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Effects of Cross-cultural Communication Competence on Tennis Performance

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This research addresses the impact of cross-cultural communication competence on the performance of 24 (14 female, 10 male) collegiate doubles tennis pairings. The aims of this study were to: (1) determine if the cross-cultural communication competence of collegiate tennis players impacts their performance, (2) observe if there are any gender differences in the way cross-cultural communication competence influences performance, and (3) verify if cross-cultural communication competence within collegiate tennis teams differs depending on the number of international players on a team. Pearson's correlations and a Mann-Whitney U test were run, and revealed non-significant relationships between the level of cross-cultural communication competence and doubles performance, and between the number of international players on a team and their doubles performance. However, results showed that players are aware of the importance of effective cross-cultural communication, and they provided suggestions for improving it.

Communication is defined as a “convergent process that aligns a group of individuals around a common objective” (Stahl et al., 2010). According to research findings (Bell & Riol, 2017) ideal communication happens in an ongoing feedback loop where both parties understand and are able to assess the information the other person is trying to give. Multicultural issues can impact this communication loop when people from different cultures communicate with one another (Hurn & Tomalin, 2013). Communication and culture go hand in hand, as culture is formed, maintained, transmitted and learned through communication; therefore, it would be impossible to keep and pass along cultural characteristics without it (Chiu & Qiu, 2014).

Culture is defined as the “knowledge that members of a social organization share and that unites them and guides their behavior” (Sage & Eitzen, 2013). According to Gudykunst and Kim (1997), the interpersonal communication patterns of a society influence its culture, since they usually have an interdependent relationship. Ricard (1993) defined *cross cultural communication* as “the ability of an individual or a group to achieve understanding through verbal and nonverbal exchange and interaction between cultures” (pg. 7). According to Nixon and Dawson (2002) cross cultural communication occurs cross nationally (between individuals from different countries) and intra-nationally (between individuals from the same country but from different co-cultures’, with different ethnic identities and traditions).

The United States is metaphorically known as a melting pot of cultures. Sports are a big part of American culture, therefore they are a great outlet for people from different backgrounds to come together (Perry, 2017). Sports create an environment of unity and a sense of belonging, consequently, multicultural team members need to know the cultures of the individuals they are interacting with. Team members need to respect these cultures and understand the different personalities, values, conflict behavior, and life experiences of teammates (Trandis & Singelis, 1998). Performance in sports is defined as the ability to outplay the opposing team, this can be done by showing more ability than the other team or playing more skillfully than the opponent (Bell & Riol, 2017). Communication is an important element in team performance and success. Communication has been found to be positively correlated to performance of multicultural teams (Kieffer, 1997; Shonk, 1982).

Cultural Diversity and Performance

There have been some contradictions in the research regarding the effects of cultural diversity on team performance. Results have shown that cultural diversity within a team can: (a) be beneficial to team performance, (b) have a negative impact on team performance, or (c) not have any effect on team performance.

Previous research has shown that cultural diversity can serve to improve team performance (Ely & Thomas, 2001; Mor-Barak, 2011; Stockdale & Crosby, 2004). More specifically, this research shows that cultural diversity can be a valuable resource that organizations can use to help group members rethink and question ideas, increase creativity, and give rise to different life experiences (Ely & Thomas, 2001). The idea that cultural diversity can improve team performance aligns with the “information-process theory” (Stahl et al., 2010) which states that people from diverse cultures bring different perspectives and approaches to problem solving. The benefits of cultural diversity on performance are often attributed to the variety of perspectives, values, skills, and attributes that diverse team members contribute (Maznevski, 1994). Earley and Mosakowski (2000) found that highly

heterogeneous teams outperformed moderately heterogeneous and homogenous teams. Furthermore, Nemeth's (1986) research showed that small amounts of heterogeneity in a team can enhance its functioning based on the group's ability to make decisions.

