The identity of each subject remained confidential; they participated on their own free will, and had the right to discontinue at any time, without any penalty to their sporting participation.

### *Data Analysis*

Descriptive statistics were used to analyze the data. Whilst there were some instances of missing data, it was only small in frequency and was distributed randomly throughout the data set. Median scores, standard deviations and effect sizes were used in describing the data. The use of inferential statistics was not appropriate because of the descriptive nature of the study. Effect sizes (Cohen's *d*: Cohen, 1988) were used as appropriate indicators of the magnitude of the differences between data sets. The use of effect sizes enabled conclusions to be drawn based entirely on descriptive measures of the data, avoiding the cost of making Type II errors

in tests of significance.

A frame of reference for describing the effect sizes was defined by the adjectives “small” (0.2 of a standard deviation), “medium” (0.5) and “large” (0.8). Whilst these operational definitions were arbitrary, they were considered appropriate definitions for clarifying the magnitude of the differences between the data sets, as they have been commonly used as conventional references in the past (Cohen, 1988).

For all subjects, preference scores were calculated by summing the scores of all the items in a particular coaching dimension and dividing by the number of items in that dimension (Chelladurai & Saleh, 1978, 1980). Median values were used as measures of central tendency (except in the calculation of effect sizes, where means were used) because of the ordinal nature of the measuring scale of the questionnaire and because of the sometimes skewed distribution of the data sets.

Response percentages were calculated for individual L.S.S. items and categorized as either a ‘preferred’ or a ‘not preferred’ coaching behavior. The responses “never” and “seldom” (median scores < 2.5) were taken to indicate that the athlete did not prefer a particular behavior, whereas “often” and “always” (median scores > 3.5) were taken to indicate that the coaching behavior was preferred by the athlete. Whilst the response “occasionally” (median score = 3) could be considered in either category, for the purposes of numerical analysis it was not included in either of the two preference groups. Typically, in other leadership studies, a 5-point measuring scale was used. However, given that the present study is primarily exploratory in nature, it was decided to modify the interpretation of the data in a more easily understood framework.

## **Results**

### *Coaching Preferences of Total Pooled Sample*

Athlete preference scores for coaching behavior were obtained using the Leadership Scale for Sport (Chelladurai & Saleh, 1978, 1980). To provide an overall picture of athlete preferences, the subjects’ responses were initially pooled together by collapsing results across the three sports for gender. Descriptive statistics of the preferences of the total pool of athletes are presented in Table 1.

Table 1 indicates that the athletes’ most preferred behavior was Positive Feedback (*Mdn* = 4.40) followed in order of preference by Training & Instruction (*Mdn* = 3.92), Democratic behavior (*Mdn* = 3.44), Social Support (*Mdn* = 2.87), with Autocratic behavior (*Mdn* = 2.20) the least preferred coaching behavior. The variability of responses presented in Table 1 was similar for all five coaching behaviors. The greatest variability in responses occurred for Positive

Table 1  
**Overall Descriptive Statistics for the Coaching Preferences of the Total Pool of Athletes**

Coaching Behavior Dimension	<i>n</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>
Positive Feedback	312	4.24	4.40	0.63
Training & Instruction	312	3.97	3.92	0.46
Democratic Behavior	312	3.49	3.44	0.52
Social Support Behavior	312	2.88	2.87	0.55
Autocratic Behavior	312	2.33	2.20	0.61

1 = never; 2 = seldom; 3 = occasionally; 4 = often; 5 = always.

Feedback ( $SD = .63$ ) and the smallest variability was recorded for Training & Instruction ( $SD = .46$ ), indicating only a small difference overall in the standard deviations of all five coaching dimensions.

### Gender

Table 2 shows an overall similarity in the median preference scores for male and female athletes. Both males and females responded with the same preference order for the five coaching behavior dimensions, with only marginal variation in their preference scores for each of the behaviors. Female athletes expressed a slightly higher median score than male athletes for their coach displaying Positive Feedback (female  $Mdn = 4.60$ , male  $Mdn = 4.20$ ), Training & Instruction (female  $Mdn = 4.04$ , male  $Mdn = 3.91$ ) and Democratic behavior (female  $Mdn = 3.67$ , male  $Mdn = 3.44$ ). The median preference values for Social Support were low ( $Mdn = 2.87$ ), and the same for both genders. Although both genders expressed little preference for Autocratic behavior, male athletes ( $Mdn = 2.40$ ) recorded a slightly higher median value than female athletes ( $Mdn = 2.20$ ). The greatest difference between the two genders for any of the coaching behaviors was for Positive Feedback, but with only 0.4 of a scale unit difference, and both groups indicating a similarly high preference for their coach displaying that particular behavior category.