On the other hand, Matveev and Nelson (2004) found that diversity within teams might serve as a source of conflict and lead to members experiencing interaction problems. Having individuals from different cultures can promote individual differences in values, norms, behavior, and communication styles that can lead to misunderstanding, conflict, and poor performance. In order to develop better team cohesion, sharing a team identity between all team members can be helpful. Creating a collective team identity may become more difficult when team members come from different backgrounds and cultures and do not share the same values, ideals and morals. The idea that cultural diversity can have a negative impact on team performance can be explained by the *Social Identity and Self-Categorization* theory which states that individuals group themselves with people they favor, and see others as outsiders (Tajfel & Turner, 1979). This idea was backed up by Jehn and Mannix (2001) who found that higher group performance was associated with homogeneity within group members, since it is likely to reduce relationship and process conflict. Research has also shown that race heterogeneity is negatively related to team empowerment and effectiveness (Kirkman et al., 2004).

Researchers have indicated that national diversity among team members does not significantly influence team performance (Brandes, Franck, & Theiler, 2009). Results showed that national diversity among team members did not influence the team's ability to play more skillfully than opponents or to outplay opposing teams (Bell & Riolo, 2017). Lazear (1999) supported this idea by stating that even though team members from different nationalities possess different skills; these skills are not significantly relevant for the team's success at the end of the season. Brandes, Franck and Theiler (2009) concluded that the larger the number of different nationalities within a team, the greater the chance that some players will find it very difficult to adopt 'new' customs and attitudes. Furthermore, Webber and Donahue (2001) conducted a meta-analysis and concluded that there is a lack of relationship between group diversity, cohesion and performance.

The conflicting results discussed above might be attributed to several different factors. First, multiple types of diversity may impact the performance of groups in different ways (Webber & Donahue, 2004). Pelled (1996) pointed out that to better understand the impact of diversity in groups, it is beneficial for researchers to differentiate between the types of diversity (e.g., highly job-related and less job-related diversity). Second, national diversity can be beneficial to a group's performance outcome, but if the context makes it difficult for diverse team members to communicate, then performance will decrease (Kochan et al., 2003). This means that poor team performance might not necessarily indicate bad chemistry or communication problems within group members, but looking into the environment and context in which the team is performing is essential. Finally, researchers (Webber & Donahue, 2004) state that another possibility of having inconsistent results is that the impact of diversity on group cohesion and performance has been overstated, and that the magnitude of these relationships are quite small.

Cross Cultural Communication Competence Model

Based on research directed at the behavioral (Ruben, 1976) and intercultural effectiveness dimensions (Cui & Awa, 1992) of cross cultural communication competence,

Matveev (2002) created a comprehensive model to examine the cross cultural communication competence of people working with multicultural teams: The Cross Cultural Communication Competence Model (3C Model). This model helps to analyze individuals' effectiveness at communicating with other cultures by measuring interpersonal skills, team effectiveness, cultural uncertainty, and cultural empathy. The *interpersonal skills* dimension measures the person's acknowledgement of different communication styles, the person's flexibility in understanding and explaining situations that arise, and the person's feelings about communicating with people from different nationalities. The *team effectiveness* dimension measures the ability of the person to understand and clearly communicate team goals, roles and norms to other team members from different nationalities. The *cultural uncertainty* dimension measures the ability of the person to be patient in intercultural situations, to be tolerant of ambiguity due to cultural differences, and to work in a flexible manner with people from different nationalities. Finally, the *cultural empathy* dimension measures the person's capacity to behave as if he or she understands the other person's world, their willingness to learn more about the person's culture and their communication patterns, and the appreciation of a variety of working styles (Matveev & Nelson, 2004).

Diversity in NCAA

The National Collegiate Athletic Association (NCAA) includes 1117 colleges and universities, 100 athletic conferences and nearly half a million student-athletes in the United States and Canada (NCAA, 2018). The NCAA provides statistical information regarding certain demographic characteristics of the student-athletes, coaches, administrators, and conference personnel from member schools. Data are self-reported annually by each NCAA member institution and conference, which provides a general view of the historical trends of people with different racial and ethnic backgrounds. These trends show that in the past years, student-athletes from diverse backgrounds, races, and ethnicities have increased in numbers within NCAA member institutions (NCAA, 2018). The increased diversity within teams in the NCAA highlights the need for an improved understanding of the communication processes that are necessary to develop high performing teams (Wheelan et al., 1998). NCAA tennis is one of the sports with increasing diversity numbers year after year.

Research Aim and Purpose

During the last two decades, the effect of national and cultural diversity on team productivity has become a major research topic in the fields of labor and economics. Many researchers have investigated cross-cultural communication competence and cross-cultural effectiveness (Kealyey & Protheroe, 1996; Redmond & Bunyi, 1991; Samovar & Porter, 1991). However, the influence of multicultural individuals in the sports industry has not received nearly as much attention (Brandes, Franck, & Theiler, 2009). Therefore, the purpose of this research project is to expand the literature that addresses the impact of cross-cultural communication competence in sports, particularly on the performance of doubles pairings on international tennis teams. Awareness of how cross-cultural communication competence can influence performance in male and female tennis players can be beneficial

for the players, coaches and staff of multicultural tennis teams.

The aims of this study were threefold. The first aim was to determine if the cross-cultural communication competence of athletes on multicultural collegiate tennis teams impacts the performance of doubles partners on those same teams. It is hypothesized that the cross-cultural communication competence of NCAA Division I and II tennis players will positively impact the performance of doubles pairings on the team. This hypothesis is based on Bell and Riol's study (2017) which showed that the cross-cultural communication competence of NCAA division I and II basketball managers and coaches was positively related to the team's collective efficacy. Since it has been previously stated (Campion et al., 1999; Gibson, 1999) that there is a positive relationship between performance and collective efficacy, the researcher hypothesized that cross-cultural communication competence will have a positive relationship with performance in NCAA division I and II tennis athletes.

The second aim of this study was to observe if there is any gender difference in the way cross-cultural communication competence influences performance in male and female collegiate tennis players. The researcher's hypothesis was that there will be no gender differences in the way cross-cultural communication competence influences the performance of doubles tennis players. This hypothesis is based on the researcher's intuition and her previous coaching and playing experience, but there is no data that supports this hypothesis.

The third aim was to verify if cross-cultural communication competence within collegiate tennis teams differs depending on the number of international players on a team. It is hypothesized that the need for cross-cultural communication competence of a college tennis team will be positively correlated to the internationality level (percentage of different nationalities represented by team members) on a specific team. The higher the internationality level on a team, the higher the need for cross-cultural communication competence, for a collegiate tennis doubles partnerships to increase their performance.

Methods

Participants

A total of 125 ($n = 44$ male and $n = 81$ female) individual tennis players making up a total of 24 ($n = 14$ female, $n = 10$ male) Division I or II collegiate tennis teams participated in this study ($M_{\text{age}} = 20.27$ years, $SD = 1.77$, age range: 18 to 22 years). Participants represented 35 different countries. All participants could read and speak English, even if it was not their first language.

Recruiting

The researcher sent an e-mail to NCAA Division I and II tennis head coaches that included: (a) an explanation of the research project; (b) a link to the online survey; (c) informed consent information; and (d) a request for coaches to forward the e-mail/link to their players and encourage them to complete the survey. The head coaches that decided to have their players participate, were asked to forward their athletes the email with the link to the survey.

Instrumentation

This research project measured cross-cultural communication competence, tennis teams' doubles performance, and the level of internationality within the team. Internationality was defined as the number of different countries that were represented by players (from that country) in a specific team. If every athlete on a team came from a different country, then the internationality level of that specific team would be 100%. On the other hand, if every athlete on a team was from the United States then that team's internationality level would be 0%. Internationality of a team was evaluated by determining the number of different countries represented by the team members on a specific team. Internationality was recorded as a percentage and was retrieved from each University's athletics website.

NCAA Division I and II tennis teams are traditionally composed of six to twelve players. Six players compete playing singles and six players compete playing doubles. In many cases, athletes play both singles and doubles for their team. The current project was focused only on those players who compete in doubles. Six players are needed to form three doubles pairings and play against another team. For a team to be eligible for analysis in this study, at least 50% of doubles team members had to answer the survey. A team's doubles performance was measured by scoring each team's winning percentage for their doubles matches during their main season and conference tournament, against other teams from their conference. Results were retrieved from the NCAA website, or each University's athletics website after every match. In an attempt to minimize the discrepancy in skill level between teams, results were only measured for matches played against teams within their athletic conference.