Effect sizes ( $d$ ) further indicate that the magnitude of the differences between the preference scores of male and female athletes were small or moderately small for all five coaching behavior dimensions: Training & Instruction ( $d = .29$ ), Social support ( $d = .34$ ), Positive Feedback ( $d = .35$ ), Autocratic behavior (.37), and Democratic behavior ( $d = .41$ ).

**Table 2**  
**Descriptive Statistics and Effect Sizes for Coaching Preferences of**  
**Total Pooled Sample Grouped by Athletes' Gender**

Coaching Dimension	<i>n</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>d</i>
<i>Positive Feedback</i>					
Female	142	4.36	4.60	.53	.35
Male	170	4.14	4.20	.68	
<i>Training &amp; Instruction</i>					
Female	142	4.04	4.04	.44	.29
Male	170	3.91	3.84	.46	
<i>Democratic Behavior</i>					
Female	142	3.61	3.67	.47	.41
Male	170	3.40	3.44	.54	
<i>Social Support</i>					
Female	142	2.78	2.87	.53	.34
Male	170	2.97	2.87	.56	
<i>Autocratic Behavior</i>					
Female	142	2.21	2.20	.48	.37
Male	170	2.43	2.40	.68	

1 = never; 2 = seldom; 3 = occasionally; 4 = often; 5 = always

The study also sought to compare the coaching preferences of athletes from the four sporting populations examined. The following sections provide direct comparisons of results for: (a) Female basketball and netball (female dual-gender sport vs female single-gender); (b) Male basketball and football (male dual-gender sport vs male single-gender); (c) Football and netball (male single-gender vs female single-gender); and (d) Female basketball and male basketball (female dual-gender vs male dual-gender).

#### *Female Basketball Versus Netball*

The results indicate that there was an overall similarity in the coaching preferences of female basketballers and netballers. As shown in Table 3, the order of the most preferred behavior through to least preferred behavior is the same for both sports. Athletes expressed the greatest preference for Positive Feedback, followed in order of preference by Training &

Instruction, Democratic behavior, Social Support, with Autocratic behavior the least preferred coaching behavior. Furthermore, Positive Feedback, Training & Instruction and Democratic behavior can be considered preferred coaching behaviors ( $Mdn > 3.5$ ), whilst Autocratic behavior was a behavior not preferred by either female basketballers or netballers ( $Mdn < 2.5$ ). Table 3 shows further overall similarities in the absolute range of responses and the median values of female basketballers and netballers for each of the five coaching behavior dimensions.

The median scale value for female basketballers was slightly higher than for netballers for Training & Instruction and Social Support, and was marginally less for Positive Feedback. Very small effect sizes were evident for Positive Feedback ( $d = .02$ ), Training & Instruction ( $d = .07$ ), Social Support ( $d = .10$ ), and Autocratic behavior ( $d = .17$ ). Female basketballers and netballers recorded the same median value for Democratic behavior, with a moderately small effect size ( $d = .39$ ).

#### *Male Basketball Versus Football*

The pattern of athlete preferences for male basketballers and football players were similar to the pattern described above for female basketballers and netballers (see Table 4). Positive feedback was the most preferred coaching behavior, followed in order by Training and Instruction, Democratic Behavior, Social Support and Autocratic Behavior. The latter category of Autocratic Behavior was a coaching behavior not preferred by either male basketballers or footballers ( $Mdn = 2.40$ , for both sports). The median preference scores of footballers and basketballers were also the same for the most preferred coaching behavior, that of Positive Feedback ( $Mdn = 4.20$ ) and were very similar for Democratic Behavior and Social Support, with very small-to-small effect sizes ( $d = .05$  and  $.25$ , for Democratic Behavior and Social Support, respectively). Training and Instruction was a coaching behavior preferred by athletes of both sports, and slightly more so by male basketballers compared to footballers ( $d = .43$ ).

#### *Australian Football Versus Netball*

Results shown in Table 4 further indicate that there was an overall similarity in the coaching preferences of athletes from the two single-gender sports examined in the study. Athletes from both Australian football and netball responded with the same order of preferences, from most preferred (Positive Feedback) through to the least preferred coaching behavior (Autocratic behavior). Furthermore, Positive Feedback, Training & Instruction and Democratic behavior were considered to be preferred coaching behaviors ( $Mdn > 3.5$ ), whilst Autocratic behavior was deemed to be a coaching behavior not preferred ( $Mdn < 2.5$ ) by athletes from both sports. As was evident when comparing female basketball and netball, Table 4

Table 3  
**Descriptive Statistics for Coaching Preferences of Female ( $n = 54$ ) and Male ( $n = 60$ )  
 Basketball Players and Netball Players ( $n = 88$ ) \***

Coaching Behavior Dimension	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>d</i>
<i>Positive Feedback</i>				
Female basketball	4.36	4.40	.54	
Male basketball	4.10	4.20	.76	.39
Netball	4.37	4.60	.53	.02
<i>Training &amp; Instruction</i>				
Female basketball	4.02	4.08	.48	
Male basketball	4.04	3.92	.47	.04
Netball	4.05	4.00	.42	.07
<i>Democratic Behavior</i>				
Female basketball	3.50	3.67	.46	
Male basketball	3.38	3.44	.61	.20
Netball	3.68	3.67	.46	.39
<i>Social Support</i>				
Female basketball	2.81	2.94	.48	
Male basketball	3.06	3.00	.61	.44
Netball	2.76	2.87	.55	.10
<i>Autocratic Behavior</i>				
Female basketball	2.26	2.20	.47	
Male basketball	2.52	2.40	.73	.42
Netball	2.18	2.20	.49	.17

\* Effect sizes refer to comparisons against female Basketball players.  
 1 = never; 2 = seldom; 3 = occasionally; 4 = often; 5 = always

shows that there was an overall similarity in the median values for Australian footballers and netballers for the majority of coaching dimensions.

Netballers indicated a slightly higher preference than footballers for their coach displaying Positive Feedback (netball *Mdn* = 4.60, football *Mdn* = 4.20), Training & Instruction (netball *Mdn* = 4.00, football *Mdn* = 3.85), and Democratic behavior (netball *Mdn* = 3.67, football *Mdn* = 3.33), and a slightly lower preference for Autocratic behavior (football *Mdn* = 2.40, netball

MED = 2.20). The same median value for Social Support ( $Mdn = 2.87$ ) was evident for athletes from both sports. The greatest difference between athletes from the two sports was for Positive feedback but with a difference of only 0.4 of a scale unit. Effect sizes indicated that the magnitude of the differences were moderately small for Social Support ( $d = .29$ ), Positive Feedback ( $d = .34$ ), and Autocratic behavior ( $d = .36$ ). Moderate effect sizes were evident for Training & Instruction ( $d = .48$ ) and Democratic behavior ( $d = .54$ ).

#### *Female Basketball Versus Male Basketball*

The similarity in the responses of male and female basketballers shown in Table 3 suggests that gender has little or no influence on the preferred coaching behaviors of athletes in dual gender sports. As is the case in the comparisons described above, both groups of athletes, male and female basketballers, expressed the same preference order for the five coaching dimensions. Positive Feedback was rated the most preferred behavior, followed in order of preference by Training & Instruction, Democratic behavior, Social Support, with Autocratic behavior again the least preferred coaching dimension. For both male and female basketballers, Positive Feedback, Training & Instruction, and Democratic behavior were considered to be preferred coaching behaviors ( $Mdn > 3.5$ ), whilst Autocratic behavior was deemed to be coaching behaviors not preferred ( $Mdn < 2.5$ ) by both genders. Differences in the coaching preferences of male and female basketballers were small for Training and Instruction and Democratic Behavior ( $d = .04$  and  $.20$ , respectively) and moderately small to moderate for the other categories of coaching behaviors ( $d = .39$  for Positive Feedback;  $d = .42$  for Autocratic Behavior; and  $d = .44$  for Social Support). Note however, that the largest effect size of  $.44$  for Social Support represents only a small difference ( $.06$  scale unit) in actual median preference score.