Cross-Cultural Communication Competence Questionnaire

Cross-cultural communication competence was measured using Matveev's seven-point, 23-item Cross-Cultural Communication Competence (CCC) Questionnaire (2002) through an online survey. This questionnaire includes four dimensions of cross-cultural communication competence (i.e., interpersonal skills, team effectiveness, cultural uncertainty, and cultural empathy). Sample items include "I acknowledge differences in communication and interaction styles when working with people from different countries" and "Working effectively with other people involves understanding other people's beliefs". Scores are measured on a seven-point Likert type scale, ranging from a low of one and high of seven. The CCC questionnaire includes several reverse-worded items to reduce boredom, ensure control for acquiescent responses, and minimize answering inertia (Harrison & McLaughlin, 1993; Schriesheim & Hill, 1981). The CCC questionnaire was developed and tested within the business literature to investigate the relationship between cross cultural communication competence and multicultural team performance (Congden et al., 2009; Matveev & Nelson, 2004), and was found to have an internal consistency alpha of .88 (Matveev et al., 2001; Congden et al., 2009; Matveev & Nelson 2004). Multi-item composition of each dimension of cross cultural communication competence minimized item-context effects and ensured validity of the measure (Ackerman, 1991; Tourangeau & Rasinski, 1988).

The online survey contained: (a) demographic questions (gender, nationality, and university they are playing for) (see appendix A), (b) the CCC questionnaire (seven-point 23-items) (Matveev, 2002), and (c) six open-ended questions. One of the questions was focused on the players' view of their doubles performance, another one asked if the players experienced cross-cultural communication with their partner, three of them focused on the player's opinion of the importance of cross-cultural communication competence with their doubles partners and some of the aspects that can affect their communication competence, and the last question asked for their willingness to participate in a 30-minute phone/skype interview. The open-ended questions that were asked last, allowed the researcher to have a better perspective of the participant's subjective opinion regarding their performance (regardless of their scores). These questions also helped the researcher to understand what (in the players' perspective) affects their communication with their doubles partners (see appendix B).

Data Analysis

Upon receiving the survey results, data was divided by teams. The Cross-Cultural Communication Competence Questionnaires was scored individually and those scores were averaged between teammates to create a single CCC score across each subscale, for each team. Performance results were documented by the amount of doubles points won per team during every conference match and conference tournament, and one percentage score for performance per team was recorded.

After receiving each team's scores for the variables mentioned above, a Pearson's correlation was conducted to investigate the relationship between the level of team members' cross-cultural communication competence (per scale) and doubles' team performance. Since the data was not normally distributed (Shapiro-Wilk's $p < .05$), a Mann-Whitney U test was conducted to determine if a significant difference existed between male and female tennis players in their cross-cultural communication competence and doubles performance. Results from the Mann-Whitney U test allowed the researcher to see if differences in gender were significantly different based on the shape of the distribution of the data (differences in medians between groups). The relationship between internationality and cross-cultural communication competence total scores were analyzed using a Pearson's correlation. Finally, open ended questions were analyzed through thematic analysis. Thematic analysis involves coding words and phrases that relate to the participants' interpretations to the research questions. The first step consisted of just reading each participant's answers. The second step consisted of re-reading the answers and making analytic notes. The third step consisted in the reading and coding each answer.

Results

A Pearson's correlation was run between the cross-cultural communication competence of the athletes on multicultural collegiate tennis teams and their doubles performance. These analyses did not reveal a significant relationship between the variables ($r = .024, p > .05$). Correlations between the subscales of the cross-cultural communication competence questionnaire (cultural uncertainty, interpersonal skills, cultural empathy,

Table 1.