### **Discussion**

This study investigated the preferred coaching behaviors of athletes from three distinct sporting contexts, namely Australian football, netball and basketball and considered the findings in relation to the sports examined with reference to gender issues and the Multidimensional Model of Leadership (Chelladurai, 1978). While previous research has revealed inconsistent results across a range of athlete characteristics, those studies have focused primarily on the coaching preferences of athletes involved in sports of a dual-gender nature (Chelladurai, 1984; Chelladurai & Carron, 1983; Erle, 1981; Schliesman, 1987; Terry, 1984; Terry & Howe, 1984), with the coaching preferences of athletes participating in single-gender sports being largely neglected. Some studies have investigated the coaching preferences of athletes in single-gender sports, but generally the results have been combined with athletes from dual-

Table 4  
**Descriptive Statistics for Coaching Preferences of Australian Rules Football  
 Players ( $n = 110$ ), Male Basketball Players ( $n = 60$ )  
 and Netball Players ( $n = 88$ )\***

Coaching Behavior Dimension	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>d</i>
<i>Positive Feedback</i>				
Football	4.17	4.20	.64	
Male basketball	4.10	4.20	.76	.01
Netball	4.37	4.60	.53	.34
<i>Training &amp; Instruction</i>				
Football	3.84	3.85	.45	
Male basketball	4.04	3.92	.47	.43
Netball	4.05	4.00	.42	.48
<i>Democratic Behavior</i>				
Football	3.41	3.33	.49	
Male basketball	3.38	3.44	.61	.05
Netball	3.68	3.67	.46	.54
<i>Social Support</i>				
Football	2.92	2.87	.54	
Male basketball	3.06	3.00	.61	.25
Netball	2.76	2.87	.55	.29
<i>Autocratic Behavior</i>				
Football	2.39	2.40	.64	
Male basketball	2.52	2.40	.73	.19
Netball	2.18	2.20	.49	.36

\* Effect sizes refer to comparisons against Football players.  
 1 = never; 2 = seldom; 3 = occasionally; 4 = often; 5 = always

gender sports and reported as a total pool of athletes, making any inferences about the coaching preferences of those single-gender sports not possible.

The results of the current study revealed widespread similarities in the coaching preferences of Australian footballers, netballers and basketballers. Overall, athlete preferences for coaching behavior were similar across gender for the three sports examined. While some minor

differences in preferences did occur, the similarities seemed to far outweigh any differences in all the selected member characteristics investigated in the study. The homogeneity of athlete preferences in the result raises the question of the inclusion of gender of preferred coaching behavior at least for the sports examined. The results from the study suggest the number of athlete characteristics that determine preferred coaching behavior of an athlete may not be as widespread as previously thought.

The results indicated that the single-gender make-up of both Australian football and netball does not seem to produce an environment unique to that of dual-gender sports, in terms of athlete preferences for coaching behavior. The overall results revealed substantial similarities between male and female athletes from the two single-gender and also the dual-gender sport, further supporting recent suggestions that similarities between males and females far outweigh differences (Anshel, 1995; Plaisted, 1995). The results also support the findings of several previous studies (Massimo, 1980; Terry, 1984; Terry & Howe, 1984) that showed minimal differences between the coaching preferences of male and female athletes in dual-gender sports such as basketball, track & field, volleyball, and swimming.

The only notable difference between genders in the current study was recorded for female athletes expressing a slightly greater preference for Democratic behavior (*Mdn* difference = .23; *d* = .41) and Positive Feedback (*Mdn* difference = .40; *d* = .35). This preference for Democratic behavior and Positive Feedback by female athletes was also evident when comparing netballers and footballers, and to a lesser extent when comparing female and male basketballers. This may partially support previous findings that female athletes have a greater preference for a participative style of coaching (Chelladurah & Saleh, 1978). However, it should be noted that in terms of differences in scale values the magnitude of the differences were only small (0.4 of a scale unit, at most). Furthermore, with the small standard deviations obtained in the present study, it is necessary to exert some caution in interpreting effect sizes of this size.

Despite the difference in preferences for these behaviors, both male and female athletes expressed similar preferences for the majority of individual coaching behavior items examined in the study, and in summary, the results add support to the notion that male and female athletes are more alike than different (Helmreich & Spence, 1976).

Contrary to the findings of Chelladurai & Saleh (1978), our results revealed that athletes had a comparatively low preference for Social Support. Low median values for Social Support were recorded by footballers (*Mdn* = 2.97), male and female basketballers (*Mdn* = 3.00 and 2.94, respectively) and netballers (*Mdn* = 2.87). Social Support is a coaching behavior characterized by a concern for the welfare of individual athletes, and, according to Chelladurai, involves the coach creating a positive group atmosphere and warm interpersonal relations with the athletes. The lack of athlete preference for this type of coaching behavior in the current study

could suggest that athletes today, or at least in Australia, do not rely on their coach to provide moral or personal support. It is also worth noting that Social Support is a coaching behavior provided extraneous to the athletic context (Danielson, Zelhart & Drake, 1975), and not directly contingent upon the individual's athletic performance (e.g. L.S.S. item: "I prefer my coach to invite the athletes home"). This may provide a possible explanation for the relatively low preference scores for Social Support, as athletes may perceive it as having little bearing on their actual athletic performance. Furthermore, it is plausible that athletes, particularly those competing at high levels of competition, view this social aspect of competitive team sport as more of a burden because of their already considerable time commitment to the sport (viz. physical conditioning, practice, competing, injury rehabilitation).

The lack of preference for Autocratic behavior confirms previous findings by Terry (1984) and Terry and Howe (1984) that athletes do not like an authoritarian coach that keeps their distance from the team. Results from our study suggest that athletes may prefer participating in a less strict environment where they can perform with greater personal freedom without any fear of chastisement from their coach. Although the results from the study did suggest that Australian footballers and male basketballers have a greater preference than female athletes for their coach displaying Autocratic behavior (footballers and male basketballers, *Mdn* = 2.40; female basketballers and netballers, *Mdn* = 2.20), the difference was only marginal, and overall, was a behavior not preferred by athletes from all three sports. The current results also provide partial support for Chelladurai and Saleh's (1978) findings that male athletes have a greater preference than female athletes for their coach displaying Autocratic behavior. However, the magnitude of the difference between the two genders was only moderate and once again all athletes rated Autocratic behavior as coaching behavior that was not preferred.

In conclusion, the results of the current study question the widespread notion that male and female athletes require different types of leadership behavior from their coach. The recent changing of societal attitudes toward gender roles and sport suggests that there may need to be modification or revision to the inclusion of gender in the Multidimensional Model. Ultimately, the results of this study challenge the number of member characteristics claimed by Chelladurai and colleagues to determine preferred coaching behavior, and provides evidence that these characteristics may not be as widespread as previously thought. It should be reiterated, however, that the current study examined coaching preferences of athletes participating in sport in Australia. Caution, therefore, should be exercised when applying the results of the current study to other sports. It is reasonable to suggest that differences exist between the environmental context of sport participation in Australia and that of North America, where Chelladurai's research and the development of the Multidimensional Model took place. The majority of previous studies for example, involved athletes participating in collegiate sports in

Canada and the United States (Chelladurai, 1984; Chelladurai & Saleh, 1978; Chelladurai et al., 1989; Schliesman, 1987). The nature and professional structure of those competitions may well be unique to North America, creating an environment for athletes that is different to those participating in sport in Australia. The motivation, goals and attitudes of athletes competing in the collegiate system may contrast the 'amateur' status and ideals of the athletes in the current study.

Several practical implications can be drawn from the current study. Firstly, the low preference scores for Autocratic behavior suggest that, in general, athletes do not like their coach adopting a strict, authoritarian manner. From the athletes' viewpoint, the authoritarian approach by a coach may now be perceived as not conducive to assisting athletic performance. This conflicts with the traditional concepts of coaching in Australian football and netball, where it has been customary for the coach to adopt a position of absolute authority.

### References

- Anshel, M. H. (1995). *Sport psychology: from theory to practice*. Scottsdale, AZ: Gorsuch Scarisbrick.
- Australian Bureau of Statistics (1997). *Sport and recreation*. ABS Catalogue No. 4156.0
- Bompa, T. O. (1983). *Theory and methodology of training: the key to athletic performance*. Dubuque, IA: Kendall/Hunt.
- Chelladurai, P. (1978). *A contingency model of leadership in athletics*. Unpublished doctoral dissertation, University of Waterloo, Waterloo, Ontario.
- Chelladurai, P. (1984). Discrepancy between preferences and perceptions of leadership behavior and satisfaction of athletes in varying sports. *Journal of Sport Psychology*, 6, 27-41.
- Chelladurai, P. (1990). Leadership in sports: a review. *International Journal of Sport Psychology*, 21, 328-354.
- Chelladurai, P. & Arnott, M. (1985). Decision styles in coaching: preferences of basketball players. *Research Quarterly for Exercise and Sport*, 56, 15-24.
- Chelladurai, P. & Carron, A.V. (1978). *Leadership*. Ottawa, Ontario: Canadian Association of Health, Physical Education and Recreation.
- Chelladurai, P. & Riemer, H.A. (1999). Measurement of leadership in Sport. In J. Duda (Ed.) *Advances in Sport and Exercise Psychology Measurement*. Champaign, Ill.: Human Kinetics.
- Chelladurai, P. & Saleh, S.D. (1978). Preferred leadership in sports. *Canadian Journal of Applied Sports Sciences*, 3, 85-92.
- Chelladurai, P. & Saleh, S.D. (1980). Dimensions of leadership behavior in sports: Devel-

opment of a leadership scale. *Journal of Sport Psychology*, 2, 34-45.