	<i>Perf</i>	<i>Intern</i>	<i>CCC total</i>	<i>C.Uncert</i>	<i>Team Eff</i>	<i>Int. Skills</i>	<i>C. Emp</i>
Performance Correlation Sig. (2-tail)	1	.222 .296	.024 .911	-.184 .390	.137 .524	-.020 .926	.283 .180
International Correlation Sig. (2-tail)		1	-.242 .255	-.240 .259	-.278 .189	-.265 .211	.179 .404
CCC Total - Correlation Sig. (2-tail)			1	.765** .000	.783** .000	.672** .000	.503* .012
Cult. Uncert- Correlation Sig. (2-tail)				1	.373 .073	.262 .217	.058 .783
Team Effect. Correlation Sig. (2-tail)					1	.571** .004	.303 .150
Interp. Skills Correlation Sig. (2-tail)						1	.359 .085
Cult. Empathy Correlation Sig. (2-tail)							1

Note. Summary of CORRELATIONS between performance ('Perf') and internationality ('Intern') level, ccc total, and ccc subscales (Cultural Uncertainty- 'C. Uncert'; Team Effectiveness- 'Team Eff'; Interpersonal Skills- 'Int. Skills'; and Cultural Empathy- 'C. Emp)

and team effectiveness) and performance also did not reveal any statistically significant differences (see Table 1). Based on these results, hypothesis 1 was not supported.

A Mann-Whitney U test did not reveal any statistically significant differences between male and female tennis players ($t = 41.5$, $p > .05$, $\alpha = .05$) supporting the researcher's hypothesis (see Table 3). As can be seen in Table 1, the results from a Pearson's correlation test failed to show a significant relationship between the internationality of a team and the level of cross-cultural communication competence needed to perform well ($r = .222$, $p > .05$, $\alpha = .05$). Based on these results, hypothesis 3 was not supported.

The second part of this study, allowed the researcher to understand the participant's perspective on their use of cross-cultural communication competence with their doubles partner and see how much they thought it influenced their performance on the court. Results showed that 81.63% of male players and 71.1% of female players stated that they use cross-cultural communication competence when playing doubles. After coding and analyzing the participants' answers for the open-ended questions, it was concluded that male and female tennis players think that the biggest factors that positively affect (cross-cultural)

Table 2.

	Gender	N	Mean Rank	Sum of Ranks
CCC total	Female	14	14.54	203.50
	Male	10	9.65	96.50
	Total	24		

Note. Summary of RANKS of Mann-Whitney Test for CCC total between genders

Table 3.

	CCC Total Scores
Mann-Whitney U	41.5
Wilcoxon W	96.5
Z	-1.669
Asymp. Sig. (2-tailed)	.095
Exact Sig. [2*(1-tailed sig)]	.096
Exact sig (2-tailed)	.098
Exact Sig. (1-tailed)	.049
Point Probability	.002

Note. Summary of MANN- WHITNEY TEST for CCC total between genders

communication between them and their doubles partners are: their mutual understanding of verbal and non-verbal communication, having a positive attitude towards the game and each other, having a good connection between partners, knowing each other (on and off the court), respecting each other's ideas and perspectives, and having similar goals.

Furthermore, male and female tennis players stated that the factors that hurt (cross-cultural) communication between them and their doubles partner the most are: miscommunication (mainly because of language barriers), personality and/or cultural differences, and having a negative attitude towards the game or each other. Some of the participant's ideas on how communication with their doubles partners can improve included: increasing cultural understanding, improving (on and off the court) personal connection, having a common goal, having a more positive attitude, and spending more time practicing together.

Discussion

The non-statistically significant results from the Pearson's correlation between the cross-cultural communication competence of the athletes on multicultural collegiate tennis teams and their doubles performance contradicts a subset of previous research which states that cultural diversity can serve to improve team performance (Ely & Thomas, 2001; Mor-Barak, 2011; Stockdale & Crosby, 2004). Furthermore, the Pearson's correlation between the cross-cultural communication competence subsets (cultural empathy, interpersonal skills, team effectiveness, and cultural uncertainty) and the tennis players' performance showed no statistically significant differences. This outcome contradicts Congden et al.'s (2009) research, which identified a statistically significant correlation between cultural empathy and team performance.

Results from this study support previous research which states that national diversity among team members has no significant influence on team performance (Brandes, Franck, & Theiler, 2009). Furthermore, results from this study are also consistent with those of Bell and Riolo (2017), who showed that national diversity amongst team members does not influence a team's ability to outperform opposing teams. This finding can be beneficial for coaches who have a multicultural team or those who are trying to recruit international athletes from around the world. Knowing that the cross-cultural communication competence of players on a team has no significant correlation to their performance as whole, can help coaches make a more informed decision about recruiting or not a certain athlete. Coaches will be able to focus on the recruit's athletic skills without worrying about cross-cultural

communication competence.

The non-statistically significant results from a Pearson's correlation tests assessing the relationship between the internationality of teams and the level of cross-cultural communication competence needed to perform well are inconsistent with previous literature. Previous literature states that the larger the number of different nationalities that are represented within a team, the greater the chance that some players will find it more difficult to adopt 'new' customs and attitudes, and therefore suffer a decrease in performance (Brandes, Franck, & Theiler, 2009). Results from this study did not show any difference between internationality level and cross-cultural communication with regard to performance.

Early and Mosakowski (2000) previously found that highly heterogeneous teams outperformed moderately heterogeneous and homogeneous teams. These results are inconsistent with the results from the current study. However, according to Nemeth (1986) small amounts of diversity on a team tends to enhance the team's functioning. Results from this study state that there is no statistical difference in performance based on the internationality (heterogeneity) level of a team. These results provide important information to coaches who are recruiting players from different countries. It is a common fear amongst coaches that recruiting athletes from many different countries will make the team dynamics more complicated and the team's performance will decrease (Forsythe, 2015). Knowing that the team's performance is likely to be influenced by the number of countries that are represented within a team, may allow coaches to recruit more freely.

Results from a Mann-Whitney U test did not show any statistically significant gender difference in the way cross-cultural communication competence influences performance in male and female collegiate tennis players. This is something to take into consideration since there is not a lot of research based on gender differences with regard to cross-cultural communication competence. Most of the research focusing on cross-cultural communication, or cross-cultural performance of groups has been conducted in business settings and has rarely focused on gender differences (Brandes, Franck, & Theiler, 2009). Further, the few cross-cultural studies that have been conducted in sports settings have mostly focus on either one specific team or one sport played by only one gender (Bell & Riol, 2017). Given the lack of research on this specific topic, results showing that there is no statistically significant difference between genders in the way cross-cultural communication competence influences performance when playing tennis is beneficial for coaches and sport psychology consultants because the findings of this research may be generalized to both, male and female players.

Results from the open-ended questions in the current study differed from those found by Jehn and Mannix's (2001), who found that higher group performance was associated with homogeneity within group members, since it is likely to reduce relationship and process conflict. Results from the current study revealed that the way in which tennis players believe their performance can improve is not by making the teams more homogenous but by becoming more understanding towards each other and by increasing the quality and quantity of communication. These results are supported by Bell and Riol (2017) who state that when an increase in communication and connection between teammates on and off the court happens, there is a greater chance for team members to increase their collective efficacy, and therefore their performance (Campion et al., 1999; Gibsion, 1999).

Results from the second section regarding participants' opinion on how communication with doubles partners can be improved seems to be consistent with previous

research which states that if individuals within a team learn to question ideas, increase creativity and have different life experiences they might see the benefits of cultural diversity on performance (Ely & Tomas, 2001; Maznevski, 1994). These results are beneficial for coaches and sport psychology consultants of multicultural teams since they can be the ones that allow and enable communication between teammates to improve. Sport and exercise psychology professionals can help players communicate better between each other by talking about communication with the team, by creating activities or situations that allow the players to understand the importance and benefits of communicating properly, and/or by working individually with each player to help them understand their individual differences and ways in which those differences can be used to the advantage of the team. Furthermore, if coaches know that the players who participate on multicultural teams believe that in order to increase their performance they need to increase their cross-cultural communication competence, then they might be more willing to have a sport psychology consultant work with their team in order to improve that skill.