Chelladurai, P., Haggerty, T. R., & Baxter, P.R. (1989). Decision style choices of university basketball coaches and players. *Journal of Sport & Exercise Psychology*, 11, 201-215.

Chelladurai, P. Imamura, H., Yamaguchi, Y., Oinuma, Y., & Miyauchi, T. (1988). Sport leadership in a cross-national setting: the case of Japanese and Canadian university athletes. *Journal of Sport and Exercise Psychology*. 10, 374-389.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ., Erlbaum.

Danielson, R. R., Zelhart, P. F. and Drake, C. J. (1975). Multidimensional scaling and factor analysis of coaching behavior as perceived by high school hockey players. *Research Quarterly*, 46, 323-334.

Erle, F.J. (1981). *Leadership in competitive and recreational sport*. Unpublished master's thesis, University of Western Ontario, London, Ontario.

Fiedler, F.E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.

Helmreich, R. & Spence, J. T.(1976). Sex roles and achievement. In D. Landers and R. Christina (Eds.) *Psychology of motor behavior and sport*. (Vol. 2) Champaign, IL: Human Kinetics Publishers.

Hersey, P. & Blanchard, K. H. (1969). Life-cycle theory of leadership. *Training and Development Journal*, May, 26-34.

Hersey, P. & Blanchard, K. H. (1977). *Management of organizational behavior: utilizing human resources*. (3rd Ed.). Prentice-Hall:Englewood Cliffs, NJ.

Horn, T. S. (1992). Leadership effectiveness in the sport domain. In T.S. Horn (Ed.) *Advances in sport psychology* (pp. 181-199), Champaign, IL: Human Kinetics.

House, R.J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321-338.

Isberg, L. & Chelladurai, P. (1990). *The Leadership Scale for Sports: its applicability to the Swedish context*. Unpublished manuscript, University College of Falun/Borlänge, Sweden.

Le Unes, A.D. & Nation, J. R. (1993). *Sport psychology: an introduction*. Champaign, IL: Human Kinetics.

Martens, R. (1987). *Coaches guide to sport psychology*. Champaign, IL: Human Kinetics.

Massimo, J. (1980). The gymnast's perception of the coach: Performance competence and coaching style. In R. M. Suinn (Ed.) *Psychology in sports: methods and applications*. Minneapolis, MI: Burgess.

Neil, G.I. & Kirby, S.L. (1979). Coaching styles and preferred coaching behaviors among rowers and paddlers. *Journal of Sport Behavior*. 8, 3-17.

Osborne, R. N. & Hunt, J. G. (1975). An adaptive-reactive theory of leadership: The role of macro variables in leadership research. In J. G. Hunt and L. L. Larson (Eds.), *Leadership frontiers* (pp. 27-44). Kent, OH: Kent State University.

Plaisted, V. (1995). Gender and Sport. In T. Morris & J. Summers (Eds.), *Sport psychology: theory, applications and issues*, (pp.538-574), Queensland: Wiley & Sons.

Schliesman, E. S. (1987). Relationship between the congruence of preferred and actual leader behavior and subordinate satisfaction with leadership. *Journal of Sport Behavior*, 10, 157-166.

Terry, P. C. (1984). The coaching preferences of elite athletes competing at Universade '83. *Canadian Journal of Applied Sport Sciences*, 9, 201-208.

Terry, P. C. & Howe, B. L. (1984). Coaching preferences of athletes. *Canadian Journal of Applied Sport Sciences*, 9, 188-193.

Tinning, R. (1982). Improving coaches' instructional effectiveness. *Sports Coach*, 5, 37-41.

Tutko, T.A. & Richards, J.W. (1971). *Psychology of coaching*. Boston: Allyn and Bacon.

Vroom, V.H. & Yetton, W.Y. (1973). *Leadership and decision-making*. Pittsburg: University of Pittsburgh Press.

Yukl, G. (1971). Toward a behavioral theory of leadership. *Organizational Behavior and Human Performance*, 6, 414-440.