Practical Implications

Even though the relationship between the CCC Questionnaire results and doubles tennis performance was not statistically significant, this study provided important information to the fields of sport psychology and coaching. Results showed that players are not only aware that they use cross-cultural communication when playing doubles, but they are aware that it affects their performance on the court, and they provided information on how they think it can be improved.

Demographic data from participants showed that NCAA collegiate tennis teams are formed by a vast number of international students. In fact, the average percentage of international athletes on a collegiate men's tennis teams was 82.15%, and the average percentage of international athletes on a collegiate women's tennis team was 60.64%. These values might be a representation of three things: 1) college coaches working in the United States value and seek international talent to be part of their teams, 2) having international student-athletes is a way to help US colleges be more diverse and 3) having players from outside the US will allow the team and university to be more well-known world-wide. The high percentages of international student-athletes on college male and female tennis teams indicate the need to continue to pay attention to this rapidly increasing population. As organizations such as the NCAA expand their focus on diversity, the need for effective cross-cultural communication competence within international teams will continue to increase in importance (Bell & Riol, 2017).

Secondly, results showed that the vast majority (81.1% male and 71.1% female) of players realize the importance of effective cross-cultural communication when they play doubles tennis. They are also aware of the different ways in which cross-cultural communication can be improved with their doubles partners. Knowing some of the ways players believe their communication can be improved (increasing cultural understanding, improving (on and off) personal connection, improving attitude, having a common goal, and spending more time practicing together) can serve as a guide for coaches of multicultural teams and other staff involved by providing an explanation of what are some off court skills that can be improved by the student-athletes in order to be able to communicate better with their teammates.

Being aware of the skills that have an impact on the players' communication with

their doubles partners, allows coaches to better guide their athletes on the right direction, and provides the opportunity to implement activities on and off the court that involve the practice of those particular skills. Players can also benefit from this study by realizing that the majority of their teammates and other student-athletes have similar thoughts and experiences with cross-cultural communication between teammates. Knowing that it is very probable that their partner feels the same way about their communication can encourage players to be more open to talk and address that situation.

Finally, knowing that these skills can all be improved and developed with proper training, can help with the improvement of the training tools for the development of coaches and players of multicultural teams. This information is relevant, since only 53% of NCAA athletic departments offer diversity training (Cunningham, 2015).

Limitations and Future Directions

The current study contains several limitations that must be considered when reviewing its results. The first limitation is that the main measure of performance was the players' doubles results (percentage of wins). Even though this is an objective measure, it is not necessarily a true reflection of the player's performance. The second limitation was that not every player of every team filled out the survey. For some teams only 50% of the players filled out the survey, therefore that might have not been a good representation of the cultural communication competence of the entire team. The third limitation is that the Cross-Cultural Communication Competence Questionnaire (Matveev, 2004) may not have been sensitive enough to capture the connection between cross-cultural communication competence and doubles tennis performance in NCAA collegiate tennis players.

There are several opportunities for future research, international student-athletes are a rapidly increasing population and additional investigations of this population are needed. Future studies could include a better measure of performance. Even though it is important to have an objective measure of performance, such as results and final scores, they are not always accurate representations of the player's performance. Adding individual interviews after every match which ask the players their perspective on their performance will allow the researcher to have a better insight on the players' attitudes and subjective opinions on their own performance. Having an objective and subjective measure of performance can only strengthen the research study.

Furthermore, this research was conducted on individual doubles players, for future research, coaches and other teammates can also be included. Interviewing doubles partners together (instead of individually) can offer more insight into their thoughts and perspectives as a doubles team rather than as an individual doubles player. Having interviews with both players together could possibly bring up new topics and solutions to the cross-cultural communication issues that they face. Also, adding a coach's perspective could be beneficial since his/her opinion of the players' performance is arguably the most important one.

Finally, researching the connection between cross-cultural communication competence and performance in other sports (individual vs. team sports) can provide interesting results. The levels and types of communication that the athletes must have in order to achieve their optimal performance might be different if they play an individual sport, a sport with one other person, or a team sport. This is important information for coaches and for players to know what communication skills are needed depending on the setting they are performing at.

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